mini'app'les newsletter

the minnesota apple computer user's group, inc.

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December, 1994

Volume 17, Issue 12

DECEMBER 1994

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Board of directors
Mini'app'les members welcome.
Mathews Ctr., 2318 29th Ave. S., Rm. C
Greg Carlson, 544-8252

Apple II/GS Main
Augsberg Park Library,
7100 Nicollet Ave., Richfield
Tom Gates, 789-1713

ClarisWorks SIG
Norwest Bank,
5320 Lyndale Ave. So., Minneapolis
Denis Diekhoff, 920-2437

Macintosh Main
Washburn Library
95244 Lyndale Avenue S., Minneapolis
Frame Technologies
Mike Carlson, 377-6553

Filemaker Pro SIG
Location Pending
Steve Wilmes, 458-1513

Fourth Dimension SIG
Location Pending
Bob Demeules, 559-1124

Apple II Novice SIG
Murray Junior High,
2200 Buford, St. Paul "Open Forum"
Tom Gates, 789-1713

AppleWorks SIG
Murray Junior High,
2200 Buford, St. Paul, "AWKS 5.0"
Les Anderson, 735-3953

HyperCard SIG
Location & date pending
Peter Fleck, 370-0017

Macintosh Novice SIG
No meeting this month
Tom Lufkin, 698-6523

Macintosh Consultants SIG
Byerly's, 3777 Park Center Blvd,
St. Louis Park
Mike Carlson, 377-6553

Mac Programmers SIG
Murray Junior High,
2200 Buford, St. Paul
Gervaise Kimm, 379-1836

mini'app'les

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Advertisers – See MultiForm mailer in the back of this issue.

Newsletter Contributions – Please send contributions directly to our Post Office, Box 796, Hopkins, MN 55343 or upload them to our BBS at 892-3317.
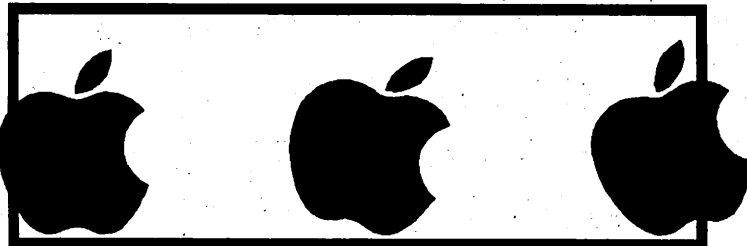
Deadline for material for the next newsletter is the 9th of the month. An article will be printed when space permits and, if in the opinion of the Newsletter Editor or Manager, it constitutes material suitable for publication.

Editor/Publisher: Tom Ostertag 488-9979

Newsletter Layout: John Hunkins

Mini'app'les BBS – 892-3317, 24 hrs. Settings: 8-1-0. Call in with FirstClass® Client software or any text-based terminal program.

Mini'app'les Voice Mail – 229-6952

Members Helping Members

> *Need Help? Have a question the manual doesn't answer? Members Helping Members is a group of volunteers who have generously agreed to help. They are just a phone call away. Please call only during appropriate times, if you are a Member, and own the software in question.*

If you would like to be a "Members Helping Members" volunteer, please leave your name & phone number on our BBS, or leave a voice-mail message at 229-6952, or use the MultiForm mailer near the back of this issue.

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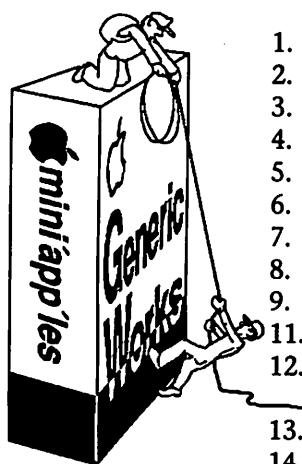
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2. Tom Ostertag..........488-9979 ....E
3. Tom Gates...............789-1713 ....EW
4. Tom Edwards..........927-6790 ....E
5. Earl Benser ....884-2148 ....EW
6. Dan Buchler............435-3075 ....E
7. Ann Bell ....422-1115 ....E
8. Fritz Lott ....377-3032 ....E
9. Peter Fleck..............370-0017...........DEW
11. Ed Spitler................432-0103 ....D
12. Bob Rosenberg........377-4300 ....EW
       340-0234 ....D
13. John Hackbarth ......715-246-6561 ....D
14. Jim Horswill...........379-7624...........DEW
15. Tom Michals...........452-5667...........DEW

16. Arnie Kroll ....433-3517 ....E
17. Michael Foote.........507-645-6710 ....DEW
18. Richard Becker........870-0659 ....EW
20. Steve Peterson.........922-9219 ....EW
21. Jodi Roste................933-1698 ....EW
22. Nancy McClure ......227-9348...........DEW
23. Rand Sibet...............566-8571 ....EW

D-days (generally 9 a.m. to 5 p.m.)
E-evenings (generally 5 p.m. to 9 p.m.)
W-weekends (generally 1 p.m. to 9 p.m.).
In any case, call at reasonable hours and ask if this is a convenient time for them. We appreciate your cooperation.

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Vice President's Report

MEETING ATTENDANCE:

We need to look into additional meeting sites to handle the larger groups. By publishing the topics on the BBS and in the Newsletter, new people are attending. Let us make a list for Eric Jacobson, and LesAnderson so they will have place to turn when the room is needed. By getting the meeting topics to Eric Knopf we get better publicity and attendance. Also, I need to know if there are video facilities, or if we may use them, at meeting sites. Many offers for products require showing a video. Does your church loan out rooms?

MAC WORLD SAN FRANCISCO JANUARY 4-7, 95

Tom Gates has discount coupons for MacWorld exhibits and seminars, which he will distribute at Sigs.

I have information on discount hotels through the UG Connection. A non-Red Tail airline with lots of stops, has a special rate for treetop flights. I expect to attend the UserGroup Breakfast and have room for one more officer or member, if no officers are available. Several Red Tailers may attend, all of whom like free meals and goodies. Please let me know if you expect to attend.

SOFTWARE EVALUATIONS AVAILABLE

I am compiling a list of persons who wish to do software evaluations. Please submit your area of interests to me. Also, IF WE CAN GET THE new System 7.5 book for $12.50, half price, will you order? If so, call me, only need 9 more. Leave information on BBS or call 835-3696

Mac eDOM #908-910

Mac eDOM #908 - Wolfenstein 3D

Wolfenstein 3D: First Encounter (©1992 id Software, Inc.)

$14.95 shareware fee includes Wolfenstein 3D: Second Encounter, which contains the entire 30-level game.

System Requirements: (high density disk)Wolfenstein 3D runs on any color Macintosh computer with System 6.0.7 or later and 2200K free memory. Make sure your monitor is set to 256 colors before you begin playing, for maximum speed. If you run the program with only 2200K free, music and sound effects will be disabled until you can free up more memory (or buy more). If you have 6000K free memory available, Wolfenstein 3D will eat it up. We recommend a 25Mhz 68030 Macintosh or faster, meaning a Macintosh IIci or LC III-class machine. Wolfenstein 3D is a "fat binary" and runs entirely in native PowerPC code if you have a Power Macintosh!

Story

Just a few weeks ago you were on a reconnaissance mission of extreme importance. You were to infiltrate the Nazi fortress and find the plans for Operation Eisenfaust. Captured in your attempt, you were taken to their prison, and awaited your execution. Only you know where the plans are kept, and the Allies will face a great defeat if you don't escape! You must face the horrors of the prison keep known as Wolfenstein.

Captain William J. "B.J." Blazkowicz, you've got a gun and thirty floors of hell to get through. Good luck!

Hey, if you make it, you'll have something to tell your grandkids about ....

If you don't, at least you'll go out in a blaze of glory!

Wolfenstein Cheater 1.1
Freeware by Carl W. Haynes III

Wolfenstein Cheater is a system extension which adds an extra menu to Wolfenstein 3D and lets you access all the cheats that I know about.

To work, put the extension in the 'Extensions' folder and restart your mac. The extension requires system seven or later to run. This system extension has been released as freeware, but I reserve all copyrights to the software and its source code. Please feel free to spread it far and wide.

NOTE: MACPLAY AND ID HAS NOTHING WHATSOEVER TO DO WITH THIS, BLAME ME, NOT THEM, FOR ANY PROBLEMS.

Mac eDOM #909 - DayMaker Demo

Pastel Development, 113 Spring Street, New York, NY 10012

The DayMaker™ demo version is a fully functional version of DayMaker except:

> Only 75 new items can be added to a file.

> The alarms are disabled

> Only basic printing is provided

DayMaker Product Description

DayMaker is the comprehensive solution for personal organization on the Macintosh. DayMaker combines calendars, appointments, alarms, to-do lists, note-taking, phone dialing, and printing to personal organizers, all in one fast, elegant, and easy-to-use package.

DayMaker includes a full range of time management tools, such as alarms, "tickler" reminders, prioritization and categorization. DayMaker can also keep track of other information such as ideas you have for a new project you're working on. DayMaker printing supports personal organizers, such as Day Runner and Daytimers. DayMaker even prints booklets ready to "fold and go."

This demonstration version of DayMaker will allow you to learn about the ways DayMaker can get you organized. This demo version is limited to 75 items and it does not include alarm functions or the DynoPage print formatting module for advanced printing. These are integral parts of DayMaker, and you will receive them when you buy a full version of DayMaker.

To further assist you, we have included an online help system which you can access from the Apple Menu. This system is designed to provide an overview of Day Maker's functionality and to make it easier for you to get started. We have also included a helpful tutorial for your use.

Mac eDOM #910 - Various Utilities

A collection of 6 utilities to make your work easier.

About 1.0.3, by Michael Hecht
Version 1.0.3, August 1, 1994

About is a process monitor. Its appearance is an unabashed knock-off of the Finder's display; but unlike that display, you can actually use About to interact with your processes and get information on them. A little arrow appears next to the current process. Clicking an icon switches you to its process, and option–clicking an icon hides or shows that process, just like the Hide and Show commands in the application menu. You can customize the display in many ways—use large icons if you prefer, or arrange the processes by their location in memory to reveal the "holes" in your address space.

Other commands allow you to monitor background–only processes, view CPU load, create an "icon palette" of your favorite applications, find a running application's location on disk, and force other processes to quit. About can also maintain a log of application activity.

Alias Finder Pro
by Jon Pugh

A "Drag & Drop" utility which causes the finder to display files wherever they may be. You can hold down the Option key to display the Get Info dialog for the file instead.

BeHierarchic 1.0.5
by Fabien Octave

System 7: Required, $10 Shareware CDEV, 12/19/91

BeHierarchic is an INIT/CDev which will automatically create a visual hierarchy in your Apple menu under System 7.0. Simply drop it in your System folder and restart.

With BeHierarchic, you will no longer have to launch a Control Panel item for instance, since you can access it directly from the pulled down Apple menu. Any folder or aliases in the Apple menu folder in your System folder will be displayed when you will pull down the Apple menu.

BeHierarchic is user configurable through the Control Panel.

Fat Free 1.1
September 26th, 1994,© Hubert Figuière 1994

The ultimate weight watcher program for your Fat Binaries applications...

This application is ABSOLUTELY FREE and should NOT be sold in anyway.

This application, intended for 680x0 mac users, simply removes the Data Fork of a file (i.e. the part containing datas and native PowerPC code), to remove the PowerPC code, and so saving lot of disk space (about 40% of the size of the fat application file). There is absolutely no warranty about a such modified copy of the application, so please ALWAYS work on a COPY. The reasons are :

• sometimes Data Fork is used by the application itself, so it may crash.

• I have NO documentation about the Mixed Mode Manager (the manager that is used to run 680x0 code on PowerPCs). I'm looking for it.

Finder 7.1 Menu Patch 1.1
Adam Wunn, Freeware

A patch for System Menu Bar that adds †-key capability to additional items, such as †-M to Make Alias, †-T to Empty Trash, etc.

New Mac OS icons
(source unknown)

A couple of variations on the new "smiling Mac"

OtherMenu 1.5.2
© 1992, 1993, 1994 by James W. Walker, all rights reserved. shareware $10 per copy. An individual with several computers need only pay for one copy.

OtherMenu is an extension that creates a system-wide hierarchical menu somewhat similar to the Apple menu. It can be used for launching applications and documents, restart and shut down, various utility functions, and executing FKEYs. It requires System 7. OtherMenu takes up a minimum of about 32K of system memory, but uses more depend-

ing on the length of the menu and the number of submenus.

The first time you start your Mac with OtherMenu installed, OtherMenu creates a folder named OtherMenu Folder inside your System Folder. You will see a menu whose title is a round icon near the help menu. Initially, the menu will contain an item named "Recent Items", an item for each disk on the desktop, a dividing line, and finally "About OtherMenu...", which can be used to read the documentation.

RAM Doubler™ 1.5.1 Updater
Connectix Corporation

Updates previous versions to RAM Doubler™ 1.5.1.
CHANGES in RAM DOUBLER 1.5.1:
• RAM Doubler is now compatible with SCSI Manager 4.3.
• RAM Doubler now works better with GeoPort on Power Macs.
• An incompatibility with CD AllCache has been worked around.

• Using File Sharing on Power Macs is more reliable now.
CHANGES in RAM DOUBLER 1.5 (the big change):
• Compatibility with the Power Macintosh; RAM Doubler now supports Macintoshes equipped with a PowerPC, 68040, 68030, or 68020 (with PMMU) processor.
• For the Power Macintosh, file mapping is now implemented. File mapping is a technology which allows for a reduction in memory requirements by using the memory management unit to manage the loading and unloading of native code segments.
• RAM Doubler's reliability on 4- and 5-megabyte Macintoshes running in 24-bit addressing mode has been significantly improved.
• Many small changes were made for compatibility with Apple System 7.5. Note that RAM Doubler should not be used with the "SCSI Manager 4.3" extension. (See incompatibilities section.)
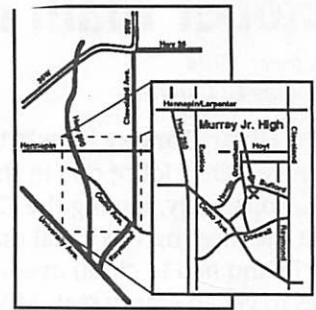
MURRAY JUNIOR HIGH

Mini'App'Les HyperCard SIG Announcement
The December SIG

Monday, December 12, 1994, 7:00-9:00.
LOCATION: The Science Museum of Minnesota, 30 East 10th St., St. Paul. The meeting is not in the museum itself. Go to the classroom area near the education offices, off Museum Square. There should be a sign on the door about checking in for computer classes. If the door is locked, KNOCK.
TOPIC: HyperGasp

HyperGasp is a "powerful, reasonably priced multimedia development tool for the Macintosh, featuring an intuitive interface which helps... users move efficiently through the construction of programs and presentations." (from the HyperGasp promo literature). It uses HyperCard as its engine but requires no programming to create hypermedia/multimedia programs. It comes highly recommended by many of the HyperCard users on the Internet.

January Main Mac Meeting
12 January 1995
Submitted by Jack Ferman

The January Main meeting will be on January 12 and will be held at the Hewlett-Packard offices in Roseville. We have the main auditorium which seats about 120. HP is at 2025 West Larpenteur Ave. Park in the front and enter through the main doors. The program is "The facts and nothing but the facts about HP's new Mac products." Come see Sgt. Joe Monday unmask the JetNet.

October Main Mac Meeting

13 October 1994
By Thomas G. Ostertag

The Library Parking lot was full and there were a lot of cars in the street. Apparently, having the Claris Rep at the meeting was a real draw. I came in and had to climb over a few bodies to get an empty seat. Mike started the meeting by saying that the presenter, Chris Moyer, might not be coming, but we would give it a little time. Mike introduced Julie Rasmussen who talked about volunteering to teach adults how to use their new LCII computers. After Julie was done, Tom Gates distributed tickets for the book collection that was presented to him by MacMillan Publishing. He handed out some literature on what types of books were available to club members and at what discount. The drawing would have to wait until later.

Mike then mentioned that the November would be on Wednesday, 9 November at Hennepin Technical College, 9000 Brooklyn Blvd. The subject is Computer Automated Manufacturing (CAM). Greg Carlson mentioned that he was also trying to involve CAD, Computer Automated Design, but didn't have any particulars.

The December meeting will be with Frame Technologies at the Washburn Library on 8 December and Jack Ferman volunteered to set up the January meeting with Hewlett Packard.

Brian Bantz talked about and distributed some of the materials and information that arrived in the Club's mailbox. Stuff like "Bullfrog Math and Science," QueStick, O'Reilly Publishing, etc. Brian also asked for volunteers to do some product testing and passed around a list for people to sign up.

Greg Carlson announced that there were a number of new Mac eDOM's and they would be available at the end of the meeting.

Chris Moyer still hadn't arrived, so Mike continued with Questions and Answers. There was one on running GX with System 7.5 and what the memory requirements were... 5 megs plus and the fonts need to be reconfigured. The second question was how to start a sticky SE... pound on it or give it a twist.

With no more Q&A, the meeting was turned over to Tom Gates who rather than pulling a rabbit out of a hat, pulled books out of a box. I think that there were about 10 books that were raffled off. Including one on troubleshooting and upgrading your PC (not a Mac book) that looked like it weighed about 5 pounds. (Appropriate... especially the troubleshooting...) Yes, Mr. Magree, there is much more to installing a larger drive on a PC than just plugging it in.

Chris Moyer still hadn't arrived so the meeting was adjourned to Byerly's where the Pie SIG occupied 3+ booths and blocked a major aisle. Our subgroup was the Pinto SIG... we shared horror stories about our experiences with the Aforementioned Frustrating Ford product. Some really cute stories though... just remember rusty doors and windows that won't close... The other subgroups were obviously talking about topics much more germane and intellectual, since we didn't hear much laughter coming from that direction. Chris Moyer didn't arrive at the Pie SIG either.

With the semi-meeting adjourning early and the Pie SIG starting and breaking up early, I even arrived home in time to talk to my wife and check out the ICON editing program that Ken Slingsby gave me. (Looks good, Ken. I did get the Beaker installed in place of the Trashcan.)

All for now... remember the November meeting is on Wednesday the 9th! and remember, Greg Carlson is not a CAD, he is just arranging for CAD to be presented.
Tom

MEMBER MNS
MUG NEWS SERVICE ™

Apple II History

PART 14 — DOS [v1.0 : 12 Jan 92]

Compiled and written by Steven
Weyhrich (C) Copyright 1991, Zonker
Software

APPLE DOS

For a computer to be useful, it must have a means of easy storage and retrieval of data. That storage medium must be both convenient and affordable. In the early days of the Apple II computer, the best that they could achieve was "affordable". The built-in cassette port was THE state of the art for personal comput- ers back in 1977; the Apple I com- puter had a cassette interface avail- able ONLY as an add-on item. But, although a cassette storage system may be inexpensive, it is not very convenient. The simplistic cassette operating system on the Apple II (visual examination of the mechani- cal index counter on the cassette recorder to know the location of the next program) was downright frus- trating to use for many early Apple II owners. Something better was des- perately needed.

As you may recall from Part 5 of the History, in December of 1977 Steve Wozniak began a crash effort to develop a floppy disk drive for the Apple II computer. To get it ready for the Consumer Electronics Show in January 1978, Wozniak and Randy Wigginton made a very simple disk operating system that would only load files from fixed locations off the disk in response to one-letter com- mands. But it was not a true disk operating system (DOS); their rudi- mentary control program would not be flexible enough for efficient and simple use of the disk drive.

DISK SYSTEM BASICS

To create an operating system that would be both simple to use and yet powerful enough for advanced file manipulations, Apple had much work to do, building on the device driver that Wozniak had written. Among other things, it had to interface well with the BASICs in ROM on the Apple II, and be no more complicated to use than the cassette system. Although Woz's dri- ver routines were efficient in writing and reading data to and from the disk, they could only be used from 6502 assembly language.

Designing a disk operating sys- tem from scratch is no trivial matter. On one side is the RAM memory in the Apple II, waiting patiently for a useful program to be loaded and exe- cuted. On the other side of an elec- tronic bridge (interface card and con- necting cable) is the floppy disk and disk drive hardware itself. The con- trol program the Woz wrote could be compared to a narrow rope bridge crossing a chasm; it works, but you can't carry much with you, and it is easy to slip and fall (lose data). A complete DOS is more like a con- crete and steel bridge, capable of car- rying autos and trucks in both direc- tions over the chasm. Woz's "rope bridge" was a foundation, but there was much work yet to do.

A disk drive consists of a record- ing head that is mechanically moved across the surface of the floppy disk, tracing the radius of the disk from the center to the edge. The disk itself is spinning under the head. This is similar to the stylus on a turntable that plays 33 RPM records (remem- ber those?), but the head on a disk drive can be given a command to move to a different "track" on the spinning disk. Also unlike the turntable, which is a "read-only" device, the head on the disk drive can either reads bits off or write bits onto the disk. To be able to find where data has been stored on a disk, it is "formatted" into a known configuration. A blank disk could be compared to empty land that will be filled with new houses, but currently has no streets, street signs, or house numbers. The initial formatting (called "hard" formatting) of a blank disk is, then, like building the streets and assigning lots for future build- ing. The second part of disk format- ting (called "soft" formatting), involves naming the streets, desig- nating addresses, and building houses.

In the case of Apple's Disk II, it was designed with 35 concentric cir- cles ("streets") called tracks. Each track is subdivided into 16 segments ("houses") called sectors. Each sector can hold 256 bytes of information. In the hardware system that Wozniak designed, the timing hole near the center of the floppy disk was not used by the hardware to keep track of which sector was pass- ing the head at any particular time. Because of that, it was necessary for the software to identify in a different way where one sector ended and the next sector began. A complicated method was used of specially encod- ing each of the 256 bytes so they have a standard, recognizable appearance to a program that is con- trolling the disk drive, plus some other specialized bytes that identify the start and end of a sector. Although it did decrease somewhat the storage capacity of the disk, the cost savings in less complicated hardware compensated for it.

DOS 3.1 - STRUCTURE & FUNCTION WITH BASIC

With this background, let's get back to tracing the gap between Woz's demo DOS and Apple's first official release, DOS 3.1. Worth and Lechner in their book, "Beneath Apple DOS", divided DOS up into four parts according to function and location in memory. When a com- puter needs an operating system, it's because there is a need to insulate the user from the complexity of try-

ing to control the hardware. Consider the four parts of DOS as layers; as you get closer to the bottom layer, you are closer to the hardware (the raw data on the disk and direct control of the disk drive), but you also increase greatly the difficulty of managing it. The farther up you go, the easier it is to manage things on the disk, but the less direct is the control of the disk data and hardware.<1>,<2> When Wozniak wrote his disk controller (driver) routines, he worked at the deepest layer, directly manipulating the disk hardware and raw data. This involved some complex timing and error checking for reading and writing data to the disk. This section is also where the program lies that erases the disk and creates the sectors and their addresses. In memory, this layer of DOS started at $B800 on a 48K Apple II.<2>,<3>

Randy Wigginton wrote a "front end" for Wozniak's controller routines. His part could be considered a thin layer that is part of the lowest layer of disk routines. Together, the two layers made up what came to be known as "RWTS", or "Read/Write Track/Sector". It could do four things only: SEEK (to move the disk arm to the desired track), READ (load a sector from disk into memory), WRITE (save a sector to disk from memory), and FORMAT (discussed above). This layer of DOS, the Disk II driver, started at $B600.<2>,<3>

Apple contracted with an outside consultant, Bob Shepardson, to write much of the rest of DOS (though modifications were made Apple programmers Dick Huston and Rick Auricchio).<4>,<5>,<6> Shepardson's group wrote the layers (parts) of DOS that later became known as the "File Manager" and the "Main DOS routines". The File Manager was the next layer in memory above RWTS. It started at $AAC9 in memory, and was responsible for twelve higher level functions that dealt with files and the disk in general. These functions were OPEN, CLOSE, READ, WRITE, DELETE, CATALOG, LOCK, UNLOCK, RENAME, POSITION, INIT

(format a disk and create an empty catalog track), and VERIFY. This set of routines, along with RWTS, would be similar to the file PRODOS in the current 8-bit disk operating system. It handled the disk at the file level, but knew nothing about BASIC.<2>,<3>

The next layer of code above the File Manager contained the Main DOS Routines. These routines started at $9D00 in memory, and were responsible for interfacing BASIC with the disk. This layer would be similar to the file called BASIC.SYSTEM used today in the ProDOS system. Since neither Integer BASIC nor Applesoft were specifically modified to handle disk commands, this part of DOS kept a constant look at any output PRINTed by BASIC. When a BASIC program was running, DOS looked to see if the character Ctrl-D (hex $04) was printed immediately after a Ctrl-M (carriage return). If that sequence was detected, DOS assumed that the next text printed was a command for it. If a BASIC program was not running, then DOS examined anything typed directly from the keyboard. If it decided that a DOS command had been entered, it would execute that command. If the user typed a command that DOS recognized (such as "RUN PROGRAM" or "SAVE PROGRAM") but which resulted in a disk error, DOS 3.1 would generate an error message. On the other hand, if DOS did not recognize the command, it passed it on to the active BASIC for processing.

The final, uppermost layer of DOS was not a program code area but a set of memory areas called "buffers". One buffer was used by DOS for each open file. These buffers ordinarily started at $9600 in memory.

Here is an example of how the layers of DOS interacted: When a user typed the command "LOAD PROGRAM" at the keyboard, DOS intercepted the statement. The Main DOS Routines determined that it WAS a legal DOS command. The File Manager was called to 1) OPEN a file

named "PROGRAM", 2) READ all the bytes associated with that file into memory starting at a specific location, and then 3) CLOSE the file. The File Manager's OPEN command in turn instructed RWTS where to move the disk read/write head, and in what order to read the correct tracks and sectors to find the contents of the entire file, wherever it happened to be on the disk. Complicated, perhaps, but the only thing the user had to know was how to type "LOAD PROGRAM".

Finally, one piece of trivia: Why was the first DOS released for the Apple II called "DOS 3.1" rather than "DOS 1.0"? According to Steve Wozniak, it was Bob Shepardson's group that decided on calling it "DOS 3". It is unclear why Shepardson decided on "3"; possibly it referred to internal revisions done by Shepardson, or perhaps it was a modification of some DOS routines done for another computer that had used earlier version numbers.<2> (Note: DOS 3 was never actually released to the public; that version apparently had a few bugs left to fix, so "DOS 3.1" came with the first Disk II drives shipped by Apple to their dealers).

DOS 3.1 - MANUAL

When originally introduced with the new Disk II drive in 1978, DOS 3.1 had very little documentation. Because the demand for the disk drive was so great, the engineers at Apple had worked feverishly to produce enough working drives to begin shipping. They went out, although there was not time to complete a real manual on how to use the disk operating system. They did include a leaflet about some of the commands, but there were still, obviously, complaints. One letter to Apple president Mike Markkula made these blunt comments: "You [expletive deleted]. I bought an Apple with floppy and nobody, I mean nobody, in L.A. or San Diego knows how to use the [thing] for random access files. I really feel 'ripped off.' Everybody talks about this great manual in the sky

that is coming out soon??? ... [more expletives]! I need this computer now in my business not next year. [Expletive]. I hope your dog dies."<7>

It was not until the release of DOS 3.2 in February 1979 that a true reference manual was made available. It was given the unwieldy title, "Disk II Floppy Disk Subsystem Installation and Operating Manual", and subtitled "Apple Intelligent Subsystems (part #030-0011-00)". It was all of 38 pages long, with weak jokes and typos, but not much else of substance. Instruction on how to READ and WRITE text files was given in a mere ten lines, with no programming examples. The EXEC command was given a little more description, but was still unclear to many users. The manual also talked about " *3D0G ". What it DIDN'T say was that this meant that the user was supposed to type "3D0G" from the Monitor prompt (to allow a return to the active BASIC with DOS connected).<8>,<9>

DOS 3.1 - FEATURES

A catalog of the DOS 3.1 System Master disk would produce this output:

I 007 HELLO
*I 043 APPLESOFT
I 016 ANIMALS
I 009 COLOR DEMOS
*I 004 MASTER.CREATE
*B 039 RAWDOS
*I 007 COPY
*B 007 COPY.OBJ

"HELLO" was the startup file executed when the disk was booted. It just displayed the following:

DISK II MASTER DISKETTE
VERSION 3.1
20-JUL-78
COPYRIGHT 1978
APPLE COMPUTER INC.
>_

Stopping at the Integer BASIC prompt. "ANIMALS" was an Integer program that gave an example of the use of disk files, and "COLOR DEMOS" was a disk version of a program that had earlier come on cassette. "MASTER CREATE" was a program that could be used to initialize a "master" disk. Using the binary file "RAWDOS", it executed the DOS "INIT" command, but put a version of DOS on the newly formatted disk that was relocatable.<10> When DOS from a "master" disk was booted on an Apple II, it first determined what was size of the memory, and then loaded itself into memory as high as possible. The INIT command properly formatted a new disk, but created what Apple called a "slave" disk; that is, the DOS loaded from a slave disk was fixed in memory to the same size as the computer on which DOS had been booted. In most cases this would not be a problem. However, the problem would surface if someone whose Apple II had only 16K of RAM shared a disk with a friend whose computer had, say, 32K of memory. Booting that borrowed disk would make the 32K computer appear to have only 16K of RAM (since it forced DOS to load at the highest location available to a 16K machine). A "master" disk was more versatile, being "intelligent" enough to adapt itself to differing memory sizes.

The Integer BASIC file "APPLE-SOFT" was interesting. It was a 43 sector file that appeared in a catalog as an Integer BASIC program (with the "I" filetype code). If you loaded the file and listed lines 10 through 80, there were lines that would produce the following text:

****
* * APPLESOFT][FLOATING POINT BASIC * *
APRIL 1978
****

COPYRIGHT 1978
APPLE COMPUTER, INC.
COPYRIGHT 1976 BY MICROSOFT
ALL RIGHTS RESERVED

There were also lines that poked some values into memory, and then jumped to a machine language rou-tine that relocated Applesoft into RAM starting at $800 (the same place where Cassette Applesoft loaded). If you tried to LIST the entire program in memory, the lines after line 80 appeared to be a jumble of Integer BASIC commands. This is because a majority of the file was actually a machine language program that had been appended to the end of the short Integer BASIC program that displayed the title above and did the memory pokes. This machine language code was the Applesoft BASIC interpreter. Now, if the file "APPLE-SOFT" was executed by typing "RUN APPLESOFT", it would display the title and leave the cursor next to the Applesoft bracket prompt. However, DOS was no longer connected; the result was much like using Cassette Applesoft. To properly use this file with DOS, you had to type "FP" from the Integer BASIC prompt. DOS would then load the "APPLESOFT" file and properly initialize the interpreter, leaving DOS connected. Since this version of Applesoft still had a few bugs in it, this method of using Applesoft was made obsolete by the Applesoft Firmware card and the Apple II Plus.<9>

Interestingly, the error messages produced by DOS 3.1 were made to look similar to those displayed by Integer BASIC. For example, this is what happened if an attempt was made to load a type "B" (binary) file with the "LOAD" command:

>LOAD COPY.OBJ ***DISK: NOT BASIC PROGRAM >_

Integer BASIC had error messages that looked like "*** SYNTAX ERR" (with a space following the asterisks). The possible error messages in this version of DOS that were different from later versions were:

SYS ERROR
CMD SYNTAX ERROR
NO FILE BUFFS AVAIL ERROR
NOT BASIC PROGRAM ERROR
NOT BINARY FILE ERROR

DOS 3.1 - USER EXPERIENCES

One problem encountered by

early users of the Disk II was properly connecting the drive to the controller card, as discussed in Part 9 of this History. Some quirks in DOS that plagued users at the time of the first releases of DOS 3.1 included one in which LOCKing a file sometimes mysteriously caused the length of the first file in the catalog to change. Apple told people not to worry about that; in fact, they told people not to pay attention to the sector counts in the catalog at all, as there was a bug in that part of the catalog routine. Another problem in early versions of DOS 3.1 was an inability to execute READ or WRITE statements in an Applesoft program if they occurred in program lines that were numbered higher than 256. It also wouldn't allow more than one DOS command on the same line of a program, so this was not possible:

10 ON ERROR GOTO 1000

20 PRINT D$;"VERIFY FILE": PRINT D$;"OPEN FILE": PRINT D$;"READ FILE"

Other bugs in early versions of DOS 3.1 included not being able to initialize disks with MASTER.CREATE unless the disk controller was moved to slot 7. (Originally, slot 7 was going to be the disk slot, but Apple decided to change it to slot 6 and leave slot 7 for video cards. Why the various 80-column cards that were eventually released were made to go into slot 3 instead of slot 7 is anybody's guess). The A.P.P.L.E. user group had patches to MASTER.CREATE and RAWDOS to fix the slot 7 INIT bug, and the >255 line number bug in Applesoft.<11> Apple later released a modified version of DOS 3.1 that fixed these bugs (without changing the version number).

DOS 3.2 - ENHANCEMENTS

As mentioned above, DOS 3 and 3.1 had a few problems. When the Apple II Plus with the Autostart ROM was released, DOS needed to be updated to handle the changes. DOS 3.2, released in February 1979, contained several modifications, but retained 90 percent of the basic

structure of DOS 3.1. One interesting change made to plan for the future was a doubling of the number of possible filetypes. The original DOS used "I" for Integer BASIC files, "A" for Applesoft, "B" for binary files, and "T" for text files. DOS 3.2 added types "S", "R", another "A", and another "B". Of those four types, only "R" was ever officially designated by Apple, and that for relocatable assembler object files.

DOS 3.2 included a program called "UPDATE 3.2", which worked much like the earlier program "MASTER.CREATE" in changing a "slave" DOS disk into a "master" disk. As time went by, and more users had their Apple II's fully populated with 48K RAM, the need for such a utility became less and less important.<12>

DOS 3.2 - FEATURES

A catalog of the DOS 3.2 System Master disk would produce this output:

*I 002 HELLO

*I 043 APPLESOFT

*I 018 ANIMALS

*B 009 UPDATE 3.2

*I 014 COPY

*I 009 COLOR DEMO

*B 003 CHAIN

*A 009 COLOR DEMOSOFT

*A 028 LITTLE BRICK OUT

*A 003 MAKE TEXT

*A 003 RETRIEVE TEXT

*A 010 EXEC DEMO

*A 010 RANDOM

*T 003 APPLE PROMS

*A 039 RENUMBER INSTRUCTIONS

*A 014 RENUMBER

The file "RAWDOS" that was on the DOS 3.1 disk was no longer needed, as its function was included in the "UPDATE 3.2" program.<10> As you can see, some of the files from the DOS 3.1 master disk were retained, but some others were added. There were now several Applesoft files, including a version of the color demonstration ("COLOR

DEMOSOFT"), a smaller version of the older Integer BASIC game "BRICK OUT" ("LITTLE BRICK OUT"), a couple of files to show simple disk access ("MAKE TEXT" and "RETRIEVE TEXT"), and a program to exhibit the use of random-access disk files ("RANDOM", with the file "APPLE PROMS"). There was finally a program ("EXEC DEMO") that showed how to use the EXEC command in DOS. Also found on this disk were two utilities for Applesoft. One made it possible to renumber Applesoft programs, and the other ("CHAIN") allowed linking between multiple Applesoft programs, retaining the value of any variables created by the first program. There WAS a CHAIN command built into DOS, but it worked properly only with Integer BASIC programs.

DOS 3.2.1

In July 1979, DOS 3.2.1 was released. This was merely a minor upgrade to make some patches to RWTS and correct a timing problem that caused the utility "COPY" to fail when copying disks with two disk drives. It also began a system disk version numbering system that persists to this day, that of adding a third digit to indicate a minor upgrade. (For example, GS/OS 5.0 changed to 5.0.1 with some bug fixes, rather than 5.1).<12>

This disk contained the new COPY program, and a program called "UPDATE 3.2.1", which worked just as "UPDATE 3.2" and "MASTER.CREATE" had previously. The update program was used to modify existing DOS 3.2 disks to the 3.2.1 version. As an bonus, Apple added some programs to this Master disk that were just for fun. All written in Integer BASIC, the games and graphics demonstrations included "APPLE-TREK", "THE INFINITE NUMBER OF MONKEYS", "BRIAN'S THEME", and "BRICK OUT" (which was an Apple II version of the arcade game, "Breakout"). The "HELLO" program displayed this when the disk was booted:

MASTER DISKETTE VERSION 3.2.1

STANDARD
31-JULY-79
COPYRIGHT 1979
APPLE COMPUTER INC.

++++++++++++++++++++++++++++++++++

NEXT INSTALLMENT: DOS 3.3,
ProDOS, & Beyond

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RAM Tripler

Submitted by Greg Carlson

Just when you thought that doubling your RAM with software was a magical gift from the Gods, here comes RAM Tripler. If you own RAM Doubler, you already own RAM Tripler - all you have to do is execute a simple ResEdit hack. Yeah, I know some of you are afraid of ResEdit, but if you follow these instructions faithfully, there is no problem.

First of all, if you choose to try this, know that tripling your RAM causes RAM Doubler (Tripler?) to use more virtual memory and you will most likely experience slowdown. But you will have more RAM! Secondly, you must have RAM Doubler 1.0.1. The original 1.0 version does not permit this hack.

To Triple your RAM with RAM Doubler:

• Click once on RAM Doubler in the Extensions Folder. Hold down the Option key and drag RAM Doubler to the desktop. Dragging while holding down the Option key makes a copy of the item being dragged. It leaves the original RAM Doubler in your Extensions Folder alone.

• Open ResEdit. Open the RAM Doubler on your Desktop. Do NOT open the RAM Doubler in the Extensions Folder. This is the trick which makes it safe for you to use ResEdit. You are not touching your original copy!

• Find the pref resource. Open it. Find the field RAM Multiplier.

• In this field you will see $00020000. The 2 in that field doubles your RAM.

• Change this number to $00030000.

• Exit ResEdit, saving changes as you leave.

• Create a folder on the Desktop. Name it Old RAM Doubler.

• Go to the Extensions Folder and drag the original RAM Doubler to this folder. You need the folder because the Mac won't let you have two items with the same name in the same window.

• Now drag the RAM Doubler which you worked on into the Extensions Folder.

• Use About this Macintosh... in the Apple Menu to not that your RAM is still doubled at this point.

• Reboot your Macintosh. Check "About this Macintosh..." Your RAM is now tripled!

Of course you could put a 4 or a 5 in that RAM Multiplier field. But the further you go, the more RAM Doubler relies on virtual memory, instead of stealing memory from unused application allocations.

You may get away with RAM Tripler. Sometimes. Anyway, it is fun to try. I successfully tripled my RAM and opened a ton of applications in the 60 megs this allowed on my 20 meg Mac IIfx. Microsoft Excel did not like my loading order, otherwise I had no problems. I did not check to see how much speed I lost. This innovative hack has appeared in several publications. The latest was a column in MacWeek.

Mac/RAM Recycling

A Thank you Note
By Tom Ostertag and Dick Peterson

Several weeks ago, I posted a note on the BBS asking about a good source for RAM SIMMS Chips for the Centris 610 and the Apple IIGS GSRam board. I was directed by Tom Gates to contact Fred Frankena, but Tom didn't have his phone number. Dick Peterson did and posted it on the board. He mentioned that we should thank Fred for the RAM being used on the Club's Bulletin Board.

I talked to Fred, then bought an 8Meg SIMMS Chip for the Centris for about $60.00 less than the lowest advertised mail order price. Fred was very helpful and friendly. I put the chip in the Centris and now I'm very happy.

If you need some extra memory (and be very happy too!) or spare parts for your Mac, (or some software) at good prices, give Fred a call at:

Fred Frankena, Mac/RAM Recycling, 5706 88th Crescent, Brooklyn Park, MN 55443, 425-9403

When you call Fred, thank him for the RAM chips being used on the BBS.

Tom and Dick

GOOD DEALS #15

by Ken Slingsby

This is another installment in a series of articles which list good deals and press releases that have been brought to our attention via a news source established by Apple Computer Co, AppleLink. Due to the constraints of space in our newsletter and time available, the articles have been greatly condensed. All were posted in their entirety on the Club's BBS. To read the full articles, plead or beg a friend who has access to the BBS to copy it for you.

As an aid in your review of the articles, I have divided them somewhat arbitrarily into DEALS and PRESS RELEASES. The DEALS include price, dates available, and the address of the publisher or author. Most of the DEALS are special limited time offers with a significant price reduction. They are presented here as a service of Mini'app'les. The PRESS RELEASES are to make you aware of the new products. You may have to hunt to find a dealer that supports the product.

Mini'app'les makes no claim as to the usefulness or quality of the products offered herein. The User Group does not endorse the products and is not supporting the products. The following is not a paid advertisement. There may be other products mentioned on AppleLink not appearing here. If so, that is an omission, not a refusal of the product. As in all purchases, buyers beware!

Please remember that the Good Deals bargains may be limited in quantity. The seller may not have any product in stock by the time this article is printed. For instance, the MacTV listed in a recent Good Deals! article, sold out (160 units) in two weeks. Mini'app'les and other user groups have reminded many selling organizations of the delay that is part of the natural process of putting a newsletter together and delivering it. Some organizations recognize this fact.

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DEALS

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PRESS RELEASES

Apple Computer

CUPERTINO, California— September 29, 1994— Apple today introduced two new printers, one for mixed-environment office work-groups, the other for the home, education and small business.

The Color Stylewriter 2400 delivers impressive speed, crisp text and vibrant colors at an Apple price of $525 (U.S.). It is ideal for families, educators and small businesses who want professional- looking docu-

ments without a steep price. The Color Stylewriter package is ready-to-print out of the box, with 64 TrueType fonts, cable, inks and integrated ColorSync software support that delivers quality color matching and superior print quality at 360 dots per inch.

For demanding office computing environments, Apple has introduced the LaserWriter 16/600 PS, a high performance, networked PostScript laser printer. An optional fax card adds high-quality desktop fax send/receive capability. The LaserWriter 16/600 PS provides impressively sharp print quality with 600 dots-per-inch (dpi) resolution enhanced with FinePrint technology for precise, smooth text and line art. It also includes optional support of PhotoGrade for grayscale image enhancement. The LaserWriter 16/600 PS can handle input from Macintosh, Power Macintosh, Microsoft Windows, DOS and UNIX computer systems, with built-in support for AppleTalk , Novell NetWare, EtherTalk and TCP/IP Ethernet networks. The LaserWriter 16/600 PS is Apple priced at $2,429 (U.S.).

Apple Computer

CUPERTINO, California— October 3, 1994—Apple Computer, Inc. today announced a new version of Apple Personal Diagnostics, a software product that allows customers of Apple Macintosh computers to test their system hardware and software to help keep their Macintosh systems working trouble-free. Version 1.1 of Apple Personal Diagnostics now supports Power Macintosh and is compatible with Apple's new operating-system release, Macintosh System 7.5. Like Version 1.0 of Apple Personal Diagnostics, the new version combines key features such as hardware testing, system profiling, disk-file structure repair, benchmark testing, and system-software checking into one easy-to-use package.

The enhanced version of Apple Personal Diagnostics is designed to further reduce system downtime,

minimize support calls, offer trouble-shooting tips, and help users identify the source of problems. Version 1.1 of Apple Personal Diagnostics includes a program disk with the complete array of hardware and software tests and emergency disks for making hard-disk repairs. The product can be run from a diskette or installed on a customer's hard drive for convenient use.

The new version of Apple Personal Diagnostics provides test support for 102 models of Macintosh systems—ranging from the Macintosh Plus to the Power Macintosh 8100. This includes support for the recently introduced Performa 630 series and the PowerBook 500 series of portable computers. Another key enhancement is that the number of emergency disks required for repairing software problems has been reduced from four to two. Version 1.1 of Apple Personal Diagnostics also offers updated benchmark tests which allow users to compare individual system performance against Apple benchmarks.

Apple Personal Diagnostics is available through software resellers and Apple authorized resellers for the suggested retail price of U.S. $129. Existing Apple Personal Diagnostics customers can upgrade to Version 1.1 for U.S. $19.95, plus shipping and handling, by calling 1-800-769-2775 ext. 5941.

AppleWorks 5
by Randy Brandt and Dan Verkade

This article was shortened considerably from the submitted text. -ks

Specs and Features

Miscellaneous
• includes AfterWork screen saver engine with several sample modules
• includes Randy's Free Patcher for customizing AppleWorks a la SuperPatch and Companion Plus TimeOut
• virtually all AW4-compatible TimeOut apps work with AW5 (updating to AW5 doesn't mean another TimeOut updating night-

mare!). The pseudo-TimeOut apps-which appear on the TimeOut menu but are really macros (TAPL programs) are an exception. Most of them will need to be recompiled and resaved as TimeOut apps before they will work.

• If both apple keys are down at bootup, TimeOut loads only TimeOut Utilities for maximum startup speed while allowing you to later add TimeOut menus via Utilities' Add applications option

UltraMacros

• includes complete UltraMacros (allows recording, Debug)
• includes new dot commands including justify, password, window, spellpath, topath, and initpath
• adds <aol> for outliner; a:<aol OA-J OA-R>! // show all with body text
• macros work at menus whether one-touch feature is on or off (macros act as if the feature is off, so Return is always required in the macro)
• compiler's #dbselrecs label fixed (AW4 bug)

Desktop Organizer

• "remember files" option keeps list of nine most recently-loaded files, from Add files menu. With one-touch menus active, you can load any one of your nine most recent files with only two keystrokes after booting up.

Printer Buffer

• optional print buffer is built-in; files print to the desktop and then are output a line at a time while you're working.)

Spelling Checker Options

• Spelling Checker menu adds Thesaurus copy synonyms option
• thesaurus synonyms may be copied even if dictionaries are not
• long dictionary paths may now be defined (AW4 quirk)

Disk File Lists

• OA-A arrange listings adds Reverse option to invert the current order
• pressing Space Bar now toggles file picking at lists (also at Save/Removelists)
• OA-Space toggles all off, all on at file lists; OA-Right works from cursor, while OA-Space works from the top regardless of position
• user chooses how lists are sorted (Misc menu of Standard Settings)
• when changing the path by picking subdirectories from a disk list, pressing OA-Return opens the highlighted subdirectory and lists subdirectories within it, allowing you to pick yet another subdirectory, instead of just returning to the Change Current Disk menu

Display/Standard Settings

• MouseText option draws file cards, OA-Q menu, WP carriage return in MouseText or original characters.
• foreign users may define currency, vertical character in Standard Settings
• yes/no question order can be defined so Yes is the default, or the Yes/No verification can be skipped completely
• date option allows spelled out months, as in "February 21 1994"

Misc

• AW5 auto switches desktops if more than 12 files are picked for current desktop, or if you try to add a file to a full desktop index
• alarms may be set for any specific date and time, or for daily repetition; at the appointed time, a message pops up on the screen
• OA-Q OA-P takes you to the change current disk option
• after creating a subdirectory, press OA-Space or OA-Return to set the current path to the new directory and exit the subdirectory create mode
• file types may by changed using File Activities; if "???" is selected, you can enter any file type from 0 to 255.
• using the mouse now resets the screen blanker delay (AW4 quirk)
• pressing OA-Escape during a file save is no longer fatal (AW4 bug)

• when Tab is pressed to change desktops at the Save or Remove files menus, the files are no longer displayed as selected (AW4 bug)

Word Processor

• a full-featured outliner is included; press OA-+ to activate, OA-/ in outliner for help screen. This outliner is improved over the old AW 3 Outliner.
• MouseText mode allows you to type MouseText directly into a document
• AW5 prints imbedded MouseText on ImageWriter II printers
• OA-P now has an option to print odd or even pages only
• Set Marker 160 marks comment lines that don't print (end with 161)
• new print to screen preview shows actual text (handy for mail merge)
• new Ctrl-Q command sets marker 0, Ctrl-W finds marker 0; this is handy for setting a "bookmark", like when you freeze the window, scroll around in the bottom, and then want to return to the original location
• split screen splits on line above the cursor. Split windows are preservedwhen you leave and return to the file. (much improved over AW4)
• AW5 preserves the last OA-F find text when you switch files
• the second word in a hyphenated word is spell-checked correctly using check Word option when the cursor is on the second word (AW4 bug)
• text files are loaded with margins set to 0 for maximum width
• user now prompted when used OA-S to save AWP over TXT or TXT over AWP; TXT over TXT and AWP over AWP save with no questions asked
• text files may now be saved in Merlin source format
• OA-T Tab editor now lets you edit the default ruler used for new files (unlike pre-AW5 patches, you now have full control over the entire ruler)
• tab ruler editor has F for First

tab ruler (the original AW3/AW4 style) and S for the Standard tab ruler (currently stored in memory and SEG.ER)

• Standard Settings' Word Processor options allows setting default top, bottom, left and right margins for new files

Spreadsheet

• now has individual cell memos (cell notes); press OA-G on a non-blank cell to get a new memo or the existing one

• enhanced Find searches for memos and for text in memos

• OA-Return when selecting Text for finds restricts to whole words

• dynamic @Alert function updates each recalc

• new @Today functions updates each recalc

• @Find is now case-sensitive (use @upper or @lower for insensitive finds)

• new "recalc before saving" option (OA-O options menu)

Data Base

• background text in SRL (single record layout) screens and in label reports; can include MouseText and inverse characters for creating attractive screens and forms for data entry

• new option allows category hiding in SRL layouts

• AW5 can create SRL layouts from SRL reports

• OA-M mixed mode in SRL shows a scrolling list of the current category entries, with remaining SRL data updated live as you scroll through list

• single hires and double hires graphics can be displayed, a la DB Pix. PrintShop graphics can be displayed as part of an SRL screen

• option to add new records at end of file instead of inserting at the cursor (use OA-Return when entering the count of records to insert)

• enter category number at scrolling lists (great for macros)

• AW5 allows tab to accept newly-entered text in an edited category

• reports now have an OA-R

menu just like RAC mode

• Control-T toggles MouseText entry in Review/Add/Change mode

• DB uses Standard Settings currency, decimal and comma settings

• new TimeOut app offers find & replace text in the DB

• cursor moves after auto-recalc category does its thing (AW4 quirk)

• copy or move to clipboard no longer cancels rules (AW4 quirk)

• the report editing screen shows the Group Totals heading on a line which doesn't get erased (AW4 quirk)

• auto-recalc no longer blanks the top line (AW4 bug)

• MRL category widths no longer bunch up during layout change (AW4 bug)

• the glossary properly displays date/time categories (AW4 bug)

Requires IIGS, 256k+ IIc, or 256k+ enhanced //e (65C02 and MouseText). Ships on two 3.5" disks (no 5.25" disks)

Available October 24, 1994 from: Quality Computers, 20200 Nine Mile · Road, St. Claire Shores, MI 48080, Phone: 1-800-777-3642

Update from AppleWorks 4: $59. Update from AppleWorks 1-3: $79. First-time purchase $99.

This file may be distributed freely and reprinted in user group publications.

INFINITY COMPUTER PRODUCTS INTRODUCES "SCAN-BY-FAX" MODEL 2000

With the advent of the "Paperless Office" the market for scanners is booming. Major manufacturers such as Hewlett Packard, Epson, Microtek, Logitec, etc. have been capitalizing on selling scanners to today's businesses with prices at more than $500.00 a machine. Most offices use these scanners to input black & white hard copy documents to a PC for updating or cataloging. This eliminates the time required to retype these documents into computer memory. Infinity Computer Products realizing the potential of this market introduces a new product "Scan-By-Fax" (Patent Pending),

with a suggested list price of $149.95

"Scan-By-Fax" Has Dual Functionality: Full Page Scanner & Printer

"Scan-By-Fax" will convert your FAX machine into a powerful full page scanner for your PC: and if your Fax Machine has multi sheet feed capability then so will your scanner. Not even the $500.00 scanners can do this! Now for a low cost, every office with a Fax machine can scan documents and pictures automatically.

"Scan-By-Fax" also allows your Fax machine to be used as a printer for your PC. This is ideal for users who have invested in Plain Paper Fax machines which have laser printer quality. Using "Scan-By-Fax" can save them hundreds of dollars which they would of spent to purchase a printer. Their Fax machine can now provide all of their printing needs.

Key Features:

• Easy to use with the flick of a switch

• Includes all required software

• 3 Year Limited Warranty

• Compatible with all standard FAX Machines

• Easy installation - installs in less than 5 minutes

• Images are scanned at the maximum resolution of your FAX machine

• Saves hours of retyping existing paper documents for computing

• Does not require use of outside telephone lines

• No Batteries required

• Brings you one step closer to the paperless office

• Enables use of your Fax Machine as a printer for your PC

How It Works:

"Scan-By-Fax" installs between a standard Fax Machine and a PC containing a Fax card. When "Scan-By-Fax" is switched into scan or print modes it automatically disconnects the outside telephone lines from both the Fax machine and the PC and then connects the Fax to the PC supplying all of the signals needed for scanning.

Bonus Feature: OCR Software Included

Infinity Computer Products "Scan-By-Fax" is being bundled with a very popular Microsoft Windows Compatible communications program from Bitsoftware called BitFaxPro. The core of this package is CAERE's renowned Optical Character Recognition (OCR) program. This program allows scanned images to be quickly converted into files compatible with all popular word processors, spreadsheets, and paint programs.

Infinity Computer Products Inc., 705 General Washington Ave, Building 201, Norristown, PA 19403, 610-539-9494, fax 610-539-9050

Apple Computer Inc.

CUPERTINO, CA—October 19, 1994—Apple Computer Inc., together with leading computer and telephony vendors, today announced the emergence of GeoPort as their preferred cross-platform computer telephony interconnect standard. Vendors participating in the announcement include: AOX, Inc., AT&T Corp., Crystal Semiconductor Corp., Cypress Research Corp., IBM Corp., Motorola, Inc., SAT Groupe SAGEM, Siemens PN, Siemens Rolm Communications, Inc., and Zilog, Inc.

GeoPort, developed by Apple Computer, is a plug-and-play serial interface which is backward compatible with the serial ports used in most personal computers, but offers over 200 times the bandwidth. Beyond just providing a physical connection, it also hides the differences between differing computer platforms and communications systems, while allowing any kind of data to pass between them.

GeoPort offers a powerful solution for both the computer and telephony markets. Telephone and computer customers will be able to communicate and collaborate more easily and effectively than ever before. They will be able to talk to each other, send faxes and computer data to each other, see each other, and share common information, without having to worry about what kind of telephone, telephone line, or computer happens to be present at each point of the connection.

PRODUCT UPDATE

New Apple IP Gateway Now Available. Dateline: CUPERTINO, California—October 18, 1994
Description:
Apple Computer, Inc. today announced availability of the Apple IP Gateway, a new software server product for AppleTalk users that, in combination with Apple Remote Access products and MacTCP, enables easy-to-use dial-up access to IP-based services such as the InterNet. The software can be used as a standalone IP Gateway server or in combination with other Apple products, such as the Apple Remote Access Personal Server 2.0.1, Apple Remote Access MultiPort Server 2.0.1 or the Apple InterNet Router 3.0.1.
Significance:

The Apple IP Gateway works in conjunction with MacTCP, available on Apple's System 7.5 operating system or as a standalone product. MacTCP client software allows Macintosh computers on IP networks to communicate using TCP/IP protocols. With the Apple IP Gateway, the MacTCP client can now be used on Macintosh computers connected to an AppleTalk network. The Gateway acts as a translator between AppleTalk and TCP/IP network protocols, allowing Macintosh computers on AppleTalk networks to access IP services as if they were on the IP network.
Availability and Pricing:
The Apple IP Gateway is a standalone software package and is available through Apple authorized resellers at a Suggested Retail Price of $249 in the U.S. Current customers in the U.S. with the Apple Remote Access Personal Server 2.0.1 or MultiPort Server 2.0.1 or the Apple InterNet Router 3.0.1 can purchase the IP Gateway at a reduced Apple Price of $69 (with proof of purchase) by calling 1-800-769-2775 (ext. 5922). Price and availability may vary outside the U.S.

For more information on the Apple IP Gateway, call the Apple Network Information Line at (408) 862-3385 or by AppleLink at ABS.NETINFO. Contacts: Emilio Robles, John McCreadie Apple Computer Inc.

Regis McKenna, Inc.(408) 862-5671, (408) 974-4398

The Little System 7.1/7.5 Book

By Kay Yarborough Nelson
Reviewed by Brian D. Bantz

Quite often all a person needs in a computer book is basic instructions for getting up to speed, as quickly as possible, with a particular program, time-saving and trouble-saving tips, humor and reassurance, and an easy way to reference different tasks. This book by Kay Yarborough Nelson, does this, as has her previous five books in Peachpit Press's Little Book series.

This book offers information from System 6.08 through System 7.1, and now, on to System 7.5. It offers an excellent, concise introduction for beginners, to system software and programs alike, likewise it offers, to experienced users, a crash-course in the differences between the versions, plus plenty of new tips and tricks. With her information-packed, yet fun and friendly style, she takes readers through:
• Using the Finder and working

with icons
• Starting programs and opening documents
• Customizing the desktop and using control panels and system tools
• Installing fonts and printing
• Networking and troubleshooting
• Understanding features new to 7.5 and using PowerTalk and QuickDraw GX.

Mini'app'les Board of Director's meeting minutes

October 6, 1994
Matthews Center, Minneapolis

Attendance

Members: Greg Carlson, Jacque Gay, Roy Sorenson, Erik L. Knopp, Les Anderson, Owen Aaland, Bob Demeules, Steve Thompson. Excused: Brian Bantz, Eric Jacobson, David Laden. Guests: Bruce Thompson.

September meeting minutes were accepted with minor correction.

Treasurer's Report
by Jacque Gay:

September shows $119 deficit, reflecting $100 deposit for swap meet and larger newsletter. Because of lower interest from CD's, and to consolidate our savings at one bank (instead of two), the balance of the CD account was transferred to our savings account. Discussion on the officer bond insurance, which will come due this month. Jacque reported Nick Ludwig, who is checking on better rates, was skeptical that we needed this insurance. Annual cost is about $110. Les made a motion that unless required by law (or bank), we drop the bond insurance: motion seconded and passed, all voted in favor except Jacque abstaining.

President's report
by Greg Carlson:

To insure better communication, Greg clarified that Erik Knopp is the contact person when volunteers are needed. Bruce Thompson is helping Sysop Dick Peterson with verifying log-ons and is willing to help verify file uploads. He is also helping Owen with Mac eDOMs. Jacque asked if we have or should create a policy screening files that may be available in future on our BBS. Currently the Sysop monitors all public posts, while private email is private. Discussion mentioned screening would require additional volunteer effort, already a scarce item. How would we screen the thousands of files we make available via online CD-ROMs? Our membership is not limited to adults, so files should be appropriate for all ages. Greg will invite Sysop Dick's thoughts on this topic.

Sophisticated Circuits has a hardware offer to our user group members, and Greg will get brochures to the SIGs and notice on newsletter.

Vice President's Report
by Brian Bantz (submitted in writing):

Swap meet is Nov. 19 at Apache Plaza from 10-2. This year to cover club costs table reservations are $5 per half table, $10 whole table for members. Non member cost is $20/table, and business cost is $25/table. Members are urged to pre-register by Nov. 1, after which half tables may not be available. Register by calling the voice mail number (229-6952) or via the BBS. (Tom Gates said plenty of tables are still available, and advertising at Apache has started).

Brian has talked to many SIG leaders gathering ideas for topics and speakers for the annual meeting, and is looking into getting someone in the communications area. He notes attendance is growing at the Mac novice, main Mac, and ClarisWorks SIGs, and we need larger sites: Brian proposes compiling a list of meeting sites available to the Mac and Apple SIG directors. He noted attendance is boosted when we promote the topic of meetings in the newsletter and BBS.

Brian asks Bob for a monthly list of new and resigning members so we can contact them. The member discount coupons for System 7.5 are still available from Brian or Erik Jacobson, and offer has been extended to Nov. 30. As coupons are limited, please request only if you plan to upgrade now.

Membership Director's Report
by Bob Demeules:

September shows 7 new members, 8 renewing members, and we welcome OnTrack, our latest corporate membership. Total membership is now 349. Bob and Owen should complete by Nov. the new member kits, including disks of our BBS software and the eDOM catalog.

Software Report
by Owen Aaland:

Sept. EDOM sales are 5 Apple disks and 7 Mac disks for $24 income. There are 2 new eDOMs for Mac and Apple II, and 1 for the Apple IIGS. Jacque suggested ideas for eDOMs could come from the 'hot shareware' lists in the monthly Mac magazines. Bruce Thompson said he is reviewing a lot of files for the Mac and those EDOM listings should appear shortly in the newsletter. He is also interested in updating older EDOM utilities. Les is helping Owen with production of Apple IIGS eDOMs. Owen raised question of making files available on the BBS: agreement on making virus and compaction utilities available. Bob said it is already getting harder to get onto the BBS, and we will need a second phone line if we make more files available for download.

Apple II SIG Director's Report
by Les Anderson:

There has been a low turn out for the Apple novice SIG, possibly because of location. Les said the Apple SIGs are set through December.

Publications Director's Report
by Steve Thompson:

Steve and layout editor John Hunkins Jr. are investigating alternative printing arrangements that could save us money. We will offer business card size ads for same rate as 1/12 page ads, with the long term discount. Ad Coordinator Nick Ludwig is talking with MacUSA. The October newsletter is late, Steve will check why. Roy gave suggestions from the executive committee for 'roving reporters' to write up club news and events, and a wish for

Mini'app'les Handy Form

Name: _____

Company: _____

City, State, Zip _____

Phone (Home) _____ **(Work)** _____

Occupation _____

Member ID#(if applicable): _____ **Expiration date:** _____

ID#: _____ Exp. Date: _____

Name: _____

Street: _____

City, State, Zip: _____

New and Renewing Members – specify your level of support

- ❏ Individual $25.00
- ❏ Student* $15.00
- ❏ Sustaining $40.00
- ❏ Foreign $40.00
- ❏ Educational $50.00
- ❏ Corporate $100.00

*Must be a Full-time student of an accredited institution.

Make Checks Payable to "Mini'app'les"

Yes... *I'd like to join!*

If this is a new membership, or a renewal, please take a few minutes to fill out the questioniare.

Which personal computer(s) do you use?

- ❏ Apple II
- ❏ Apple III
- ❏ Apple IIe
- ❏ Apple IIc
- ❏ Apple IIc+
- ❏ Apple IIGS
- ❏ Laser
- ❏ "Toaster" Mac – 68000 (128K,512K, 512Ke,Plus,SE,Classic)
- ❏ Other 68000 (Mac Portable, Powerbook 100)
- ❏ "Desktop" Mac – 68020 (II, LC)

- ❏ "Toaster" Mac – 68030 (SE/30, Classic II,Color Classic,Color Classic II,LC 520, LC 550, Mac TV)
- ❏ "Desktop" Mac – 68030 (IIx,IIcx)
- ❏ "Desktop" Mac – 68030 (IIsi,IIci,IIfx,LC II,LCIII,IIvx)
- ❏ "Desktop" Performa – 68030 (400,405, 410,430,450,460,466,467,600)
- ❏ "Toaster" Performa – 68030 (200,275, 550,560)
- ❏ "Toaster" Performa – 68040 (575,577, 578)

- ❏ "Desktop" Quadra 68040 (605,610,630, 650,660AV,700,800,840AV,900,950)
- ❏ "Desktop" Centris (610,650,660AV)
- ❏ Powerbook – 68030 (140,145,145B, 160,165,165c,170,180,180c)
- ❏ Powerbook – 68040 (520,520c,540, 540c)
- ❏ Powerbook Duo 68030 (210,230,250, 270c)
- ❏ Powerbook Duo 68040 (280,280c)
- ❏ PowerMacintosh (6100,7100,8100)
- ❏ Other_____

What attachments or peripherals do you use?

- ❏ QuickDraw printer
- ❏ PostScript printer
- ❏ Modem
- ❏ Scanner/digital camera
- ❏ Drawing tablet
- ❏ Voice mail
- ❏ MIDI
- ❏ Other_____

What are your areas of special interest?

- ❏ Business applications
- ❏ Household applications
- ❏ Educational applications
- ❏ Desktop Publishing
- ❏ Programming
- ❏ Networking
- ❏ Games
- ❏ Other_____

- ❏ Check if you want your name withheld from commercial and other non-club mailing lists
- ❏ Check if you are interested in volunteer oppertunities (see other side)
- ❏ Check if you were refered by a club member. Please give name

_____

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eDom Orders

Prices:

5.25" eDom:	$3.00
5.25" System:	$1.00
3.5" eDom:	$5.00
3.5" System:	$3.00
Mac System 7:	$15.00

(Prices include 6% Minnesota sales tax)

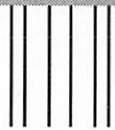| Disk size	eDom	Title or Description	Qty.	Price @	Total

Total merchandise		
Double price for non-members		
Add $1/disk shipping ($4.00 max)		

Make checks payable to "Mini'app'les" | Grand Total:

Current Apple System Software

Apple II, II+, IIc, IIe

	Version	Date	Format
Dos 3.3 System Master	n/a	09/10/85	5.25"
Apple II System Disk	3.2	07/16/90	5.25/3.5"
ProDOS 8	1.9	07/16/90	5.25/3.5"

Apple IIGS

GS/OS System (6 disks)	6.0	4/92	3.5"
HyperMover(2disks)	n/a	n/a	3.5"

Last Fold – Seal with Tape

2nd fold

1st fold

Attention:

Mini'app'les
P.O. Box 796
Hopkins, MN 55343-9905

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Dear Mini'app'les
Please direct this to the:
☐ Membership Director
☐ Software Director

more graphics in the newsletter (members with digital cameras, please email Steve).

Operations & Resources Director's Report
by Erik Knopp:

Tom Gates reported on voice mail usage. Cost is $17/month, and it appears to have more usage than board members thought. The number is published in Computer User, our newsletter, and II Alive magazine.

New Business: Brian has a 2x speed CD-ROM he will sell at cost ($179) to club for a second BBS CD drive. No action taken at this time.

Adjournment:

next executive board meeting 7:30, Oct. 20 at Jacque's. Next board meeting 7 pm, Thursday, Nov. 3, Matthews Center, 2318 29th Ave. S., Minneapolis.

Treasurers Report Oct 1994
Profit & Loss Statement — *by Jacque Gay*

Income
Memberships	$665.00
Advertising	$95.00
Sorftware Sales Net of Sales Tax	$22.54
Interest	$72.13
Total Income	**$844.67**

Expenses
Secretary	$93.00
Publications/Newsletter	$638.88
Hardware/Resource Support	$24.04
Membership and Promotion	$66.03
Total Expenses	**$821.95**

Net Profit/(Loss) **$22.72**

Submitted by Roy Sorenson, secretary.

• Organizing your System Folder, including striping unnecessary drivers

The explanation of System 7.5's improvements, the securing of the system file and desktop, and other features, remind one of the Performa characteristics, without adding At Ease. Tips are included on almost every page and yet they are helpful, not overwhelming. The explanations of PowerTalk, will help all connect to a network or to ready for TCP/IP. QuickDraw GX reminds one of the features of the PDD (Portable Digital Document maker), and of the convenience of having the Printer driver on the desk top, where a double-click will bring up the printer monitor. The index of this book is excellent. It lists improvements through all of the recent System software and all tips and shortcuts are included simplifying most cross referencing.

Buy this for a Christmas gift, then you have a chance to read it, while wrapping it.

Tom Gates has discounts available for this issue.

The Little System 7.1/7.5 Book, By Kay Yarborough Nelson, Peachpit Press, 2414 Sixth St., Berkeley, CA 94710, 208 Pgs, $13.95, (510)548-4393, FAX (510)548-5991

Ongoing Deals for Mini'app'les Members
Submitted by Tom Gates

The following businesses have agreed to provide ongoing discounts to members of Mini'app'les. When you contact these companies, please identify yourself as a member of Mini'app'les to qualify for these discounts. For questions related to these discount offers, please contact Tom Gates - (612) 789-1713 evenings and weekends.

APC Power Protection Products

Surge Protection strips, Battery backups, line conditioners, etc. Contact Keith Kalenda at Business Security Products (612) 789-1190. 1/3 off SurgeArrest line of products 25% off BackUPS, SmartUPS and related products

MacMillan Publishing

35% discount off computer books from QUE, Sams, New Riders Publishing, Hayden and Brady. Catalogs available thru Mini'app'les or by contacting Marcie at 1-800-428-5331 x3744. To place orders, contact Melissa at 1-800-428-5331 x4673.

MacMillan Publishing produces frequent listings of new titles that have been added to their catalog. Mini'app'les will attempt to have these available on the BBS in addition to the catalogs.

 mini'app'les
Box 796
Hopkins, MN 55343
ADDRESS CORRECTION REQUESTED

 mini'app'les **membership card**

Expire 99-12   ID No: 0160

DAN B BUCHLER
2601 WOODS TRAIL
BURNSVILLE MN 55337