

WAppleII NEWS

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Welcome to the November issue of WAppleII NEWS. As I was trying to come up with something to write about to introduce this issue, it occurred to me that I have been producing this newsletter now for six years, which is twice as long as the period of my computing life which was "WAppleII-free".

To rephrase that, I bought my original computer (my trusty little Apple IIc) at the beginning of 1985. I started WAppleII three and a half years later, halfway through 1988, and produced the first two page newsletter at the end of that year, and it seems I have been doing little else ever since—annnd *loving* it...(most of the time).

This though caused me to reflect on the original ideals and hopes we had for WAppleII back at that first meeting in 1988, and to wonder if we had managed to remain true to them. I do remember thinking that a realistic life expectancy for an Apple II usergroup might be around 5 years or so, and we are already doing much better than that, but I also remember discussing such ideas as Special Interest Groups, attracting the interest of those expert in programming in machine language, and having a membership exceeding a couple of hundred of enthusiastic, interested Apple II users.

A lot has changed since 1988. In 1988, much of what we now consider to be ancient history in terms of software was then hot stuff with a glowing future: programs like *MultiScribe*, *Publish It!*, the *TimeOut* series, *GEOS*, *DB Master* and many others were being vigorously marketed and developed. AppleWorks 3.0 had not yet been heard of. Hardware companies such as Applied Engineering were breaking new ground all the time with products like the PC Transporter card, the Z-Ultra series of memory cards for the IIc, internal hard disks, etc, and the Apple IIgs was a stranger to almost all of us.

In 1988, our "competition" was the IBM XT range of computers (the AT was real "state-of-the-art" and beyond the reach of most) and the Macintosh Plus. CD-ROMs, budget-priced laser printers, scanners and the rest were virtually unknown to the home computer user. We were comfortable with the knowledge that what our computers and their software lacked in power when compared with the others was more than compensated for in terms of speed and ease of use. Our standard was the IIe, we supported the II Plus and IIgs as much as

WAppleII^{Inc.}

Supporting the
Apple II in W.A.



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NEXT MEETING

Thursday, 24 November, 1994

7:30 pm

Tutorial: *Nibbling at BASIC*

WAppleII NEWS is written and laid out using only Apple II hardware and software. The text is first entered into the AppleWorks word processor, and then imported into *Publish It! 4.0* before downloading as EPS files for laser printing.

we could, and we encouraged the enhanced IIe and IIc because of their suitability with the latest software. We also encouraged people to develop and improve their computers with more memory, large disk drives, accelerators, etc.

Now, in 1994, we still encourage the enhanced IIe and IIc, we support the II Plus as much as we can, and we have much more emphasis on the IIgs. We also still encourage people to improve their computers with more memory, larger disk drives, etc... So not a great deal has changed. Our emphasis has perhaps altered slightly but not a great deal, and this has been more a function of the way the Apple II industry has changed than any conscious transition on our part. We still have the dream of establishing Special Interest Groups, attracting the attention of programmers, increasing our membership, etc, but I'm afraid after six years these things may never be realised. We have a dedicated but somewhat static committee, some highly devoted and very active office bearers, and we're doing what we can. But we can only do so much, and the rest is up to you. We still encourage you to expand your computer to take advantage of the new software being developed, such as AppleWorks 5.

Most of the publishers of those "old" programs have

long since perished or gone along different paths, but the programs themselves are still as useful now as they were then. Our "competitors" of 1988 no longer exist, having themselves been devoured by their ravenous and gigantic offspring. It is fortunate in some ways that they no longer believe *we* exist, so we are left to live our own lives, as difficult as that is sometimes. And *that*, I believe, is now the role of WAppleII, as it probably has always been—to make the living easier. All we can do is provide as much help and information as we are able. It's up to you to make whatever use of it you can.

AppleWorks 5: New Release Date

According to Geoff Schuurman of Australian II Series Software, the release date for AppleWorks 5 is now November 21. Quality Computers report that there has been a hold up with printing the manuals. Oh, and by the way—Quality Computers apparently couldn't care less whether or not you already own an original copy of AppleWorks if you just want to buy an upgrade, so Geoff doesn't either. This holds for both versions 4 and 5 (AW4 will not be superseded by version 5, out of consideration for those people still using 128K, 5.25" systems). If you want to go ahead and order one of the new versions, call Geoff on (02) 606 9343.

Last Meeting

The October meeting was very well attended—almost half our membership turned up, which is brilliant by anyone's standards! Thank you very much to all those who attended.

The theme of the meeting was to look again at the new features of AppleWorks 4, and to discuss briefly what further changes will take place in AppleWorks 5. It was evident that a good deal of what was demonstrated opened the eyes of many people present to just how powerful AppleWorks has become, and is about to become to an even greater degree.

This Month's Theme

The November meeting will be another tutorial meeting, our last for the year.

I asked a few people at the October meeting for some suggestions for a tutorial topic, and the best suggestion, I thought, was to expand on some of the ground covered at the first tutorial meeting and delve more deeply into AppleSoft BASIC, the programming language built into every Apple II. I immediately cast my mind back to those carefree days before WAppleII when I used to spend hours with my computer and the latest copy of *Nibble* magazine, happily typing in endless pages of

BASIC code and trying to make the programs work at the end of it all. So I thought I would try and transfer some of that happiness to some of you. I have selected a short program out of one of my old issues, and I propose to lead you through it, typing as we go, and dissecting each line as we type it. When we have finished, we will all type "RUN" together and see whose typing was the most accurate. It should be a hoot (or worth at least a mild grin).

From the Periodicals

A2 Central

\$59.95 (\$88.16) per annum
 \$49.95 (\$73.46) with automatic renewal
 Send cheque, money order or Visa Card details to

ICON,
 PO Box 11250,
 Overland Park,
 Kansas 66207-1250, USA
 Fax: 0015 1 913 469 6507

Apple II Resource List

Now that Resource Central has pulled out of the mail order business, it is becoming increasingly difficult to find reliable sources of goodies for the Apple II. None of them stock everything we need, some are much chea-

per than others, and still others are very little known in Australia. As a parting gesture, if you like, to their loyal customers over the years, Resource Central (or ICON as they are now known) have published a list of known vendors of Apple II hardware and/or software.

The list, reproduced in the adjacent table, was originally compiled by A2.Lunatic, marketing manager for the Apple II RoundTables on GENie. I have edited it a little to remove the US-based 800- numbers, and also take out a column which showed the companies' bulletin board locations on GENie, information which is largely useless to us here.

I have, however, retained the companies' GENie addresses, since these are readily usable by any one with access to email on the Internet, simply by adding "@genie.geis.com" to the address shown. The email address will connect you to a reliable spokesman for the company concerned.

BlueDisk Tape Drive Info

Joachim Lange (developer of the Blue Disk interface card) recently made the following comments on tape drives that are usable with the BlueDisk interface card:

- Parallel Tape Backup drives are *not* usable with BlueDisk. BlueDisk is a floppy controller, a floppy controller (that) doesn't have a parallel interface. Parallel Tape Backup drives use the ("Centronics") printer port of a messy (MS-DOS) machine, and there won't be even a chance to do that on a Apple II machine (neither docs nor system power available).
- I recently published the BlueDisk v1.0 specs where I mentioned the tape backup. This document tells you that a QIC-80 compatible streamer unit will be supported. I should emphasize that most likely *other* streaming floppy tape drives (not QIC-80 compatible) will not be supported.

Company	GENie EMail Address	Phones
Add On II (hard drive repair)	ADD.ON.II	312-735-9010 voice
Alliance International	B.MAPLES	502-491-6828 voice
Alltech Electronics	T.DIAZ	619-724-2402 voice 619-724-8808 fax
Balloons Software	P.SHAPIRO1	202-244-2223 voice
B&D Computer Repair		312-735-9010 voice
Big Red Computer Club		402-379-4680 voice
Bright Software (U.S.A.)	A.HORSTMANN	707-379-3181 voice
Byte Works, Inc.	BYTEWORKS	505-898-8183 voice
Charlie's Applesøeds	A2.CHUCK	619-566-1297 voice
DreamWorld Software	S.CHIANG4	319-338-6491 voice
DYA/DigiSoft Innovations	DIGISOFT	203-375-0837 voice
Educational Resources		708-888-8300 voice
EGO Systems/GS+ Magazine	JWANKERL	615-332-2087 voice
GENie	FEEDBACK	
HyperStudio Network		609-466-3196 voice
II Alive	II.ALIVE	313-774-7200 voice
ICON	ICON	913-469-6502 voice 913-469-6507 fax
InTrec (formerly InSync)	INTREC	602-992-1345 voice
JEM Software	BRANDT	303-422-4856 voice
Kitchen Sink Software	KITCHEN.SINK	614-891-2111 voice
Lost Classics	A2.TIM	310-813-5697 voice
Marin MacroWorks	W.NELKEN1	415-459-0845 voice
MECC		612-569-1500 voice
METAL/FutureVision	J.THOMPSON1	
Micol System	MICOL.SYSTEM	416-495-6864 voice
Microcycles (Zip Accelerators)		310-202-8337 voice
Morgan Davis Group	MORGAN-DAVIS	619-670-0563 voice
NAUG	NAUG	313-454-1115 voice 913-362-9898 voice 312-338-2202 voice
Nite Owl Productions		815-338-8685 voice
On Three, Inc.		
Other World Computing (formerly LRO)		
Parkhurst Micro Products	PMP	510-837-9098 voice
Parsons Engineering	BURGERBILL	909-966-5538 voice
Procyon, Inc.	PROCYON.INC	303-781-3273 voice
ProDev, Inc.	PRODEV	313-848-4012 voice
Public Domain Exchange		408-496-0624 voice
Quality Computers	QUALITY	313-774-7200 voice 810-774-2698 fax 502-491-6828 voice
Raptor, Inc.		707-573-9257 voice
RezTek	REZTEK	619-442-0522 voice
Roger Wagner Publishing, Inc.	ROGER.WAGNER	303-666-4549 voice
Sequential Systems	SEQUENTIAL	904-575-0566 voice
Seven Hills Software Corp.	SEVENHILLS	904-575-2015 fax
Shareware Solutions	JOE.KOHN	
SHH Systeme	J.LANGE7	49-89-6515150 voice
Shreve Systems		318-424-7987 voice
Simplexity Software	S.MCQUEEN1	714-283-3957 voice
Softdisk Publishing	SOFTDISK.INC	318-221-8718 voice
Sun.Remarketing		801-755-3360 voice 801-755-3311 fax 407-695-9000 voice
Techware Corp.		516-732-3771 voice
Triad Venture Inc.	M.NUZZI	408-432-9057 voice
Tulin Technology	T.TULIN	503-297-5317 voice
VernierSoftware		503-297-1760 fax
Vitesse, Inc.	VITESSE	818-813-1270 voice
WestCode	WESTCODE	619-487-9200 voice
Zip Technology	THE.ZIPPER	310-568-2002 voice

What I wanted to tell you:

- During the first stages of creating the low-level part of the backup software, Xxxxx Yyyy (the name of one of my hardware gurus) found that several tape drives exist which are not QIC-80 compatible. The Colorado series of tape drives obviously use QIC-80 tapes, but this fact doesn't imply that it is fully compatible with the *command* set of QIC-80 compatible drives. (By the way, the command set is laid down in the QIC-117 standard, whereas QIC-80 only describes the *tape* (the cassette) specifications.)
- As of our knowledge today, Colorado tape drives (and some other drives) won't be compatible with BlueDisk tape software, otherwise Xxxxx Yyyy (would have) had to write different drivers for each command set (I don't know whether he would like to do that).
- Due to the fact that the command set (QIC-117) is a fairly new standard (fall 1992), it is very likely that not a single 60/120 MB (uncompressed/compressed) tape drive can handle the QIC-117 set correctly. Colorado was the first company to come up with a 60/120 MB unit four or five years ago. You can estimate that their 120/250MB unit has the same command set as the smaller units. Nothing confirmed or proved. Latest production series could be compatible.
- Where to go? Yes, I like Conner (the storage company), because they made the first IDE hard drives, and these drives had been on the top of performance for several years (for a long time, they already had a fairly sophisticated caching scheme at interleave 1:1 when Applied Engineering decided to put the Western Digital interleave 3:1 slowpokes into their Vulcan cases).
- Two years ago, Conner has bought Archive, and Archive obviously had a *very* good reputation and quality in their products. Sooo, as of today, Conner tape storage products are still being produced in the Archive facilities. The Conner (Archive) tape drives I have seen had a very good quality and so I simply do recommend Conner TapeStor drives. In addition, these drives *are* QIC-80/QIC-117 compatible.
- Aside from compatibility, I like these Conner (Archive) drives because they are very quiet compared to Colorado tape drives. This is a very important feature *for me*.
- As a summary, if you want to buy a tape drive, be sure you will get a QIC-80/QIC-117 compatible drive (let them print it on the receipt). Some drives are not compatible at all, although they can be connected to the floppy bus and controlled by proprietary software. 60/120MB tape units are "old hardware", fairly cheap to buy today, but only compatible with the software that came with the drive (exception: Central Point Backup supports almost any floppy tape drive).

Joachim Lange also posted information about upgrades

that are available for the BlueDisk interface card:

- If you have a BlueDisk purchased before July 1, 1994, you may want to upgrade your current firmware/software. Just to be sure it makes sense, have a look at the firmware EPROM (it carries a white label). If the version number (written on the label) says "v1.0" you don't need any upgrade. You have already received the latest versions of all firmware/software available. If the version number says "v0.98" you can get an update from us directly. Note that the ROM upgrade is not absolutely necessary. You can use the BlueDisk v1.0 software on disk with the ROM v0.98.
- To make this notification more complete, I will include the info about the firmware changes posted in an earlier message:
A summary of changes in the BlueDisk firmware (ROM) from version 0.98b to 1.0:
(please note: all these items are related to the firmware and only take effect when using the ProDOS 8 or SmartPort protocol, i.e. when running GS/OS using no GS/OS driver, during the first part of booting GS/OS, or when using any ProDOS 8 application including PC-Transporter software)
 - introduced the 360K (ProDOS, GS/OS, HFS and MS-DOS) and 720K (ProDOS, GS/OS, HFS) disk sizes on 5.25 inch drives. The firmware now can read and write *any* low-level format created with the GS/OS driver. This also means that you can read any standard MS-DOS disk from 360K up to 2.88MB.
 - improved error handling (when dealing with weak/bad blocks).
 - improved retry handling for recognizing different disk sizes.
 - the (built-in) formatter now includes verify (the GS/OS driver and the BLUE.FORMATTER always had verify).
 - faster response on SmartPort status calls (when booting GS/OS or ProDOS 8). The 0.5 sec wait is over.
 - the (sometimes annoying) beeps on I/O errors have been removed.
 - BlueDisk now can serve as a backup-only controller. The draft manual told you that at least one floppy drive must be connected. This is not true with version 1.0. When setting jumper #4, you can disable any floppy drive activities (which could also be useful when testing a misbehaving drive). The GS/OS driver v1.0 behaves accordingly.

Pricing for BlueDisk ROM upgrades:

- Overseas (includes standard air mail shipping)

BlueDisk ROM v1.0 + Disk	US \$14.00
BlueDisk ROM v1.0 + Disk (ROM 0.98 returned with order)	US \$6.00

 (The updated manual will be on the disk as a text file)
- Returning the v0.98 ROM means pulling it out from the BlueDisk card *carefully* and packing it in a piece of rubber foam or similar media (antistatic material

preferred) in order to let it reach our home without damage. Your ROM must be sent with your order.

- Upgrade orders must be cash prepaid, either in American or German currency. If you haven't already sent in your registration form, please send it with your order.

AppleWorks Forum

Published by NAUG
The National AppleWorks Users Group
\$44 (\$58.67) per annum (surface)
Foreign orders by Credit Card only, to
NAUG
Box 87453,
Canton, Michigan 48187
USA
FAX: 0015 1 313 454 1965

August/September 1994 Issue

- *AppleWorks: The First Decade*
Reviews AppleWorks' and NAUG's shared history and celebrates AppleWorks' popularity and longevity (1994 is the 10th anniversary of AppleWorks).
- *How to Create Jigsaw Puzzles with AppleWorks*
Yeah, well...
It's the fourth article in a series describing projects you can develop using TimeOut SuperFonts. An interesting idea for those who want to try this.
- *How to Change the Order of Data Base Reports*
A macro which lets you change the order of your report formats in your database files. Works only with AppleWorks 4 and UltraMacros 4.3.
- *A Spreadsheet that Predicts School Enrollments*
Shows how to use the AppleWorks spreadsheet for sophisticated population projections—in this case predicting school enrollments. Works with any version of AppleWorks.

October 1994 Issue

- *How to Set Up a RAM Disk for AppleWorks 4*
The first of two articles describing how to use RAM disks with AppleWorks 4. Describes the benefits of a RAM disk and shows how to set one up on an Apple IIgs.
- *How to Create Magnetic Signs and Business Cards with AppleWorks*
The fifth article in a series describing projects to undertake using TimeOut SuperFonts. Potentially useful. Requires AppleWorks 2.0 or later, and a compatible version of TimeOut SuperFonts.
- *How to Create a Cursor Thermometer*
A macro which adds a pop-up "thermometer" which

provides an instantaneous graphic representation of where you are in any AppleWorks file. Works with AppleWorks 3.0 or 4. Installs easily in your default macro set.

November 1994 Issue

- *How to Create Window Signs with AppleWorks*
Shows how to create 8" x 5" window signs using *Publish It!* Clipart, AppleWorks, TimeOut SuperFonts and TimeOut Paint, or 8" x 11" signs using AppleWorks GS.
- *TimeOut ShrinkIt Plus Compresses Files from within AppleWorks*
A review of the excellent TimeOut program *ShrinkIt Plus* which, with its companion program *ShrinkDesk*, creates and extracts NuFX archives from with AppleWorks.
- *Inexpensive Hard Drive Backup*
A review of the Verbatim removable SCSI drive from Memory Plus distributors. These things use a proprietary 20 megabyte cartridge and sell for \$US79. There might be problems for Australian users, though, given local voltage differences and difficulties getting hold of extra cartridges.
- *How to Avoid AppleWorks 4 Crashes on IIgs Systems*
AppleWorks 4 is unable to have macros active when running on an AppleTalk network. This article shows how to fix the problem.

GS+ Magazine

\$24 (\$32.43) for 6 issues
\$36 (\$48.65) for 6 issues plus disk

Send cheque, money order or credit card details to

GS+ Magazine
PO Box 15366
Chattanooga
TN 37415-0366
USA

November/December Issue

In addition to the articles outlined on the next page, the November/December issue contains important news and advertisements which are featured elsewhere in this edition of WAppleII NEWS. There is one point to make, however: Steve Disbrow points out in his editorial that for the first ever, renewals in GS+ are declining. In order to prevent this magazine from going the way of (almost) all others, Steve is imploring all subscribers to try to recruit at least one new subscriber between now and the end of the year. I'd like to think that this little message might achieve at least that, perhaps more. Seriously, if you have an Apple IIgs, you do owe it to yourself to take at least one year's subscription to this magazine. It is good value.

- **Programming the IIGs—Part 4: Program Building Blocks**

This is a continuation of a series the last installment of which appeared the July/August issue. This article discusses the elements of the user interface which are crucial to making a program easy to use.

- **Mr Priceguide Looks at Laser Printers**

An in-depth analysis of the commonly available Laser Printers on the market, looking at their suitability for use with a IIGs, their features and prices. Since many of these printers are designed for use on an IBM-compatible they use parallel interfaces, so a list of currently-available Apple II parallel cards is also provided.

- **Reviews of AUGE CD #1** (a collection of both IIGs and Macintosh software on CD-ROM from the German Apple group AUGE), *The SimpleScript Notebook* (a beginner's guide to using and understanding the HyperStudio programming language, Simple-

Script), and *Ultima I* (the IIGs version of the original Apple II DOS version ported over to GS/OS by Bill Heineman).

- **Featured Software** includes *Ultimater I* (a complete character editor for Ultima I), *Geeker* (lets you change five Finder preferences to which you normally don't have access, such as the position of the Trash can, and default window positions), *Elucidation* (lets you define new file types for the Finder as they are assigned by software developers—after all, Apple won't be doing it anymore), and *Copy Icon* (a Finder extension which lets you select any Icon you like and copy it to the system clipboard, from where you can paste it to an Icon editor or a paint program).

- **Working with the Toolbox—Part 14: The TextEdit Tool Set**

The TextEdit Tool Set allows a programmer to provide the ability for the user to edit styled text. This article explains the technicalities behind it.

New PD/Shareware

ANGEL081.SHK

Minimum Setup: IIG (enh.)

Type: Freeware

by Tony Marques will unpack .ZIPped files from the MS-DOS world, and will even handle version 2.04g of PKZIP, which last month's UNZIP program cannot. It also unpacks ARC, LHA, and ZOO compression.

The main problem with Angel is its extremely clumsy interface, which requires you to specify a destination for your unZIPped files before you even select the archive to unZIP! Once you get used to the way it works, however, Angel performs very well, and is really the only avenue most people will have to get access many of those foreign files formats.

IIGs3D.SHK

Minimum Setup: IIGs

Type: Freeware

This is not a program, really—just a stereogram image of the Roman numeral II with the letters GS overlaid, created by Paul Benson. You must have seen these comput-

er-generated 3-D images which have been popping up everywhere over the past twelve months or so—in magazines, books, posters, and even greeting cards. To the casual glance they appear to be incomprehensible gibberish, and to many people they remain that way. To those who have mastered the technique of viewing them, however, they are a fascinating new art form, a true creation of the computer age.

It was my faint but fervent hope when I saw my first one that someone, somewhere, would develop a program to create them on the Apple II, and now someone has—Paul Benson—and he apparently expects it to be released commercially "soon". I *really* can't wait for *that* one!

By the way—the image in this graphic works very well.

Sonobox.shk

Minimum Setup: IIGs:GS/OS 6.0.1

Type: Freeware

Sonobox is an Apple IIGs NDA that allows the loading and playing of Amiga MOD files (music modules) from within any desktop application

that supports NDAs. Sonobox features extremely high quality sound output, the ability to listen to songs in the background while you work, variable stereo and volume controls, and much more.

Sonobox plays MODs that conform to the standard set by the Protracker program on the Amiga, as well as Startrekker 4-track MODs, and some older Noisetraacker/Soundtracker MODs.

Sonobox works on any Apple IIGs computer running GS/OS 6.0 or later. The program is more usable if you have a hard drive and more than 2MB of RAM, though these are not absolutely necessary to use the program. To install Sonobox, copy the file "Sonobox" from this archive into the Desk.Accts folder inside your System folder and restart your computer.

Evolve Or Die

Minimum Setup: IIGs

Type: Shareware \$5.00
(see docs)

Evolve or Die is a population dynamics simulation. A 2-dimensional field is created and separated by

barriers into two distinct regions with only small openings connecting them. Then some "food" is evenly distributed around the field. Next some artificial "bugs", which can be thought of as little automata controlled by very short programs (genes) are randomly generated and placed around the field.

As the artificial world is set in motion, the bugs move, eat, and rest, with only the fittest surviving. After about a minute or two, only a few bugs, if any, will have lasted the initial attempt at survival. After that, the bugs evolve to adapt to the environment with which you can experiment.

The author was inspired to create this program by an article in the Computer Recreations column of the May 1989 issue of Scientific American, so if you want to find out what he's really trying to do, check out the magazine at your local library.

PowerGS #4

Minimum Setup: Apple IIgs
Type: Freeware

PowerGS is a "Magazine-on-a-disk" which uses the runtime version of HyperStudio. It is developing into a very nicely designed product, and a very ambitious one for Auri Rahimzadeh, the creator and editor. He has enlisted the help of a fine computer artist to design the various intro screens, and has been able to invite worthwhile contributions from quite a number of people. If you have an Apple IIgs this is well worth checking out. If you have a modem, it is available from the Apple II files area of Multiline.

Polishing Green Apples

by Steve Weyhrich

Reprinted from GEnieLamp, July 1994

Hooked on Storage (Part 5)

Hooked on Organization

After getting your hard disk installed, formatted, partitioned, and the disk management software put into place, an important consideration is how to organize your files to make them as easy to find as possible.

There are as many different methods of arranging your directories as there are methods of housecleaning; I will suggest what makes sense to me, and you can adapt that to your own specifications.

Desktop vs. Disk

First of all, remember that there is an important distinction between "memory" and disk storage. I've talked with people who told me that they had a computer with 4 megs of memory and 40 megs of memory. What they really had was a computer with 4 megs of RAM, and a hard disk (for storage of data) that could hold up to 40 megs of data. RAM is where a program *runs* (is "executed"). Disks are used to *store* programs or data files. They are *not* the same. This is important to remember, if you want to keep the computer bullies from kicking sand all over your keyboard.

Consider this illustration. Imagine a desk, with a surface on which to work, and drawers for storing things. You might put papers on your desktop to work on, doing tasks such as reading, writing, sorting, stapling, shred-

ding, coloring with crayons, cutting out paper dolls, and so on. When you are done with your papers, you put them into a file drawer in the desk for safekeeping and easy retrieval. While your papers are in the file drawer, you cannot very well work on them in the ways that were listed above. But you also cannot keep *all* your papers out on the desktop where you can work on them, as eventually it would get overcrowded and you would lose things.

To connect the above example to a computer, the desktop refers to your RAM memory. The larger your RAM memory, the more documents (or programs) you can handle at a time. If you have a small amount of memory (a small desktop) you may be able to handle only a single document or program at a time.

The file drawer refers to your disk storage. If you have a small space in a drawer for storage, you may need many different individual drawers in which to store your papers. If you have several large drawers, you will have more space to store your papers, but it will require more work to organize them in a way that makes it easy to find them again.

Establishing Order

The analogy of a file drawer also takes us into the realm of *organization* of a storage system. Just as the file drawers in a desk require some sort of structure to keep track of the papers within, so also does a hard disk de-

mand structure to help keep track of files efficiently.

When a file drawer is small, organization is less necessary. You can easily see the few folders that are there, and it is not difficult to quickly locate and retrieve an item. When the number of folders gets beyond a certain point, however, it becomes more time-consuming to find the particular folder you want, unless it is arranged in some order that makes sense to *you*. (Note that the method of organization does not necessarily have to make sense to anyone else; as long as *you* can find what you want quickly, then it is appropriately organized for *you*.)

This organization can be in the form of dividers to separate different types of folders (correspondence, bills, insurance, financial, and so on), or perhaps just alphabetizing everything. You generally must decide on a maximum number of folders within a category that are manageable, and when they go beyond that number of folders it is time to subdivide. Also, the size of a folder depends on how many papers can be placed within it before it gets too heavy or fat to handle. (In my medical office, we must occasionally divide our patient charts if they become too large. It is not a pretty sight when a large, stuffed folder falls to the floor and explodes.)

On a computer, there are two basic ways of keeping your files on a disk. A "flat" structure just puts *all* the files in the same place. As with a few folders in the file drawer, this is fine, as long as there are only a few data files to keep track of. The older DOS 3.3 operating system for the Apple II could *only* work in a flat structure, and so a printed catalog of a disk that contained many small files could run to several pages, usually with the files in no particular order. To try to deal with this limitation, a method was devised of creating "dividers", which were actually dummy file entries, usually in inverse type (black letters on white) to separate different types of files. Maintaining this required a utility that could sort the filenames on a disk, to keep the correct files within their boundaries.

Here is an example of a flat file list:

```
/Disk1 <--- This is the name of the disk volume
Letter.1
Burger.Alert
Letter.59b
Eviction.Note
MegaData.System
Letter.2
MD.Data.1
MD.Data.2
Space.Raiders
Bozo.Graphics
```

There is no particular order to these files, and they don't have much in common. Of course, the user could just as easily put the games on one disk, the word processing files on another disk, and so on. In this example, the number of files is still manageable, and would not really need any further organization. But as the number of files becomes larger, finding the particular one that is wanted will get more difficult.

Order With Expansion

With the advent of the ProDOS operating system in 1984 (which was taken directly from the older SOS system used on the Apple III when it appeared in the late 1970s), a slightly different approach was taken. Although the flat structure could still be used, there was a limit of 51 files that could exist in the main (or root) directory of a disk. To store more files, it would be necessary to make use of a "hierarchical" system. This system allows creation of subdirectories (similar to using a separate file drawer in a filing cabinet). These subdirectories were not limited to a single level; they could go as "deeply" as there was room for the name that defined that drawer. (This was limited to 63 characters, including the "/" that was used to separate subdirectory levels.) Within each subdirectory, files were handled in just the same way as in the flat system; the filenames typically appeared in a list that was specific for *only* that subdirectory.

Here is an example of an entire hierarchical file list:

```
/Disk1
/Data
MegaData.System
MD.Data.1
MD.Data.2
Letter.2
/Word
MegaWord.System
Letter.1
Letter.59b
Eviction.Note
Letter.2
/Games
Burger.Alert
Space.Raiders
/Graphics
Bozo.Graphics
```

Notice in this example that the file "Letter.2" is present in more than one subdirectory. As long as it is in a different subdirectory, there can be more than one file on the disk with the same name, even completely different types of files. This would not be possible if the disk was using only a flat file system (as in DOS 3.3, for example).

When displaying this list of files on one level only, the top or root level of the directory looks like this:

```
/Disk1
Data
Word
Games
Graphics
```

A display of the files in the Data subdirectory would look like this:

```
/Disk1/Data
MegaData.System
MD.Data.1
MD.Data.2
```

and so on. Within any subdirectory, the files are displayed in a "flat" format; however, it is possible to change to another directory and access *those* files also, still in the flat format.

Notice that at the top of the root directory shown above

is the name of the disk, "/Disk1". In the ProDOS method of organizing disks, the start of a "path" to a file begins with a slash to indicate to the system that this is the name of a disk, rather than the name of a file or subdirectory. When the "Data" subdirectory was displayed, the name shown was "/Disk1/Data". Again, a slash is used, but here to indicate that the file "Data" (a subdirectory) is under the directory "/Disk1". This "pathname" specifies to the computer the path it must take to find a file on a disk. The full pathname for the file named "MD.Data.1" would then be "/Disk1/Data/MD.Data.1"

Under GS/OS on the Apple IIgs, the same format is used, but the colon typically is used as a separating character, just as is done on the Macintosh. Either the "/" or ":" character is acceptable in a pathname, but they cannot be mixed (i.e., :Disk1:Data:MD.Data.1 is acceptable; :Disk1:Data/MD.Data.1 is *not*).

Finally, understand that there can be as many subdirectories in a pathname as you can fit, as long as the total number of characters is less than the limit. Since there is a limit of 63 characters in a pathname under ProDOS, the deepest that subdirectories could be nested would be 29 levels, with each one having only single letter name (i.e., "A", "B", "C", etc). The top level would be the root directory, also a single letter name, and the name of the file could only be a single letter. The full pathname for such a file would be

/A/B/C/D/E/F/G/H/I/J/K/L/M/N/O/P/Q/R/S/T/U/V/W/
X/Y/Z/A/B/C/D/E

In this example, the disk volume name is "A", which has a subdirectory named "B" under it, which has a subdirectory named "C" under it, and so on down to a deeper subdirectory named "D". Within that subdirectory is the file, named "E". (If you *really* need to be organized down to *that* deep a level, you need to be referred to Obsessive-Compulsive's Anonymous.)

What Good Are Pathnames?

To get the most use out of the hierarchical filing system that ProDOS provides, it is best to use sensible names that are not too long, but are long enough to tell what they are for. This makes it easier to find the program or file that you want.

For example, I have the subdirectories on part of my hard disk organized as shown at the top of the next column. This is not necessarily the *best* method of setting up a hard disk, but it works well for me. Notice that I have placed the various types of AppleWorks files within a subdirectory named "FILES", and beneath *that* level is another set of subdirectories that hold more files in a fashion that makes sense to me. To find the A2 News Digest for July 1993, I just use the path "/C/WORD/FILES/NEWS/NEWS.GENIE.9307". If a subdirectory gets too large (too many files to quickly find them), my personal preference is to subdivide it and make another subdirectory with files as similar as possible grouped within it. Since I don't care to make paper copies of the contents of my subdirectories, it is both

```

/C
--/MODEM           :Disk Volume Name
--/GEM             :Telecommunications files
--/S               :GEM (GENie Master) files
--/T               :GEM UltraMacros samples
--/TIC SCRIPTS    :GEM UltraMacros task files
--/SP.Scripts     :GEM Script files for TIC
--/LIB            :GEM Script files for Spectrum
--/TIC            :GEM library files
--/TERM          :Talk Is Cheap terminal program
--/SPECTRUM      :Terminal emulation files
--/MACH          :Spectrum terminal program
--/WORD          :Files from local BBS
--/AW1.2         :Word processing files
--/AW3           :AppleWorks 1.2 program files
--/AW.INITS      :AppleWorks 3.0 program files
--/TIMEOUT       :Inits for AppleWorks
--/AW4           :TimeOut applications
--/AW           :AppleWorks 4.0 program files
--/FILES         :Document files created by AW|
--/ARC           :General archives from GENie
--/NEWS          :A2 News Digest files
--/LAMP          :Articles for GENieLamp A2
--/HISTORY       :Apple II History files
--/FINANCIAL     :Financial spreadsheets
--/JOKES         :Humor files
--/SYSTEM        :GS/OS System files
--/DESK.ACCS
--/SYSTEM.SETUP
--/FONTS
--/CDEUS
--/DRIVERS
--/TOOLS
    
```

easier and faster for me to have no more than one or two screens of filenames (i.e., 20-40) to review when looking for a file.

Finale

The main thing I want you to take away from this month's article is to consider some sort of organization when planning how you will use a hard disk. It will simplify your daily use of it later, when you begin to accumulate more and more files.

In this series I have gone through the process of selecting, setting up, and using a hard disk on the Apple II and IIgs. Although there is still more to be said about *other* aspects of using Apple II computers, my available time for writing articles has become considerably more limited in recent months, and so I will at this time have to bid you goodbye for now. This is the twelfth article in the "Polishing Green Apples" series, and I hope that they have been useful to you. Apple II Forever!

Steve Weyhrich is a family physician from Omaha, Nebraska. He has been using Apple II computers since 1981, and writing about them since 1990. He follows closely the events that continue to shape the destiny of the legendary Apple II and IIgs computers, and compiles a monthly column called the "A2 News Digest" for A2-Central disk magazine. He is also the author of the "Apple II History", available on fine BBSes everywhere, and drawing to a close in this month's issue of GENieLamp A2.

Software News

More on that new Fax Software

By Paul Packhurst

Reprinted from *GEnieLamp*, Oct 94

Wheels do need re-inventing now and again...

Seriously, I want my software to work with *any* kind of fax modem. So, I'll have to get to Class 1 eventually, anyway, and since its the hardest to program for, I may as well get it over with. Also, if I can write fax software that will work with a Class 1 modem, I can write it to work with anything...

Anyway, I guess everyone is happy about this software. To keep you up to day, I've been converting more C code into assembly to try to speed things up. Right now, it takes about 30 seconds or so (I haven't actually timed

it) to "print" an AWGS page layout document to a fax file. It then takes about 2 minutes or so to send it to the receiver. The more complicated the document being printed, the longer it tends to take. To speed things up, I'm going to have 2 quality settings. When you "print" (ie save to a fax file), you'll be given 3 quality settings (Fast, Standard, Best). When you send the fax, you'll be given 3 or 4 resolution settings. The quality setting tells PMPFax how big to make the graphic image. When printing text, the bigger the better, since an enlarged graphic image will use larger font sizes if you have them, which will improve the general quality of the fax. The resolution is basically a chunkiness setting. Normally, PMPFax uses a 16x16 pattern to print in grey scale. With the best resolution, 1 bit in the patter represents one fax pixel. With a resolution setting of 2, 1 bit represents 2 bits, etc. Its more complicated than that in real life, but the upshot is larger the setting, the chunkier the printout (and the lousier the quality) and the larger the setting, the faster it sends.

As I mentioned before, I'm saving fax files into standard

Lights from the Lamp

Miscellaneous items from *GEnieLamp*, November 1994.

Old Roger Wagner Titles Still There

I (*identity unknown—Ed*) spoke with Pam Wagner yesterday and she assures me (us) that nothing has been deleted from the RWP catalog. Even the oldest of the old titles for the][+ are still available if you call.

TrueType From MS-DOS

In reply to a question about converting MS-DOS (Windows) TrueType fonts to a form compatible with GS/OS and Pointless, Steve Weyhrich posted the following:

You have to run the fonts through a converter program on a Macintosh. Then you have to spend a few hours getting things like style bits, font names, and font ID numbers right. Then just put them on an HFS disk and pop it in a GS.

It's not for the faint of heart...or those lacking in computers. You can make the conversion if you have an MS-DOS computer (possibly optional), a Macintosh, and your Ilgs.

1. Make sure the TT fonts on the MS-DOS disk are "NAME.TTF", and not "NAME.TT_". The latter fonts have some compression that has to be decompressed before they are usable. This would be the only situation where you would NEED an MS-DOS computer. Just use the Utility included with the fonts to install them into Windows.
2. Transfer the MS.DOS "TTF" font files to a Macintosh using Apple File Exchange (AFE) on the Mac.
3. Download the shareware program TT Converter from the Mac RT. Run each TTF file through TT Converter, and it will make it usable by the Mac. Note that the filename given by TT Converter to some fonts with similar

names may be close enough that you will get an error when trying to do it. (For example, Bozo Bold and Bozo Bold-Italic might both be given the name Bozo BO by TT Converter; attempting to convert the second one will cause an error and the program will quit).

4. Put the converted files on an HFS 3.5 disk, and put it into the Ilgs.
5. Move the files from the HFS 3.5 disk to wherever you want them on the Ilgs hard drive.
6. Use the Pointless control panel to load each of the converted Mac fonts. Pointless will change them from typeless files (\$00/0000) to proper TT fonts (\$C8/0001).

There's more if you want to be fancy, but that's the quick and dirty.

Cogito Easter Eggs Found On 'Net

This little tidbit scammed from comp.sys.apple2, and is for the benefit of those who like the new game *Cogito* from Brutal Deluxe (described in the September issue of WApplell NEWS):

From: "Theo Schneider" <tooly@zelator.de>

Hi there,

I found 4 eastereggs in Cogito. In every Ground I found one:

1. Ground : Lundy
Click on the i-point in the Name 'Cogito'
2. Ground : Happy Land
Click on the big white point in the right eye from the happy figure

Continued next page...

Lights from the Lamp...from previous page

3. Ground : Planet

Click on the Moon from the big Planet top of the watch

4. Ground : Xeno

In the figure right on the screen you see an row of white points. Click on the 3th from top.

DeskJet Internal Fonts Tip

Don Zahnister

Someone asked recently about the mapping of GS fonts to DeskJet internal fonts in Harmonie. I set up the examples from the DeskJet 500 Translation table in my Harmonie manual (Came with V2.0M), and tried a few other examples, printing out from ShadowWrite in External Rendering mode. The following translations worked:

<u>GS Font</u>	<u>DJ Internal Font</u>
Courier 12	Courier 10
Courier 8	Courier 16.67
Courier 6	Courier 20—6 point (half height)
Times 12	CG Times 12 point (Proportional font)
Times 6	CG Times 6 point (Half height & width)
Geneva 12	Letter Gothic 12
Geneva 6	Letter Gothic 24—6 point (half height)

GENie to Provide Full Internet Access By Year End

Rockville, MD, October 17, 1994—GENie announced today its plan to release Phase I of its Internet Access Service by year-end 1994. The GENie Internet Access Service will enable subscribers to access the wealth of information and numerous discussion groups available on

the Internet from GENie.

Phase I will provide GENie subscribers with access to:

- The FTP Service which provides users with interactive access to any of the millions of files available for public access on the Internet.
- Usenet Newsgroups Service which allow users to participate in the global discussion areas collectively known as USENET.
- Outbound Telnet Service which enables users to connect to other host computers through the Internet.
- Gopher Service which is a set of menus designed to help users access files, discussion groups and other host computers in a more orderly and logical fashion.
- Wide Area Information Server (WAIS) Database Service which provides users with access to "no cost databases" across the Internet.

GENie will also establish a GENie Information Server, accessible to Internet users interested in learning more about GENie Services. Pricing information, access numbers, a list of services, and details of special offers will be available, as well as a sign-up module.

GENie Services, which became operational in 1985, is one of the leading online information services with subscribers throughout the United States, Canada and around the world. GE Information Services, Inc., a division of General Electric Company, is headquartered in Rockville, Maryland.

RoundTables are GENie's special interest areas. Each RoundTable includes a bulletin board, software library and Real Time Conference.

Apple Preferred format (saved with a custom block for the page information). This will allow PMPFax to send any AP graphic file, as well as a receive fax file. Someone mentioned that type \$C0, aux \$0007 is the official Group 3 T.4 raw image file, so I guess that's what I'll use for received faxes.

So, here's the stuff that actually works: the CDev loads fine and patches the Print Manager. The patch code intercepts Print Manager calls to capture print jobs to fax files. And, a stand-alone (for now) program will take these files and send them out. In other words all the basics (except the receive) is finished. Receiving should be quite simple, since all the routines I'll need are already written for the send side. Converting received faxes will take a bit of time, but shouldn't cause too many sleepless nights (two weeks' worth tops)

So, there you have it. Keep suggesting things, and I'll keep working.

S. Reeves wrote:

There is an article in the October '94 issue of MacWorld comparing Mac fax programs. In a sidebar, the author describes desirable features of such programs. It would be nice for a GS program to include as many of these as are feasible. To paraphrase the article:

Common features are: scheduling of outgoing faxes, send and receive in the background, multiple phone books, export received faxes as graphics, send one fax to multiple people, send multiple documents as one fax, log all faxes, forward a received fax to another fax machine, flip a received fax upside down, magnify and reduce faxes on screen.

More sophisticated features are: send gray-scale images (like photos), antialiased (gray-scale) viewing of received faxes, intelligently omit the local area code when dialing, turn received faxes into text (OCR), rotate a received fax 90 degrees, dial credit card dialing sequences, can switch to fax manually during a voice call, automatically print received faxes, import and export tab-delimited phone books, a program that lets you quickly whip up short typed faxes.

Paul Packhurst replied:

Well, first, I wasn't assuming everyone had AWGS...just that most do, which is why it would have been nice to have the graphic file specs. However, I'm writing my own cover sheet program, so the point is moot. It will be a basic draw program. You'll have all the basic shapes (ovals, rects, round rects, lines), 16 colors and 16 patterns, text, and APF importation of bitmaps for back-

grounds, etc. Also, of course, you'll have the predefined fax fields, such as page #, total pages, addressee, company, comments, etc.

Short cover sheets won't be a problem. You could always just choose a short page size (such as envelope) and confine your sheet to that. Attaching a default cover sheet (or none at all) to a phone book entry is a good idea. I'll do something like that. Since the actual print jobs are going to be stored in APF format, you'll be able to choose from print jobs, APF, and coversheet formats for sending faxes. You'll also be able to send received faxes, or convert them over to APF format. I'll also include groups in the phone book so you can send faxes to a number of different people.

I've changed how I'm going to do a few things. For the actual saved fax file, I'll be using my own format instead of APF and do all of the translation at "print" time. This will greatly improve the speed at which the fax is actually transmitted (saving on phone bills). It will still be able to import APF files, but actual send jobs will be saved as a fax send file.

Received images will be saved as raw T.4 fax data, with each page stored in a different file. When viewing these files, the raw information will be read in, translated to scanline/pixel information, and squeezed into whatever magnification level you've selected. When printing, I'll probably be stuck using whatever page size the printer driver is supporting. I bet, though, if you select Compressed and 50% or whatever with the Laserwriter, you'll actually get a nice printout.

As to informing you of un-sent faxes... What I'm planning on doing is keeping a scheduled log that contains all send jobs that haven't been sent yet. Each of these jobs (which can include print jobs, coversheets, pages from other scheduled or received faxes, or PIC/APF files) will have a status and a time that they will be sent. Normally, you will send jobs immediate when they are created. The job gets sent, then they are normally deleted (you'll have an option to retain sent jobs). However, you'll be able to specify a particular time to send a job. As long as you keep your computer in the desktop, the fax software will look at the time (as well as seeing if any calls are coming in) and when the time comes for a scheduled fax, it will attempt to send. If something goes wrong, the job will remain in the scheduled log, the status will be "Send Failed" or something like that, and all the details will be in the main log for you to look at. At boot time next, you'll probably be able to hear nifty sounds for "Fax Waiting", "Fax Not Sent" and the like.

More Fax Software

Well, while Paul Packhurst and others are still working away on their software, it seems that the IIGs software company Vitesse have been quietly toiling away and have stolen the march in the Fax software game with a new product called *FAXination*. Vitesse claim that this product will be shipping in the first week of December. Not wishing to be party pooper here, but judging from

the time they finally took to get Quickie C off the ground, I guess it really means we should see *FAXination* around the middle of March next year (oops, sorry—is that me being cynical again??)

Whatever the situation, if you want this software you should order before December 15 this year, because after that the price will almost double. Here are its features, taken directly from Vitesse's ad in the current issue of GS+ (this stuff has also appeared on the Internet):

- Allows printing to an external fax mode from any standard GS/OS-based application!
- Faxes graphics and text with ease.
- Support for Pointless™ TrueType™ fonts.
- Use the Deferred Send feature to send one or more documents to the same fax station with a single call.
- Use the Deferred Send feature to create a fax document when RAM is low, and then send it later when more RAM is available.
- Phone Book feature faxes and fills in cover sheets automatically.

Before 15/12/94	After 15/12/94
<i>FAXination</i>	\$49.95 (\$79.95)
<i>FAXination</i> with 14,400 external Faxmodem	\$149.95 (\$189.95)
Tracer Sanction & Mind	\$29.95 (\$39.95)
Shadow (combo)	
Quickie 3.2 Hand Scanner	\$89.95 (\$149.95)
Quickie 3.2 Hand Scanner with Inwords OCR	\$99.95 (\$249.95)
Quickie-C (Adaptor)	\$99.95 (\$129.95)
Quickie 3.2/Quickie-C bundle	\$189.95 (\$259.95)
Quickie 3.2 (Update from 3.1)	\$24.95

- Answers and receives fax calls automatically, or only by manual command.
- Maintains a log of faxes sent and received.
- Use Send or Receive Logs to view cover information, the actual document, print the document, or change the address and forward it to another person.
- Automatically supports Class-1, Class-2, and Class-2.0 fax modems.
- No knowledge of modems needed. Automatically senses which port and which modem is attached! Simply plug in the modem, install the software, and reboot.
- Optional Call Progress window allows you to see what is happening while sending or receiving a fax.
- *FAXination* is a CDev with an NDA interface to provide quick access to *FAXination* controls.
- *PrintPicker* NDA allows switching between the *FAXination* printer and your printer (GS/OS system

6.0, or higher only).

- Special desktop application allows even users with less than 2 Meg RAM to send Deferred faxes.

FAXination requires GS/OS 5.0.4 or higher, 1.5 Mb RAM, and a hard disk drive. System 6.0 or higher, and 2 Mb of RAM are highly recommended. *FAXination* supports only external FAX/Modems. Shipping the first week of December 1994. Taking advanced orders on *FAXination*. Prices as shown on previous page.

Order direct from Vitesse and save \$\$.

Vitesse Inc., PO Box 929, La Puente, CA. 91747-0929
(818) 813-1270 • FAX (818) 813-1273

This is a limited time offer, prices subject to change without notice.

Getting Animated

Yet another program promised before the end of the year is *Animasia 3D*, a new animation program for the Apple IIgs. Rather than try and re-invent the wheel, here is their ad, also taken from the current GS+:

Introducing *Animasia 3-D+*

Animasia 3-D is an exciting new desktop animation program for your Apple IIgs. With it, you can create instructive, dramatic, or experimental type animations. Animations can be played by *Animasia 3-D*, recorded to VCR, or included in HyperStudio and HyperCard GS stacks. Three dimensional objects are the things that make up animations; objects have height, width and depth, like a chair or a bird. You animate objects just by moving the object to a new position at a new time. Create the starting and ending positions and the in between transitions are filled in automatically.

Animasia 3-D is...

- **Intuitive** — Elements are directly changeable by pointing and clicking the mouse, conforming to the guidelines published by Apple Computer. In other words, "What you see is what you get".
- **Familiar** — Begins with a basic set of tools, such as those found in drawing and painting applications.
- **Accommodating** — Advanced features are hidden so that beginners can work at their own pace.
- **Forgiving** — Thirty levels of undoable actions protect you from making costly mistakes.
- **Compatible** — Works with all applications, like AppleWorks GS, Platinum Paint, HyperStudio, HyperCard GS, Switch It!, The Manager, Twilight II, etc.
- **Standardized** — Uses existing standards, such as exporting Apple Preferred Format pictures, creating PaintWorks animations, and importing AutoCAD "DXF" type object files.
- **Powerful** — Create oval, rectangle, and free-form objects, which can be built upon to create pipes, rings, spirals, cones, and lathed shapes. Cut, copy, paste,

move, rotate, size, deform, bevel, align, hide, and lock any object.

- **Structured** — Assign parent-to-child object relationships to aid in character animation.
- **Visible** — Multiple cameras show any perspective of your 3-D world.
- **Lighted** — Brighten your 3-D world with an unlimited combination of four types of lights: Ambient, Directional, Radial, and Spotlight.
- **Animated** — An event-based timeline lets you precisely adjust the timing of any one of an object's 12 attributes.
- **Fast** — Full-screen animations play back at 30 frames per second by taking advantage of the IIgs' unique "Fill Mode" video.
- **Capable** — Does more than Cartooners and Fantavision combined.
- **Supported** — Assistance is available 5 days a week and online through GENie (Animasia@Genie.geis.com).
- **Fun** — Creating 3-D worlds, images, and animations is one of the hottest trends in the computer industry.
- **Amazing** — People are already talking about it: "...aspects of the user interface...convinced me that *Animasia 3-D* was probably the most user friendly 3-D program I'd ever seen".—Jerry Kindall, Editor "II Alive".

While *Animasia 3-D* has capabilities rivaling software costing ten times as much, *Animasia 3-D* is **only \$99!** Cheque or money orders accepted. Add \$3.50 S&H. Overseas orders add \$5 for air mail shipping.

Available beginning December 10th.

System requirements: Apple IIgs with System Software 6.0.1, 2 Mb of memory, disk drive, and a colour monitor. 4 Mb of memory, a hard disk, and an accelerator are recommended.

Animasia

3324 Vishaal Drive
Orlando, FL 32817
USA
407-380-9932

Symbolix Special Offer for Shareware Solutions II Subscribers

(Basle, Switzerland /San Rafael, California. October 26, 1994) The European offices of Bright Software has recently taken over the worldwide distribution of Symbolix, the most sophisticated math program ever written for the Apple II GS.

Bright Software would like to take this opportunity to also inform you that an amazing new 2 disk interactive demo of Symbolix is now available exclusively from the US-based offices of Shareware Solutions II.

Symbolix is a full-featured GS/OS desktop application for complex numeric and symbolic math. Written in fast assembly language, Symbolix calculates object-oriented

2-D and 3-D graphs with hidden surfaces. It offers commands for symbolic derivatives of any complex expression and frees you from expanding, collecting, simplifying and rewriting real or complex expressions. Symbolix fully supports *The Manager* and the Floating Point Engine, although it requires neither.

Symbolix differentiates any mathematical expression in the twinkling of an eye. It also supports nested line integrals with any number of independent variables. Symbolix's unique 3-D module is the most impressive graphing tool ever seen on a IIGS. You can rotate graphs, choose from among different color sets, and export them in various formats. There is a complete online help system, and a complete collection of mathematical formulas and summary of all chemical elements. Plus, there are Easter Eggs galore!

Symbolix requires 2 megabytes of RAM, two 3.5" disk drives or a hard disk, and System 6. It is now available only from Bright Software's European offices for \$70 plus \$5 for shipping and handling. Bright Software can accept payment by EuroCheck and by check or money order in US currency.

Bright Software is also pleased to announce that a special discounted offer for Symbolix is now available exclusively to subscribers of Shareware Solutions II. Details may be found in Shareware Solutions II, Issue #7.

The 2 disk interactive Symbolix demo is reminiscent of FTA demos, with stunning and informative animations and a toe-tapping musical soundtrack. That demo is now available from Shareware Solutions II for only \$5. The Symbolix demo requires a hard disk drive, but the actual Symbolix program does not.

To order the Symbolix demo, send checks/money orders, made payable to Joe Kohn, in US Funds only, to the Shareware Solutions II Worldwide Headquarters.

Bright Software	Shareware Solutions II
c/o Henrik Gudat	c/o Joe Kohn
Missionsstr. 38	166 Alpine St
4055 Basel	San Rafael, CA 94901
Switzerland	USA

Bright Software is the producer of a number of Apple IIGS commercial and freeware software titles. Commercially available software includes The Gate and Space Fox. Freeware from Bright Software includes ShadowWrite and MultiView.

Shareware Solutions II is a bi-monthly 20 page newsletter that celebrates the magic that is the Apple II computer. Shareware Solutions II also publishes Bill Heine's Contacts GS name and address IIGS New Desk Accessory data base program.

Please contact Bright Software and/or Shareware Solutions II for additional information on their respective products. E-mail inquiries may be directed to:

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Hardware News

Soundmeister Card Now Shipping

Reprinted from GENieLamp, Oct 94

From a message by Tony Diaz of Alltech Eelcetronics: They are starting to trickle out the door.. the waiting list is first and by the time the backorders are out they should be in ample supply..

The major hold up right this second is the company that I ordered the 1/8" panel mount phone jacks from sent me mono instead of stereo. When we receive parts, they go into stock. They even looked like stereo so no one paid it any mind, but last Monday when I went to assemble a sample cable so they could build the rest, I discovered that.

That's the reason for the slowness at this point. If people want to build their own "patch board" for connections, they can get a card a bit sooner..

So You Want a MIDI Card...

by Peter Hinchliffe

If you are musical, have an Apple IIGS and have been wanting to get into MIDI for some time but don't know how to get hold of a MIDI card, worry no more. Go out a purchase that MIDI keyboard with confidence, because working with MIDI is as easy as visiting your local Apple reseller. All you need to do is pretend to them that you have a Macintosh (do *not*, under *any* circumstances, tell them that you own an Apple II or they'll make you ring me up!) and they'll sell you an external MIDI interface for the Mac. The whole point is that these things apparently work perfectly from the modem port of an Apple IIGS! According to Eric Heim in a letter he wrote to GS+ magazine, any external MIDI interface will work, but he describes specifically one called the MacMan, from a company called Sound Management. This device even comes with a serial throughput switch so you can connect your modem cable to the MacMan and simply swap between your modem and MIDI just by flicking a switch instead of changing cables. I don't have the details of Sound Management, but as I said, any Mac interface should do...

More on the Second Sight VGA Card

Reprinted from GENieLamp, November 1994

Message from Quality Computers:

In defense of Sequential, there's a finite supply of Apple IIGS RGB monitors out there. Nobody is making them, so this card will be instrumental in the preservation of Apple II computers out there. For those with an Apple IIe, it's basically the only choice for an improved dis-

play. We constantly get questions from people about the clarity of Apple II displays and this is a good solution. So, without reservation, I'll gladly say, nice job Sequential.

More questions from GENie members:

Q: Why does the card have to go in slot 3 on a ROM 01?

A: There is a signal, M2B0, that's available only on slot 3 in a ROM 01 that the card needs.

Q: As I already have a Zip in slot 3 and moving it would not be possible. Adding a longer cable would cause the Zip fits.

A: Actually, you can put the Zip in slot 1 by just reversing the orientation of the CPU cable on the Zip. The cable isn't any longer, and we've been running the 10/64 Zip in a ROM 01 (noisy) like this for over a month without problems.

Q: Is the card compatible with the Zip for that matter?

A: Works fine with a 10MHz/64K Zip we've got in that machine, and we've no reason to believe faster ones won't work just as well.

Q: Say, nobody asked if it worked fine with the 3200 color viewing scheme.

A: I'm not 100% sure, but probably not.

Q: Even better would be an LCD flat panel display that directly accepted VGA/SVGA signals.

A: Excellent idea, Luny! I've been browsing some Educational catalogs going (ooh, look at *this* screen projection system that people with II's in schools can use now!

Q: Jawaid, I have read that the Compton Encyclopedia

has some video parts and some animation. Does your software for Compton support these?

A: The Compton's CD does in fact have QuickTime (Mac) or AVI (Windows) movies, but there's no IIGS software to play these movie formats yet, and even if there was, it would take a great deal of time to process the movies into color. With the Second Sight video card, however, players for these movie formats should be easier to write, and perform in real-time.

Q: Will the SS card and a larger VGA monitor allow me to view an entire page in AWGS, GraphicWriter, etc.? Will it make doing a page layout any easier (see the whole page at actual size) if I can use a larger monitor?

A: (From Ken Lucke) Not at this point (although I know Dave is interested in supporting it for GW). These programs are not currently written to support the special functions of the card, so all you would get (from what I can tell) is a better resolution (sharper) and clearer (no scan lines) version of what you already see.

A: (From Jawaid Bazyar) As we sell them, it won't allow this. However, if in the future someone patches QuickDraw for the Second Sight board, then assuming the software isn't deficient in some way, you could get more on the screen at a time (and with the right aspect ratio, too).

Just a quickie notice: I made significant progress in my investigation of Compton's encyclopedia today, enough so that I can safely say that the next version of Compton's, with new features like the "Idea Search" implemented, will be out by Christmas.

What's New?

These days we Apple II owners are well used to seeing familiar software and hardware vendors and developers leaving the Apple II scene with monotonous regularity in search of greener pastures in the lands of the Mac and/or the IBM compatibles, only to close down because they find all that green grass is really just painted cement.

It is extremely rare, therefore, to find new developers entering the IIGs paddock, but that is precisely what a new company, Warpfield Engineering, intends to do!

According to Prof. G. S. Gumby of GS+ Magazine, in his column *Rumors, Wishes & Blatant Lies*, Warpfield Engineering is being formed by some former Applied Engineering employees, and they intend to stick strictly to Apple IIGs products! AE failed in the Mac market because they misinterpreted the average Mac user, and indeed the whole idea of the Macintosh computer, which has always been that of a computer that **shall not be tampered with**. Their other problem, of course, was that the

Mac was developing at a rate much faster than AE could keep up with, and their products were simply not needed by the time they made it to the production stage.

So I guess these former AE employees have decided to go back and try their luck in a more stable, albeit much smaller, environment. Their first new product will be a portable hard drive called the "Voyager". Unlike AE's incredibly overpriced and inefficient "Vulcan" series, the Voyager will be an external drive which will plug directly into the SmartPort of the IIGs, and contain a pass-through port for your other drives. By using the SmartPort, the Voyager avoids the need for a separate power supply and can easily be moved from one IIGs to another. (The question begs to be asked here: will it work on the IIC SmartPort?) The Voyager will also have standard SCSI and IDE ports so that you can connect it to any existing controller card you might already have (which presumably means its use is not restricted to IIGs users). It will be available initially in three sizes: 240 Mb, 540 Mb and 1 Gb, priced at \$300, \$500 and \$800 respectively. Quite realistic all round, I'd say.

WarpField also have other products in the pipeline, including a new incremental backup program, a 9-disk

CD-ROM "jukebox", and a handheld phone/modem that will allow you to communicate from just about anywhere. All something to look forward to.

Technical Note

GS/OS System 6.0.1 contains a feature known as "magic routing", which greatly simplifies the installation of files which belong inside the System Folder.

In the vast majority of cases, such files are required to be placed in special folders within the System Folder, such as fonts, inits, desk accessories, etc. It is not always easy to tell in just which folder a file should be placed, but with Magic Routing much of the guesswork is removed. All you need to do is open the icon representing your boot disk, locate the System Folder (it is always white with a multicoloured Apple logo on it) and "drag and drop" your file(s) onto it. A dialog appears informing you that the files you are copying will be placed in special locations within the System Folder, and asking you if you want to proceed. When you click "Yes" the file(s) will be automatically copied to the appropriate folder(s).

There is one small problem with this: under normal circumstances you can only do this once, because after the files have finished copying, the System Folder turns yellow and loses its Apple logo, so that it now appears to GS/OS as just another folder and Magic Routing is no longer possible.

This is a genuine bug in GS/OS 6.0.1, and one which was completely overlooked by the software engineers when they were putting the system together. There have traditionally been two work-arounds to the problem: (a) close the window of the boot disk and reopen it, whereupon the System Folder icon reverts to its correct appearance, or (b) move the System Folder icon out onto the Desktop (that vast expanse of "periwinkle blue" surrounding your windows) and copy your files to it there (remembering, of course, to move it back to your boot disk when you're finished). The latter was the method used exclusively by the software development team, as well as the beta testers, so as amazing as it seems, the bug passed through the entire testing process undetected!

Apple have never bothered to provide a fix for the bug, having abandoned the Apple II completely, but fortunately for us all the world-wide Apple II community is made up of clever people, and a French subscriber to GS+ Magazine has come up with a solution, and a simple one it is, too. All you need is a utility which will allow you to change the *auxType* of files (there are plenty of these around, and not just for GS/OS—there are a few ProDOS 8 programs which will do it) and change the *auxType* of the System Folder to \$00000002. That's it. And why it has gone this long without anyone else discovering this is anybody's guess.

AppleWorks Corner

AppleWorks—The TimeOut Utilities

by Kevin Noonan

The single most important addition to AppleWorks (AW) that any user can make it to buy any of the TimeOut (TO) utilities. These are small computer programs that, when installed properly, "pop up" within AW and allow the user to perform tasks ranging from graphing data in a spreadsheet to backing up a hard disk. This is a list of those TO that I consider "essential" parts of my set-up, and why I value them.

I get these lists by pressing Open-Apple-Esc inside AppleWorks. Up pops a menu of all of the TO I currently have installed. Only thirty programs fit on a single menu but if I have more than that I get more than one menu as shown below.

1. About Time	16. CALENDAR.N
2. Batch.Loader	17. Calculator
3. CALENDAR.A	18. Calculator+
4. CALENDAR.B	19. Calendar.Now
5. CALENDAR.C	20. Case Converter
6. CALENDAR.D	21. DirecTree
7. CALENDAR.E	22. DuplicateZapper
8. CALENDAR.F	23. Envelope Address
9. CALENDAR.G	24. File Encrypter
10. CALENDAR.H	25. Grammar
11. CALENDAR.I	26. Graph
12. CALENDAR.J	27. Help Screens
13. CALENDAR.K	28. Letters
14. CALENDAR.L	29. Line Sorter
15. CALENDAR.M	30. MousePrint

By pressing the TAB key I can move from one TO menu to another. In this case I only have 30 on Menu 1 and 23 on Menu 2.

1. MouseText.4.2	13. SuperFonts
2. MouseType	14. SuperForms
3. Note Pad	15. Thesaurus
4. Page Preview	16. Time Zones
5. Paint	17. Ultra Compiler
6. PickFonts	18. Ultra Mac2Menu
7. Printer Manager	19. Ultra Options
8. Screen Printer	20. Utilities
9. Shrink Desk	21. Word Count
10. ShrinkIt	22. World.Clock
11. SideSpread	23. seg.um
12. Stop Watches	

So, what do these little programs do?

All of the ones titled CALENDAR.A through to CALENDAR.N in Menu 1 are part of a universal calendar system that allows me to see at a glance any year between 1792 and 2091. Now to be honest this is not really a must have item but I rather like them. Equally the file *Calendar.Now* also in Menu 1 is a month by month calendar for any year between 1582 and 9999. Again I don't have any serious use for this but have it for fun. The main difference between the two is that *Calendar.Now* allows a month-by-month display whereas the others display the whole year at one time.

In a similar vein *About Time* (Menu 1) gives me a display of times and dates upon which I can perform calculations. The display shown gives the birth date of a certain regular AppleSauce writer and the number of days he has been alive, as of the December meeting date. All of this data can be exported to a SpreadSheet. It also allows calculations based on time rather than dates but is limited to calculations involving no more than 24 hours. In each case, the user has complete freedom to enter any two of the data and the computer will calculate the third. As a default, the start date is read from the current clock date and the start time is also read from the current clock time on any Apple II equipped with a clock.

Start Date: 24 Feb 1955 (Thu)
Days: 14526
End Date: 02 Dec 1994 (Fri)

I also have a dynamically displaying world clock (*World.Clock* in Menu 2). That is, it constantly reads the clock inside my Apple IIs and displays it onscreen. Again, for me, this is really more for fun than for serious use.

The real work horses in my collection are *Calculator+*, *DiracTree*, *Envelope Addresser*, *Graph*, and *Letters* in Menu 1, and *Printer Manager*, *Shrink Desk*, and *Ultra Compiler* in Menu 2.

Envelope addresser automatically takes the address details from a file (but the user can override the automatic choice easily) and sets the screen up to print an envelope properly in the USA style with mailing address centred nicely on the envelope and the return address on the top left corner of the envelope.

Graph has been written about before so needs nothing more to be written (see July 1994 AppleSauce).

Letters is a TO I have made for myself from my own macros to quickly set up a new letter for either my wife or myself. It allows me to define an entire blank letter with address and salutations etc with a single keystroke.

Ultra Compiler is the Ultramacros module that turns macros into runnable programs within AppleWorks.

Calculator+ (not to be confused with *Calculator* also in Menu 1 which is much simpler) is a Hewlett Packard style fully scientific calculator which is always available with the standard Open-Apple-Esc keystroke valid for all TO.

Directree is particularly handy for those users with a Hard Disk, but is useful for anyone with a lot of files. It will quickly search through an entire disk and display either all files on the disk, or just the AppleWorks files. In the case of AppleWorks files, the user can then have that file loaded onto the desktop. This can be a very fast way of finding a file on a hard disk.

Printer Manager allows me much more complete control over the printing capabilities of my ImageWriter II printer. There is also a version for DeskJet users. These allow me to use any of the special printing characteristics of the printer without having to resort to changing the Special Codes contained in the printer set up menus.

Shrink Desk is a space saver. It is designed to automatically shrink a file down to save space on disks. It will also automatically load the files again and unshrink them. This one is a must for those using only 13cm disks. The other related TO is *ShrinkIt* which works in a similar manner but does not unshrink to/or from the desktop but only to disk. I know of a number of people who use this as a method of backing up their hard disk without having to leave AppleWorks.

Some of the others do get used a lot but I guess I really could live without them. I use the thesaurus when I need a replacement word; *DuplicateZapper* will automatically remove any duplicated DataBase entries; *MousePrint*, *MouseType* and *MouseText* allow me to enter the graphical mouse text characters in my word processing documents.

Page Preview allows me to see what a document will look like before I print it. This is useful since AppleWorks does not display the way things will be printed. It is, however, rather rudimentary.

NotePad displays a small note pad where you can write short notes (actually, only limited by the amount of memory available) about any topic. I have commonly seen this used for remembering peoples addresses and storing useful AppleWorks tricks.

Paint is a full feature paint program that works inside AppleWorks like any other TO. It allows the standard paint tools, eg. drawing circles, rectangles, filling, spray painting, lines, text, etc. very useful as a way of painting a new picture or modifying an existing picture to use in either *Graph* as a background, or in *SuperFonts* as a way of displaying some important point of information.

SuperFonts and *SuperForms* have been written about previously. *PickFonts* is part of that set of utilities. It makes font selection a lot easier than in standard *SuperFonts*. In fact it provides a scrolling list of available fonts which you select by pressing return. The font is then automatically added to the *SuperFonts* document.

I will not bother the reader with the detail of all of the others. The uses of many can be guessed at from their names.

This is my particular set of TO. There are literally hundreds available. Other users will undoubtedly have a different selection.

I would value any suggestions for future articles, and would like to receive correspondence from other members who use any version of AppleWorks for any task at home, school, or work. I would also like to suggest that brief "how I do it articles" would be valued highly by the editor.

I would be only too happy to help in whatever way I can. Understand that I am not an AW expert. I am simply a user who has had to cope with all that AW has to offer and has survived so far!

Please address any correspondence on AW to;

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16 Nicholas Drive
Tea Tree Gully SA 5091

For those with an Internet connection;

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A Touch of Humour

Reprinted from GENieLamp, November 1994

Cartoon Laws

by Trevor Paquette and Lt. Justin D. Baldwin

The Ten Laws of Cartoon Physics

Cartoon Law I.

Any body suspended in space will remain in space until made aware of its situation.

Daffy Duck steps off a cliff, expecting further pastureland. He loiters in midair, soliloquizing flippantly, until he chances to look down. At this point, the familiar principle of 32 feet per second per second takes over.

Cartoon Law II.

Any body in motion will tend to remain in motion until solid matter intervenes suddenly.

Whether shot from a cannon or in hot pursuit on foot, cartoon characters are so absolute in their momentum that only a telephone pole or an outsize boulder retards their forward motion absolutely. Sir Isaac Newton called this sudden termination of motion the stooge's surcease.

Cartoon Law III.

Any body passing through solid matter will leave a perforation conforming to its perimeter.

Also called the silhouette of passage, this phenomenon is the speciality of victims of directed-pressure explosions and of reckless cowards who are so eager to escape that they exit directly through the wall of a house, leaving a cookie-cutout-perfect hole. The threat of skunks or matrimony often catalyzes this reaction.

Cartoon Law IV.

The time required for an object to fall twenty stories is greater than or equal to the time it takes for whoever knocked it off the ledge to spiral down twenty flights to attempt to capture it unbroken.

Such an object is inevitably priceless, the attempt to capture it inevitably unsuccessful.

Cartoon Law V.

All principles of gravity are negated by fear.

Psychic forces are sufficient in most bodies for a shock to propel them directly away from the earth's surface. A spooky noise or an adversary's signature sound will induce motion upward, usually to the cradle of a chandelier, a treetop, or the crest of a flagpole. The feet of a character who is running or the wheels of a speeding auto need never touch the ground, especially when in flight.

Cartoon Law VI.

As speed increases, objects can be in several places at once.

This is particularly true of tooth-and-claw fights, in which a character's head may be glimpsed emerging from the cloud of altercation at several places simultaneously. This effect is common as well among bodies that are spinning or being throttled. A 'wacky' character has the option of self-replication only at manic high speeds and may ricochet off walls to achieve the velocity required.

Cartoon Law VII.

Certain bodies can pass through solid walls painted to resemble tunnel entrances; others cannot.

This trompe l'oeil inconsistency has baffled generation, but at least it is known that whoever paints an entrance on a wall's surface to trick an opponent will be unable to pursue him into this theoretical space. The painter is flattened against the wall when he attempts to follow into the painting. This is ultimately a problem of art, not of science.

Cartoon Law VIII.

Any violent rearrangement of feline matter is impermanent.

Cartoon cats possess even more deaths than the traditional nine lives might comfortably afford. They can be decimated, spliced, splayed, accordion-pleated, spindled, or disassembled, but they cannot be destroyed. After a few moments of blinking self pity, they reinflate, elongate, snap back, or solidify.

Corollary: A cat will assume the shape of its container.

Cartoon Law IX.

For every vengeance there is an equal and opposite revengeance.

This is the one law of animated cartoon motion that also applies to the physical world at large. For that reason,

we need the relief of watching it happen to a duck instead.

Cartoon Law X.

Everything falls faster than an anvil.

Examples too numerous to mention from the Roadrunner cartoons.

If you need help or advice with your Apple II, call one of the following people: if they cannot help directly, they might be able to direct you to someone who can...

Peter Hinchliffe	Willetton	332 6482	(AppleWorks, general)
John MccAuley	Lynwood	458 3951	(WAppleII library)
Colin Russell	Dianella	349 3810	(General, Apple][+)
James Kunz	Bayswater	370 5307	(Hardware problems)
Jamie Yoon	Floreat	387 2892	(IIGs SIG, hardware)
Eddie Stone	Ham. Hill	331 3656	(General, beginners)
Charles Kueh	Bullcreek	332 7228	(Copy protection)
Bill Watson	Padbury	401 6667	(General, beginners)
John Thompson	Eden Hill	279 3524	(General, AppleWorks)
Peter Kroll	Willetton	534 1029	(General IIGs)

WAppleII Calendar 1994

Meeting	Deadline	Committee
Thu 24 November	Friday 11	Saturday 12
Tue 20 December	Friday 9	