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Washington Apple Pi



The Journal of Washington Apple Pi, Ltd.

Volume 9

March 1987

Number 3

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- 🍏 Apple // News and Notes
- 🍏 Appleworks Tips and Techniques
- 🍏 EdSig News
- 🍏 Macintosh Bits and Bytes
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- 🍏 MacWorld Plus

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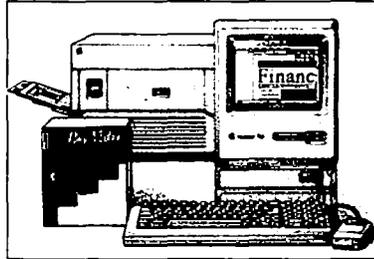
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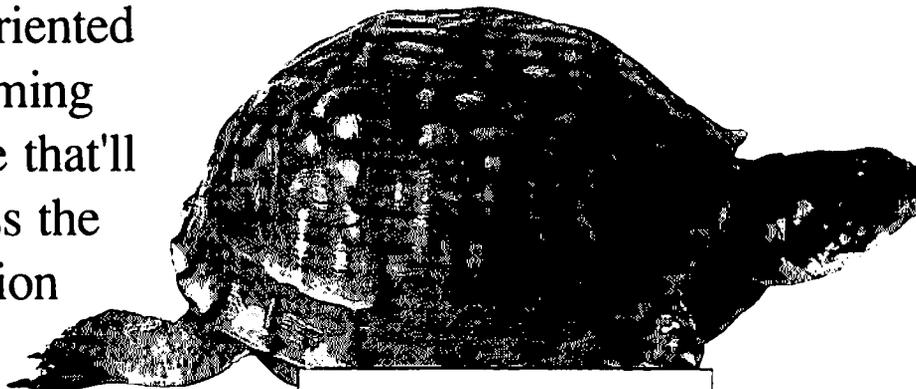
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EDITORIAL

Is it really so? Have Apple policymakers really decided to not provide an upgrade path for current Macintosh owners to the next generation versions?

Starting with the Apple II series, Apple has from time to time indicated by lack of action or by statement that there would be no upgrades. Each time Apple has relented and, together with third party vendors, has provided many ways by which their slogan "Apple II Forever" has been (so far) satisfied. Apple][owners have been able to convert to Apple][+ by means of the Applesoft card and the replacement of ROMs on the motherboard. Apple][+ folks have had ways to attain compatibility (almost) with Apple //e machines. The

ever popular AppleWorks program can be executed on the Apple][+. An ill-fated adventure with the Apple III resulted in a fine computer which was orphaned by Apple. The //c deviated from the //e by the change of the 6502 computer chip to the CMOS 65C02. This was remediable by means of the enhancement kit for the //e, but with some introduction of incompatibility with earlier programs and applications. Then in September 1986 came the Iigs with a major change brought on by the substitution of the 65802 for the 65C02. However, even here Apple has provided an upgrade path for the //c folks. The //c, due to its "closed" architecture was designated by Apple to be non-upgradeable to the Iigs. contd. on pg 70



PRESIDENT'S CORNER

by Tom Warrick

By the time most of you read this, the two-day party that Apple calls "AppleWorld 87" will be over. It's no secret that this will see a number of new products for which many of us have been waiting. I hope to have a full report next month on the highlights.

Until we can talk about Apple news, let me tell you some Washington Apple Pi news. First, let us welcome three new

Directors-at-Large. *Robert C. Platt* is someone most of you will recognize. Bob has been one of WAP's most active members. He is currently WAP's tutorial coordinator and has in the past been Vice President for Special Interest Groups and a director. Bob edited *Perfect Pascal Programs*, a compendium of articles from the Washington Apple Pi Journal on the extremely popular Pascal programming language. (If Bob were writing this, he would be sure to put in a plug, so I'll do it for him—*Perfect Pascal Programs* is for sale at the WAP office.) Bob is also a co-author of a book on Modula 2, a programming language designed to overcome many of the limitations of Pascal. Bob recently returned from Amarillo, Texas, where he worked as an attorney on natural gas issues and corporate acquisitions for Mesa Petroleum Corporation, owned in large part by the celebrated *T. Boone Pickens*. (Think how different things might have been if during Apple's dark days in 1985 Bob had been successful in getting T. Boone Pickens interested in trying to take over Apple Computer, Inc., rather than, say, Unocal Corporation.)

The second new director is (Regina Litman, take note) *Priscilla Myerson*, well-known by people who attend WAP Board meetings. (Remember, all members are invited to Board meetings, and during meetings there is little, if any, distinction between official directors and other attendees. This is one of the things in which WAP takes great pride.) Priscilla has been for all practical purposes our co-Treasurer since *Ed Myerson* assumed the formal title of Treasurer several years back. Priscilla is a Certified Public Accountant (as is Ed, for that matter—a marriage made at Wharton, you might say) for W.R. Grace and Company near Baltimore.

The third new director is *Richard Mlodoch*, one of the ace programmers on the Telecommunications System Committee. Rich has been one of the key players on *Lee Raesly's* team, involved in expanding the UBBS software, licensed in 1985, into a multi-user, multi-computer networked system. Rich has also been one of the most active participants on the TCS itself.

These three vacancies were the result of, first, the

resignation of *Mike Ungerman*, who has now moved to sunny Florida. After one of the big snowfalls a few weeks ago, Mike had the audacity to call up the Telecommunications System just to let us know the weather forecast in Orlando. Gee (grr), thanks (grrr), Mike (grrrr)!

The other two vacancies were the result of bylaws changes, the first of which provided that when one person is entitled to serve in two Board positions at the same time, that person gets only one vote and the Board may appoint someone else to bring the Board up to the full complement of 15 official members. At present, *Bernie Urban* is an elected director (he received more votes for Director-at-Large in last year's election than has any other Director candidate in WAP history) and also an appointed Director by virtue of being Editor of the WAP Journal. The second was a bylaws amendment that says that only members may serve as officers and directors of the club. This created a vacancy when the Board was compelled, reluctantly, to expel Theron Fuller for disrupting WAP services, specifically by continually and unjustly degrading and demeaning the office staff and the Telecommunications System Committee despite many warnings and after being given many opportunities to correct his conduct. The Board, in accordance with the procedures in the Bylaws, heard evidence from the people affected, and after deliberations, voted 12-1 in favor of expulsion.

In other WAP news, if you work for the Federal Government, you owe it to yourself (and your agency) to come to a meeting of *FedSIG*, Washington Apple Pi's Federal Special Interest Group. FedSIG meetings are normally held on the third Wednesday of each month at the WAP office. FedSIG arose after a number of people expressed an interest in pooling information on how to break the MS-DOS lock on many Government shops in the area. (Or, as one person put it at a meeting once, how to be a Macintosh guerrilla.)

FedSIG's efforts have been greatly assisted and encouraged by another recent development: Apple Computer, Inc. itself has recently opened up a modest office in Reston, Virginia. One of the principal purposes for this office will be to coordinate marketing with the Federal Government. The Reston office is well aware that it shares a mutual interest with many FedSIG members, and the office has been most helpful to FedSIG in arranging presentations and facilities. I have not yet been out there, but I'm told that if your agency or group is thinking about acquiring computers, try to get yourself on the team to go out to the Reston office—it is supposed to be fabulous.

As many of you know, we hold our monthly meetings at the *Uniformed Services University of the Health Sciences (USUHS)*, 4301 Jones Bridge Road in Bethesda, Maryland. USUHS is the military's medical school—medical students attend without paying the astronomical cost of going to med school in exchange to agreeing to serve in the Medical Corps of the Army, Navy, Air Force or other uniformed service.

USUHS has been gracious enough to let us use their
contd.

beautiful, well-equipped Auditorium and Cafeteria *free of charge* (we pay only for the security guards), but after the December garage sale, they wanted to rescind their invitation to let us meet there. It appears that a number of people did not clean up their tables after the sale, leaving unsold materials strewn about the Cafeteria. In addition, a number of people were very rude to the guards when the people were told they could not bring their for-sale items up through the building elevators.

I must tell you, first, that I believe that many of the people who behaved so poorly were not Washington Apple Pi members. We have never tried to keep our meetings limited to members only, and our garage sales in particular have traditionally had a higher number of non-members in attendance than our regular meetings. This makes garage sales crowded, but as there are both more buyers and more sellers, which we think adds to the fun for everyone.

In any event, USUHS was, with justification, quite unhappy with what happened. If they had thrown us out, it would have been a serious problem for the Pi. It is very difficult to find an auditorium-meeting room combination at little or no cost in the Washington area that also has free parking. Those that are available cannot give us a commitment to let us use their facilities on a regular basis twelve months a year. As we found a couple of years ago when we had to move from meeting site to meeting site for a few months, attendance suffers when we have difficulty remembering where the meeting is this month and then trying to find out how to get there.

Fortunately for the Pi, *Leon Moore* and *Bernie Urban* met with USUHS and were able to work out an arrangement whereby we will be able to continue to meet there. But it is of paramount importance that we act as the guests we are, and be especially considerate of USUHS's guidelines—particularly with regard to cleaning up after each meeting. This will require us to have a "*proctor*" who may from time to time ask for your assistance to help rearrange tables and help out in other ways. Rich Mlodoch, in one of his first acts as an official director, has volunteered to coordinate this effort. Also, please respect the parking signs in the garage. As you go into the garage, there are a number of spaces marked for trucks and vans only. If you have a regular car, please do not park there—park on the upper level. After you park, please go up the stone steps that lead up through the arcade outside the building, particularly if you have computer equipment. USUHS has a great deal of computer equipment, and the security people are always concerned that the computer you are taking out might not be the one you brought in. (Sometimes the guards may make exceptions to these rules, but these would be only in special situations.) Finally, USUHS rules do not permit pets on the premises. (This will come as a disappointment both to my wife *Rochelle Stern* and to *Ellen Leanse!*)

We should have no difficulty with these rules. Considering the great benefit that access to USUHS confers on us, we are, and should be, *properly thankful* for the University's consideration in allowing us to use their excellent meeting facilities. ☺

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| Managing Your Money | 138 | MacOneWrite Sys. | 170 |

Communications

| | | | |
|----------------|----|--------------------|----|
| ASCII Pro | 81 | MacMail Telecom | 38 |
| Point to Point | 80 | Sikekick/PhoneLink | 72 |

Database

| | | | |
|-------------------------|-----|-----------|-----|
| Bank St. Filer (128K) | 50 | DBase Mac | 365 |
| pfs: Workmates(f,r,p,w) | 170 | Reflex | 71 |

Education

| | | | |
|--------------------|----|-------------|-----|
| Computer SAT (HBJ) | 55 | Mind Prober | 34 |
| Math Rabbit | 29 | Statworks | 101 |

Graphics

| | | | |
|-------------|----|---------------|-----|
| Fontrix 1.5 | 66 | Cricket Graph | 153 |
| PrintMaster | 26 | Full Paint | 73 |

Leisure

| | | | |
|------------------------|----|-------------------|----|
| G. Kitchen's Gamemaker | 36 | Smooth Talker 2.0 | 63 |
| Leather Goddess/Phobos | 29 | Toy Shop | 46 |

Programming

| | | | |
|------------------------|----|--------------|----|
| Enh. Terrapin LOGO 3.0 | 70 | MacForth II | 79 |
| MacroWorks | 23 | Turbo Pascal | 71 |

Spreadsheet

| | | | |
|------------------|-----|---------------------|-----|
| HabaCalc N Graph | 38 | Business Filevision | 235 |
| Supercalc 3A | 141 | Excel | 275 |

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| | | | |
|------------------|----|--------------|-----|
| PaperClip | 43 | MORE (512K) | 175 |
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APPLE

MACINTOSH

| | | | |
|--------------------|-----|-------------------|-----|
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| ASCII Mousetalk | 105 | Business Sense | 395 |
| Award Maker Plus | 32 | Ferrari-Gr. Prix | 49 |
| Multiscribe | 49 | Graphadex | 78 |
| Quicken | 35 | MacGolf | 41 |
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| Where USA is C. SD | 33 | Super Paint | 71 |
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CLASSIFIEDS

WANTED: Used Apple //c green monitor and stand. Call Tom, evenings only 935-5520.

WANTED: Name, address, telephone number where I can ship my Rana Elite 10MB Hard Disk (used w/Apple][+) for repair. Rana went out of business and I now live in Republic of Panama. I'm desperate! Mike Michel-Howell, PSC Box 722, APO Miami FL 34002.

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FOR SALE: ASCII Express, dBase II ver 2.43, both unopened; also, DB Master ver 3, VisiCalc/VisiPlot, Creative Financing, MicroCourier Electronic Mail. Call me with a reasonable offer. David Reuben, 231-6393.

FOR SALE: PageMaker v1.2, \$295; Excel v1.0, \$195. Both new. Call Tom (301) 781-6591, leave message.

FOR SALE: Apple //e, monitor, Epson printer, 2 disk drives, 128K, 80-column, system saver fan, modem cable, all software. \$1200/best offer. Call Bill, 365-7614. ☺

JOB MART

HELP WANTED: Small nonprofit research organization in disarmament field, located in Georgetown area, needs part-time research assistant skilled in using Macintosh. Primarily for data entry, also some general research. Prefer undergraduate or graduate student with some background in economics/statistics. 10-15 daytime hours per week @ \$10/hour. Call Mrs. Sivard 965-1661. ☺

EVENT QUEUE

Washington Apple Pi meets on the 4th Saturday (usually) of each month, both Apple and Mac, at the Uniformed Services University of the Health Sciences (USUHS), on the campus of the Bethesda Naval Medical Center, 4301 Jones Bridge Road, Bethesda, MD. Disketeria transactions, Journal pickup, memberships, etc. are from 8:45-9:30 AM and during the Q& A sessions (times for these vary according to the main meeting topic). The business meeting is from 9:00-9:30.

A sign interpreter and reserved seating can be provided for the hearing impaired, but we need 5 business days notice. Call the office.

Following are dates and topics for upcoming months:

- | | | |
|-------|----|-------------------------|
| March | 28 | - Apple II: Pinpoint |
| | | - Mac: Add-on Products |
| April | 25 | - Apple II & Mac: Music |

The Executive Board of Washington Apple Pi meets on the second Wednesday of each month at 7:30 PM at the office. Sometimes an alternate date is selected—see the WAP calendar for any changes.

General Information

Apple user groups may reprint without prior permission any portion of the contents herein, provided proper author, title and publication credits are given.

Membership dues for Washington Apple Pi are \$32.00 for the first year and \$25.00 per year thereafter, beginning in the month joined. If you would like to join, please call the club office or write to the office address. A membership application will be mailed to you. Subscriptions to the Washington Apple Pi Journal are not available. The Journal is distributed as a benefit of membership.

Mailing Notice: Change of address must be postmarked at least 30 days prior to effective date of move. Journal issues missed due to non-receipt of change of address may be acquired via mail for \$2.50 per issue.

Current office hours are:

- | | | |
|-----------------|---|--------------------|
| Monday - Friday | - | 10 AM to 2:30 PM |
| Tues. & Thurs. | - | 7 PM to 9:00 PM |
| Saturday | - | 12 Noon to 3:00 PM |

Please note that the office is closed on all U.S. Government holidays.

Members are asked to place phone calls to the office during the day hours Monday - Friday whenever possible, since only one person staffs the office during evening hours and on Saturday.

*** March 1987 ***

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|--|--|---------------------------------------|--|---|
| 1 | 2 PI-SIG 7:30 PM Office | 3 Apple II Beginning Tutorial #1 7:30-9PM Office | 4 Mac Progrms. 7:30PM Office; dPub SIG 7:30PM PEPCO | 5 GameSIG 7:30 PM Office | Sat. Mar 7 --> contd. - Frederick Slice - 9:30 AM Frederick Library | 7 Introduction to Applesoft Tutr. 9-12AM Office |
| 8 --> Deadline for Journal Articles is March 9 | 9 Mac Beginner's Tutorial #1 7-10 PM Office | 10 Apple II Beginning Tutorial #2 7:30-9PM Office | 11 Executive Board 7:30 PM Office | 12 StockSIG 8:00 PM Office | Sat. Mar 14 --> contd.-Annapolis Slice; Music SIG | 14 Intermediate AS Tutr. 9-12AM Supercalc3a Tutr. 12:30PM Office |
| 15 | 16 Mac Beginner's Tutorial #2 7-10 PM Office | 17 Apple II Begining Tutorial #3 7:30-9PM Office | 18 FEDSIG 7:30 PM Office | 19 Pascal SIG 8:00 PM Office | 20 | 21 Music Software for Mac Tutorial 10-12AM Office |
| 22 | 23 Mac Beginner's Tutorial #1 7-10 PM Office | 24 Frederick Slice SIG Mac 7:30 PM MRIID | 25 Apple /// 7:30 PM Ch. of Com. DC | 26 EDSIG 7:30 PM Office | 27 | 28 WAP Meeting USUHS 9:00 AM |
| 29 | 30 Mac Beginner's Tutorial #2 7-10 PM Office | 31 | | | | |

*** April 1987 ***

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|--|--|---------------------------------------|--|--|
| | | | 1 Mac Progrms. 7:30PM Office; dPub SIG 7:30PM PEPCO | 2 GameSIG 7:30 PM Office | 3 | 4 Intro. to Excel Tutorial 10-12AM Office |
| 5 --> Deadline for Journal Articles is April 6 | 6 PI-SIG 7:30 PM Office | 7 Apple II Beginning Tutorial #1 7:30-9PM Office | 8 Executive Board 7:30 PM Office | 9 StockSIG 8:00 PM Office | Sat., Apr 11 --> contd.-Frederick Slice; Annapolis Slice; Music SIG | 11 Advanced Excel Tutorial 10-12AM Office |
| 12 | 13 | 14 Apple II Beginning Tutorial #2 7:30-9PM Office | 15 FEDSIG 7:30 PM Office | 16 Pascal SIG 8:00 PM Office | 17 | 18 |
| 19 | 20 Mac Beginner's Tutorial #1 7-10 PM Office | 21 Apple II Beginning Tutorial #3 7:30-9PM Office | 22 Apple /// 7:30 PM Ch. of Com. DC | 23 EDSIG 7:30 PM Office | 24 | 25 WAP Meeting 9:00 AM USUHS |
| 26 | 27 Mac Beginner's Tutorial #2 7-10 PM Office | 28 | 29 | 30 | | |

SIGNEWS

Apple /// SIG meets on the 4th Wednesday of the month at 7:30 PM in the Chamber of Commerce Bldg., 1615 H Street NW, DC. The next meeting will be on March 25.

AppleWorks SIG offers two meeting options: 8:00AM before the regular WAP meeting and 12 Noon after the meeting. Attend either or both.

DisabledSIG - For info call Jay Thal at 344-3649.

dPub SIG (Desktop Publishing) meets on the 1st Wednesday of the month at 7:30 PM in the PEPCO Auditorium at 1900 Penn. Ave., NW. The next meeting is on March 4.

EDSIG (the education special interest group) meets on the 4th Thursday of the month at 7:30 PM at the office. The next meeting will be on March 26.

Fed(eral) SIG meets on the 3rd Wednesday of the month

at the office, 7:30 PM. The next meeting will be on March 18.

GameSIG meets on the 1st Thursday of the month at the office, 7:30 PM. The next meeting will be on March 5.

MusicSIG meets on the 2nd Saturday of each month. See their news elsewhere in this issue for details.

PIG, the Pascal Interest Group, meets on the 3rd Thursday of each month at 8:00 PM at the office. New and prospective users are welcome. The next meeting will be on March 19.

PI-SIG (Program Interface) meets on the 1st Monday of the month at 7:30 PM at the office.

Mac Programmers meet on the 1st Wednesday of the month at the office, 7:30 PM. The next meeting is on March 4.

Telecom SIG meets after the regular meeting on the 4th Saturday of the month. (3)

ON THE TRAIL OF THE APPLE ///

by David Ottalini, /// SIG Co-Chairman

There's lots to report on the Apple /// front this month, fellow ///ers, so here we go:

/// EZ PIECES UPGRADE

As you are aware, On Three has been working with the developer of the integrated program /// EZ Pieces (AppleWorks to our // brethren) to upgrade the program to the current 2.0 version. /// EZ Pieces has never been upgraded beyond its original 1.0 level and has more than its share of bugs. The developer, Robert Lissner agreed to consider doing the upgrade if enough owners of the original program (translation: you don't have an illegal copy) were willing to pay a \$50 upgrade fee. On Three got the message out over CompuServe and by mass mail. Thanks to Charlene Ryan, we also contacted all members of the SIG, letting them know about the possible upgrade and to call On Three to place an order.

As of February 12, I was told at least 1000 owners of the program have called. An excellent response considering the mailing went out in late January. Lissner reportedly said he wanted 5000 orders for the upgrade and given this initial response, there seems to be some optimism at On Three that the project could go through. If you have not called, please do so. If you are interested in buying the new version outright you can indicate that too. On Three's number is 800-443-8877.

I'll hopefully be able to tell you the final decision in next month's Journal. Lissner says it will take him about three months to do the upgrade, giving our program all the capabilities of the 2.0 version of AppleWorks. There is also an indication that Lissner would include code in new versions of AppleWorks allowing it to work with either Apple // or /// computers! This is probably the last chance we will ever have to get this upgrade, so please call if you have not done so.

BUSINESS BASIC ON THE IIGs

One more indication that the Apple /// continues to live is a well-placed rumor that Apple has taken our own Business Basic off the shelf to give it a make-over for use on the new IIGs. An outside firm reportedly has the source code and is in the process of making the conversion now. According to Frank Moore of The /// Magazine, the primary reason Apple is going ahead with this project is to give it a Basic language system it can own and control 100%. Microsoft apparently has some rights to Applesoft. As you might imagine, the new version for the gs will be more powerful than our latest 1.23 version (since it will be able to take advantage of the 16-bit chip the /// never got).

But the good news is that except for specific assembler routines, many of the programs should work directly on our machine. Additionally, many of the Business Basic programs that are already in existence can be ported over to the gs without many difficulties. That should help Apple /// vendors still selling Business Basic programs as well as get new ones going. Some of the Apple // magazines might even start publishing BB programs. And if the Beagle Brothers get hold of the language, watch out!

On another front, there are also reports that the new gs Toolkit being developed for that machine's Pascal 1.3 system

will have routines to emulate the Apple ///'s Console driver. That should make the porting of /// Pascal programs much easier, although porting over to the 16-bit environment with the Toolkit could cause some problems.

Finally, an update on the ASKY Envoy card I mentioned last month. Its price will be \$180, including a power cable for the IBM disk drive. They also plan to sell a card and drive combination for \$325 in the near future. And ASKY now has a BBS dedicated to users of the card. That number is 408-943-1950 (300/1200 baud). We hope to have a card to test in the near future and will report back to you on it at that point.

WELCOME BACK, TAYLOR!

Back at Apple, there's a "new" old face these days. Many long-time users of the /// will remember Taylor Pohlman as the man who had to get the /// back into the marketplace after its early troubles. He was the one who issued Apple /// buttons to everyone in sight that read, "Let Me Reintroduce Myself." His campaign was such a success that the /// became the sixth best selling computer in the country. But the effort (though no fault of his own) ultimately failed because Apple decided that wasn't good enough to keep it going. Pohlman left to work elsewhere, but he is now back in the Marketing Department at Apple, working on Business Development.

Some time ago I wrote to him, asking for permission to reprint his excellent series of articles on Business Basic that were published in Softalk. It took him a while, but Pohlman has now told me we can place the entire series into our Public Domain library. All the articles are on disk, making it an easy task to prepare them for inclusion in the Disketeria. Any of you gs users interested in learning about the great Basic you may soon be getting should take a look at some of these articles, all of which the WAP library has in its collection of Softalk magazines.

APPLE //e UPGRADE

Notice the new Apple //e now comes with a built-in keypad like our ///? Apple continues to upgrade its // line to the machine we've been using for years! All we need now is a platinum case!

APPLE /// WISH LIST

One of the panels being developed for the Phase /// Conference in Chicago October 2-4 is a discussion about potential enhancements for our ///s. Chris Acreman, of Acreman Engineering in Austin, Texas is heading up the effort. Specifically, he is looking for "Wish Lists" of what you would like to see for future enhancements to the ///. He is asking that the suggestions be limited to hardware or SOS and that the requests be "performance specific." Acreman also wants to know what you'd be willing to pay for the enhancement. You can drop him a note on CompuServe by sending E-Mail to 72747, 3060 or call and leave a note on ///'s Company at 804-747-8752 in Apple.III.Help/Mail.Boxes/Row.4/Chris.Acreman. Or let me know and I'll pass it along for you.

NEW PRODUCTS

New products for the Apple /// abound these days, as vendors continue efforts to offer products we can all use.

contd.

Daryl Anderson of D.A. Datasystems has already come out with a series of RAM drivers for users of the Titan ///+// and ///+//e cards that optimizes the RAM disk feature. I can attest greatly to their usefulness. Now, he has come out with programs designed to let /// users who have hard disks and Catalyst or Selector call the Titan emulation directly from the menu, and when finished in // mode get back to the menu again. He does it with a special Interpreter file you install like any other. Daryl is currently holding a contest to name these products, with his original name being "Bak-2-SOS".

And at Pair Software, Frank Moore plans to offer an XMODEM protocol telecommunications program shortly, along with the long-promised alternative to the System Configuration program. He has also introduced his own version of the 3.5" UniDisk driver, and now has many new hardware offerings. Unfortunately, prices have had to be increased on most products as well. Just recently, Pair sent out its first separate product catalog, which ran to 19 pages. There are also plans to start printing The /// Magazine with a laser printer (but not a LaserWriter) in the near future. On Three started doing that with its January issue.

Speaking of On Three, they continue to announce new modules for DesktopManager and have lowered the prices on some products, notably the 512K upgrade (which I am taking advantage of). Like Pair Software, On Three is actively porting products over to the gs and as new products are developed, they will make them available to both machines. The Spelling Checker has some problems but should be out soon.

There is also rumor of a new 512K board being introduced. Joe Dobrowolski of the Apple THREE Group International says the board is now in prototype form and will be offered for \$175! Dobrowolski says in the February "News and Views" the new board will utilize 256K by 1 RAMs exclusively and will come with installation instructions (thank goodness!). But he also says it will NOT come with patches to allow programs like 3EZ Pieces to use the extra RAM! Unless someone bales the developer out on that one, its usefulness, even at the lower price, will be minimized.

I also hear that an Apple employee has indicated he would be willing to write a driver for the SCSI card Apple is selling (it is believed it will fit into our machine). If that happens, we will have access to all the new hard disks Apple and other vendors are coming out with, continuing the life and usefulness of our machine.

APPLE /// TO IBM

What's the best way to get information transferred from your Apple /// to an IBM clone? Chuck Schrieber of the Apple Three Users of Northern California says one way is to do it by direct connection and telecom programs (he uses Access /// and Procomm). Make sure you use a modem eliminator cable to hook your /// (serial card or port) and the COMM 1 port on the IBM or clone. You must also make sure the settings of your telecom programs in both machines are the same and everything else should be fairly simple. Schrieber says, however, that you might need to make sure the LF and CR are not duplicated.

PHASE /// CONVENTION

Here's the latest on TAU's Phase /// Conference and Exposition. It's being billed as the "First major gathering designed explicitly for the business and professional user of Apple Computers." As mentioned earlier, it will be held

Friday, October 2nd through Sunday, October 4th. It will include seminars, workshops and even a limited attendance /// Forever Luncheon to honor the people who have made major contributions to the continuing value of the Apple ///.

However, it should be noted the conference will NOT just be for Apple /// users. It includes the entire Apple computer family. A Phase /// Exhibition is being planned for vendors to show off and sell their wares. All attendees to the conference will have free access to the Exhibition as well.

Conference fees are now out and it includes an incentive to reserve a place early. The fee before April 15th is \$225. Before July 1st is \$275 and after July 1st it's \$375. A separate Companion fee is also being charged (\$60/\$60/\$75). There is a \$100 early-bird deposit that is non-refundable. Hotel is the Hyatt Regency Woodfield in Schaumburg, Illinois. Rates: \$57/night single or double. Both of your /// SIG Chairmen are planning to attend at this point and we encourage all interested members to join us.

To help, here is a registration form you can copy, fill out and send in:

PHASE ///, INC. C/O Randall Jackson-1511 N. Bell Chicago, Il. 60622

NAME _____

TITLE _____

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Send hotel registration forms Check enclosed

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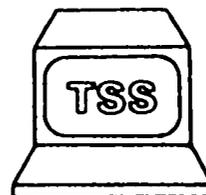
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Q & A

by Bruce F. Field and Robert C. Platt

I have heard from a few more people regarding interference problems between monitors and the internal disk drive of the //c when the monitor is placed directly above the //c. The problem is that interference, probably magnetic, prevents the disk drive from reading diskettes properly. Often some diskettes won't boot in the drive. Moving the monitor a few inches away from the computer will usually solve the problem. But, apparently a small metal shield for the read/write head is missing from some //c drives. Apple is aware of this and will send dealers extra shields at no cost. More information on this can be found in *Open-Apple* by Tom Weishaar.

This problem is not limited to //c's. Jack Reed wrote that he had the same problem with a three-year old Amdek 300A and Rana Elite Two disk drives. He says that the sloppy "fix" of putting a layer of aluminum foil between them seems to work but what's discouraging is that the industry doesn't seem to have made any progress in this area in three years.

In response to a number of requests, here is *Open-Apple's* address. *Open-Apple*, P.O. Box 7651, Overland Park, Kans. 66207, is published monthly at \$24 for 12 issues.

I also have an unconfirmed report from Tom Vier that the Apple IIgs SCSI card has a stack management problem that causes the gs to crash occasionally and possibly lose data. The present solution is to back your disk up frequently. If anyone has additional information on this subject, please let us know and we'll pass it along.

Q. The plot thickens in the great Tandy Model 100/102 question. Last month I bought a Model 102 with plans to upload text files via modem to my Apple //e. I couldn't believe it when I read the January, 1987 A.P.P.L.E. Doctor and saw that I was not alone in trying to rid myself of those pesky little carriage returns. First, answering the "width?" prompt, as suggested by Chris Arndt, with only a carriage return does not work. I couldn't get it to work so I called Tandy. They say a carriage return defaults to a width of 40. Second, I can't get George Katzenberger's solution to work either. I'm trying the method that uses a modem. If you put the 100/102 into Text mode, then how does one connect via modem to another computer? And if you put the 100/102 in Telcom mode, then after connecting to another computer, there is no way to get the "Save to" prompt.

A. George's solution was to access the modem from the Text program by pressing F3 to get the 'Save to:' prompt and then typing 'MDM:M7N1E' to send the text out the modem. This simply sends the text you have typed directly out through the modem as if it were a printer. If you need to sign on to your //c, first use the Telcom program to sign on and set it up to receive an upload. The communication program on your //e must be capable of receiving and storing a string of text characters without interrupting the transmission or sending prompt characters that require response by the 100/102. Once the //e is ready

to receive text, exit the Telecom program, startup Text, load your text file, and 'save it' to the modem. When finished you may need to again go to the Telecom program to send a few characters to close the file and sign off the //e.

Q. I attempted to use Microsoft's Applesoft BASIC Compiler to compile an Applesoft utility program called CAT SCAN written by Bill Parker, which appeared in the CALL A.P.P.L.E. In Depth Issue, All About DOS. CAT SCAN contains a machine language subroutine, RWTS2VAR. The format to call this routine from CAT SCAN is

```
CALL RWTS2VAR : D1$,D2$
```

The Compiler issues a syntax error when trying to compile this line. Could you suggest a modification to RWTS2VAR that would eliminate the need to specify the parameters D1\$ and D2\$ in the format listed above?

A. This question has a general application which I'll answer first, and after you wade through all that garbage, then I'll give you the answer you want. There is almost always going to be a problem compiling an Applesoft program that contains machine language routines. So much so, that unless you understand how Applesoft works internally, how the Compiler works internally, and exactly what the machine language program does, you are probably doomed to failure. In this case there are several hidden problems. First, the Compiler won't compile the line because D1\$,D2\$ is not a valid Applesoft command. When the RWTS2VAR routine is run from Applesoft the routine digests the D1\$,D2\$ and Applesoft never sees it, so everything works okay. There is no simple way these variables can be 'POKed' into the routine. Second the purpose of the RWTS2VAR routine is to move bytes from the DOS buffer to an Applesoft string. There is no guarantee that the Compiler stores strings in exactly the same manner as Applesoft, so even if RWTS2VAR could be made to function it may have to be rewritten to work with the Compiler string storage. Also, the routine uses a number of internal Applesoft routines and pointers to find where the D1\$ and D2\$ strings are stored, and to move the buffer bytes to the strings. These routines won't work with the Compiler. Third, there may be a memory conflict. Applesoft and the Compiler may use different parts of memory and putting the machine language routine in a "safe" place protected from Applesoft does not ensure that the Compiler won't stomp all over it. Since this routine is stored starting at \$300 that probably isn't a problem here.

One solution is to forget about using the machine language routine entirely and just perform the same function with BASIC. The reason for the machine language routine in the first place is that Applesoft is very slow in filling strings, but the Compiler may have acceptable speed. To make this change to CAT SCAN,

delete lines 1050 through 1160, change line 1210 to SD2=46267 : D2\$="", and add the following line:

```
1215 FOR I=1 to 255 : D2$=D2$+CHR$
      (PEEK(SD2+I)) : NEXT I
```

This will PEEK the bytes from the DOS buffer and concatenate them into string D2\$. The rest of the program is the same.

Q. I have a IIgs with a 3.5 drive, a 5 1/4 drive, and just added a Unidisk 3.5. If I boot with RunRun, Copy II+ or AppleWorks 2.0, I cannot get into the Unidisk with Slot/Drive or pathname. If I boot with the IIgs Utility Disk first then the Unidisk is found at slot 2, drive 1 and can then be used. It takes extra time to use the Utility disk which is not much different from RunRun as a program selector—I'm double dipping as they say. Any suggestions?

A. The problem most likely is that RunRun, Copy II+ and AppleWorks 2.0 are being run under ProDOS 1.1 (or earlier) while the IIgs Utility Disk has ProDOS 1.2 (or later). ProDOS 1.2 and above support up to 4 drives on the smart port as well as the 5 1/4 floppies but earlier versions support only two drives and the 5 1/4 floppies. In your case you also have the RamDisk enabled which puts three drives on the smart port. They are assigned this way, dumb Apple drives first (the 3.5 drive to slot 5 drive 1), RamDisk next (to slot 5 drive 2), and finally smart Apple drives (the Unidisk 3.5 to slot 2 drive 1). The 5 1/4 floppies are mapped to slot 6 as usual. The solution is simple, copy the later version of ProDOS from the Utility Disk to your other disks.

Q. How can I write an Applesoft program that uses upper and lower case for the //e, //c and IIgs and will automatically display only upper case on the][+?

A. ProDOS maintains a machine identification byte at address 49048. The following routine will check this byte and will convert each string to upper case when the program is run on a][+. The program assumes that the ASCII code for a capital letter is 32 less than the corresponding lower case letter. It will place each string on a separate line.

```
1 GOTO100
10 IF PEEK(49048)>=128 THEN
  PRINT TS: RETURN
20 FOR I=1TO LEN(T$): AS=MIDS
  (T$,I,1): IF AS>="a" AND AS<=
  "z" THEN PRINT CHR$(ASC
  (AS)-32);:GOTO 40
30 PRINT AS;
40 NEXT I: PRINT: RETURN
100 T$="This is a sample text.":
  GOSUB 10
```

110 REM USE GOSUB 10 instead of PRINT TS
120 END

Q. I want to use AppleWorks with a Grappler interface card and an MX80 printer. How should I configure AppleWorks to print in 80 columns?

A. From the interface setup menu, change the default of control-180N to control-10N. (That's zero not oh.)

Q. How can I get AppleWorks to print out category names on my reports?

A. Put in category names when you layout your report format. Then use the open-apple-V option to include those category names on your report when you generate the report.

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APPLE II NEWS AND NOTES

by Walt Mossberg

Herewith begins a periodic series of columns in the WAP Journal on the Apple II computer. The mandate from the editor is to roam far and wide, and so we shall. There will, as the title suggests, be news. But we will also indulge in mini-reviews, tips, notes and other miscellanea—drawn from the author's first-hand experience, from other WAP members, the WAP telecommunications system, Apple-related publications and elsewhere. One important source will be MAUG™, the nationwide electronic Apple user group on CompuServe, which is a focus of news on Apple computers. While this isn't a IIgs-only column, there will be a particular IIgs emphasis, at least at first, since much of the news in the Apple II world now relates to the IIgs.

A word on your columnist. He has had an Apple II for four years—first a IIe, now a IIgs. He has used, or tested, hundreds of software packages. He is no programmer, no technical expert. He is, like most of you, interested mainly in what comes out of the box, rather than what goes in. So this will not be the place in the Journal for locating highly technical stuff, or much programming information, or much on using the][+. These are all noble topics, but others better qualified will be dealing with them in other articles, as they always have. In addition, there will continue to be many other Apple II articles between these covers, which might dwell on some of the same topics covered here. These may—indeed, should—reflect other points of view, sometimes differing with those of this column. The opinions herein are those of the columnist alone; Washington Apple Pi as a group doesn't necessarily share them. Maybe nobody else does.

IIgs STUFF

Well, the IIgs—a wonderful machine, by the way—is finally appearing in quantity, finally being advertised by the computer stores. But so far, there is precious little IIgs-specific software and hardware actually on dealers' shelves. As this is being written in mid-February, we have access to:

- **Paintworks Plus**, a very nice art program from Activision, which used to specialize in Atari-type games and now is getting more sophisticated, and trying to establish itself as a big IIgs supplier. Paintworks Plus is a sort of color MacPaint, or a more powerful Dazzle Draw. But it's pricey (\$79.95 list, \$52 mail), a bit buggy and—worst of all—copy-protected. You can copy it, but your copies won't run without the "Master Disk" in a drive. Still, it is the first IIgs program that really shows off the fabulous color capability of the machine.

- **Word Perfect IIgs Version (1.1)**, a little-advertised upgrade of the very powerful Apple II version of this word processor. Word Perfect is widely viewed as the top WP program in the IBM world. About a year ago, it was issued in an Apple II version (1.0) and then an upgrade version (1.1), with spelling checker, came out. Now there is a IIgs version (confusingly also called version 1.1). The IIgs version is not a Mac-style mouse oriented thing with pull-down menus. But it does do some things that are novel in the Apple II world.

For instance, underlining and bold face appear on screen; and the IIgs numeric keypad is mapped as control keys (with an IBM-type NUMLOCK command that returns the key pad to its numerical function). You can change the text, background and boldface colors without going into the IIgs control panel. But Word Perfect is still pricey (\$179, I think, retail; \$85 mail; \$35 upgrade for current IIe/IIc owners). And it is very complicated. Also, it has the slowest scroll rate on long documents I've seen on the Apple II, even at IIgs "fast" speed.

- **Tass Times in Tonetown**, an illustrated adventure game from Activision, is available in both IIe/IIc and IIgs versions. I leave it to the game experts to do a full review, but the IIgs version is fun for me because it really shows off the crisp, detailed IIgs color graphics and has fabulous sounds (good music, realistic ticking clocks, barking dogs, etc.). Also, it is a Mac-type mouseable game wherein you can click on icons that represent commands and objects, saving lots of typing. But mainly I love the graphics and sound. Sometimes I just boot it to hear the jazzy theme song, which plays endlessly over the picture of a sheep dog dressed up as a newspaper reporter, until you click to enter the game. Tass Times isn't copy-protected, which is rare and commendable for a game. But it does command a high price (\$50 list, \$31 mail).

- **VIP Professional** by VIP Technologies. A power spreadsheet which is a clone of Lotus 1-2-3 for the IBM, but with Mac-like mouse-oriented interface. Supposedly it can use Lotus files received via modem. Runso n IIe/IIc but a IIgs version has been issued. List is \$300, mail should be about half price.

- **GraphicWriter** by DataPak Software. A desktop publishing program that combines word processing, a paint program and page layout. (List: \$150).

- **AppleWorks 2.0**, by Apple, which also works on the IIe/IIc. It is IIgs-specific only in that it automatically recognizes and uses the IIgs' extra memory, without any patches. (List \$250, mail \$199, upgrade is \$50 from Apple). Not copy-protected.

- **Pinpoint 2.0.2**, by Pinpoint Publishing, also, is able to see and use IIgs memory automatically. No patches needed. (List \$89, mail \$49, upgrade is minimal cost). Not copy-protected.

- **MouseWrite 2.6.8**, by Roger Wagner Publishing. This very complete Mac-type, mouse-oriented word processor (which includes spell checker and comm program) will run on the IIe/IIc. But, like the previous two entries, it recognizes and uses the massive extra IIgs memory. (\$150 list, \$89 mail, upgrade available for less). Not copy-protected.

THE BOUNTY OF SPRING

In mid-February we are about 6-8 weeks away from the promised appearance of a whole bunch of new software and hardware for the Apple II. Much of this stuff is specific to the IIgs, but some of it will work on the IIe and IIc as well. Some are all-new items, others are upgrades of familiar products. Some are being ported over by their publishers for

contd.

the IIGs from other graphics & sound-intensive computers, especially the new Ataris and the Amiga. Here is a sampling of what's being promised. Some may appear as this is written, others may be vaporware. This column takes no responsibility for the failure of vendors to live up to these pledges.

- **Writer's Choice Elite**, by Activision. A MacWrite-type word processor in color, able to also insert text pictures from the same company's Paintworks Plus (both are actually by the French firm Version Soft, which did MouseDesk—now issued by Apple as the Apple II Desktop). For IIGs only. It will list for \$100.

- **816/Paint** by Baudville. Another MacPaint or Dazzle Draw type color painting program. Unlike Paintworks Plus, it has modes that will run on the IIGe/IIGc, as well as a IIGs mode. (\$75 list, \$46 mail.)

- **Print Shop for the IIGs**, by Broderbund. It will supposedly have all the features of the last revision (such as on screen previews, saved files and color printing) but be faster and use the IIGs' 4,096 colors. It will also supposedly be available for a \$20-\$30 upgrade fee to current owners.

- **Drawing Table** by Broderbund. A mouse-type drawing (as opposed to painting program) for IIGs only. It will be based on moving detailed objects around, with less freehand than paint programs. Planned price is \$90 list.

- **Newsmaker** by Broderbund. A combined Mac-type word processor, page layout and graphics program, for doing newsletters and the like on either the Imagewriter II or Laser-Writer. Planned price is \$90.

- **Music Construction Set** by Electronic Arts. A IIGs-specific, very souped up version of the famed music program. Planned price is \$50.

- **Music Studio** by Activision. Another music program for the IIGs.

- **DeluxePaint II** by Electronic Arts. Another IIGs-specific, color MacPaint-type program.

- **PageWorks** by Megahaus. A IIGs-specific desktop publishing program. Planned price is \$125.

- **Dollars & Sense**. The best-selling personal finance package is supposedly due out in a IIGs version. List will be \$150.

- **Visualizer** by PBI Software. A IIGs-specific package that can draw graphs from AppleWorks spreadsheets. (Beware, though. In your columnist's opinion, PBI's last similar program, GraphWorks, was very disappointing). Planned price is \$100 list.

- **MultiScribe GS** by StyleWare. A IIGs version of the MacWrite-type word processor already available for IIGe/IIGc. Planned list of \$100.

- **TopDraw** by StyleWare. A MacDraw-type, object oriented drawing program for the IIGs. Planned list of \$100.

NEW IIGs SYSTEM DISK

There is already an upgrade to the IIGs system disk. It contains a new ProDOS 16 (v1.1), a new ProDOS 8 (v1.3), a new Launcher (v1.1), a new IIGs System Utilities v1.1) and a new Apple II Desktop (v1.1). Dealers are supposed to copy it onto your old system disk for you for free.

INSECTS

There are some bugs in the IIGs and other new stuff from Apple. None is fatal, but all are worth noting.

On the IIGs, the special video chip causes some shim-

mering and gives a red fringe when black text is against a white background. Apple promises a free replacement chip sometime in 1987.

Also, on some IIGs's, including mine, you get a high-pitched "chirp" in fast speed when the screen scrolls. This is apparently because something in the power supply is vibrating. It's no big deal.

The new ProDOS 8, version 1.3, fixes an earlier ProDOS bug (that in some circumstances could wipe out disks; ask a technical WAP'er for details). But it introduces two new bugs—a tendency to "poll" or turn on floppy drives excessively when you are only looking for a file in one (this shows up only with drives hooked up to controller card, not ports); and a tendency to bomb on unenhanced Apple II's still using the original 6502 CPU instead of the 65C02 or 65816. There are patches available to remedy these bugs, on BBS systems.

The "Tour of the IIGs" disk packed with each IIGs crashes under various mysterious circumstances.

MS-DOS (GASP!)

Yes, dear Apple user, your columnist is now going to turn to the dreaded subject of MS-DOS (or MS-DOG, as one Apple fan I know calls it). This is, as you know, the operating system in that alternate universe we know as the "IBM World." It is clumsy, sort of a knock-off of CP/M, to my way of thinking, with little A> prompts all over the place.

So why mention it here, in a wholesome Apple magazine? Because several companies are planning to bring out hardware add-ons for the Apple II that will allow it to handle MS-DOS disks and thus gain a large measure of compatibility with the "IBM World." There have been attempts at this before, most notably a hugely expensive but generally functional box sold by Rana. But these new products promise to cost in the \$500 range, according to the rumor mills.

To make an Apple read MS-DOS, you need a card, usually containing some variation of the chip IBM's use (the 8086, 8088 and others), and you need a disk drive able to read MS-DOS disks (which aren't written the same way Apple disks are). Here is what is supposedly on its way to market.

1. "Little Blue". This is a card developed by a small outfit (The Engineering Dept.) and expected to be marketed by Applied Engineering. It will supposedly let you RUN software intended for IBM on Apple II's.

2. "DOS Boot". This is a similar product, by Orange Micro.

3. "Envoy". This card, by Asky, Inc., won't run IBM software. But it will supposedly allow you to read data disks created on IBM's and clones and port the data into Apple programs and vice versa. So it would give you a way to swap data between IBM offices and Apple homes without a modem. Price is supposedly \$180.

We will keep an eye on this MS-DOS stuff, and report further on it in coming months. ☺

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TELECOM SIG NEWS

by Dave Harvey

The January meeting of the TELECOM SIG was held after the regular WAP meeting on January 24, 1987. The meeting was conducted by Allan Levy, the new chairman of the TELECOM SIG. All future meetings will be held at this same time, since this seems to be a convenient time for the members. There was a large turnout at the meeting compared to previous meetings held during weekdays.

Allan announced that he will be sending out letters to communications software publishers asking for copies of their software for review. There are many different programs on the market and it's hard to make a buying decision without reviewing the software. There are many relatively new programs such as Point to Point that members would like to know more about before purchasing.

Washington Apple Pi recently made a group buy (along with NOVAPPLE) of the communications program, Mousetalk. Since members have bought this program, there has been a lot of discussion on the WAP Telecommunications System about bugs in the software. Allan plans to write a letter to the publisher, United Software, about the problems that members have encountered in running and using the program. Phone calls to United Software indicate that they will provide an update with the bugs fixed for a nominal charge. One new problem was reported by Dale Smith when using the program on an Apple //c with the new logic board and memory expansion option. Incorrect displays of block counts and file sizes occur. Another new problem reported was using the program on the Apple IIGs with the Prometheus 1200A modem. The program bombs when it's run on this system configuration. This problem occurs even though the documentation specifically states that Mousetalk supports the Apple IIGs and the internal Prometheus 1200A modem. Still another problem encountered has to do with protocol transfers. The program is not compatible with ASCII Express protocol transfers, but it is compatible with other xmodem transfers.

The DEC VT100 terminal emulation software for the Apple // was discussed. The program Access II does support VT100 emulation. There is a new shareware program called DCOM 3.3 that also emulates VT100 terminals. This program can be run on the Apple][+ as well as the //e. A copy had been promised to Allan by the author but it didn't arrive in time for the meeting. This copy will correct some of the bugs in previous versions. As with most other shareware, if you like the program and decide to use it, you send a fee (in this case, \$25) to the author. As soon as Allan gets the new version, he will provide a copy to the WAP Disketeria so that everyone can get a chance to try out the program. As with most VT100 emulators, it will be interesting to see to what degree the program emulates the VT100.

A member needed help in using ASCII Express Pro in the remote mode. He found that dip switches on the modem had to be set differently than for originate mode and wondered if this was necessary. It is necessary, and there is no way to get around this problem using AEPRO. One of the features noted with Mousetalk (MT) is that the dip switches don't have to be

reset if you want to go to the remote mode.

When using MT in the "capture to disk" mode, it can create very large files, with no way to edit them after they are saved. One member had tried to load the file into AppleWorks without success. The only solution appears to be to use a word processor such as ScreenWriter or Word Perfect that can handle large files.

Regarding using MT with RAM cards, MT can be run from a RAM card only if the card is not in the Auxiliary slot, such as the RAMFACTOR card. The reason is that MT uses the full 128K and destroys any files that are stored on the RAM disk. When run, MT notifies the user that files will be destroyed, if it detects files on the RAM card. United Software has promised an update to MT that will enable users to use RAM cards in the Auxiliary slot.

Other MT bugs were discussed. The number of labels allowed is limited to 10, contrary to the documentation; when in the MACRO editor and the eleventh label is added the program bombs. Cursor keys will not work in the editor when the editor is almost full. When using the "change prefix" option in the program, the program sometimes bombs and destroys disks or volumes in other drives that are connected.

The meeting ended at 12:45 p.m.

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STOCK SIG NEWS

by Andrew D. Thompson

Stock SIG met on January 8th when the Dow closed above 2000 for the first time in history. The meeting had three components: report from the Mutual Fund Sub-group; discussion of market timing; and presentation of three projections which members' research provided for the January and early February stock market.

1. MUTUAL FUND SUB-GROUP REPORT

The December 23rd Mutual Fund Sub-group focused on Carroll Creitz's presentation of his research into the possibility of using a risk-return index (RRI) to predict which mutual funds will offer the best return. The Creitz RRI tested the assumption that there ought to be a relationship between the amount of risk inherent in a mutual fund and that fund's rate of return. Plotting a fund's net assessed value (NAV) over a 26-week period of time illustrates a fund's rate of return. NAV variations from the least-squares regression plot line then defines the volatility or risk factor. Creitz used a Mac to generate the RRI and its plot as the ratio of the fund's return against the standard deviation from the NAV. After using the weekly data of 10 funds from June 1985 through December 1986, he concluded that there is no consistent relationship between a mutual fund's risk and its return. He concluded that the RRI, as presently constructed, has no value as a performance predictor. The Sub-group has agreed to study the index further in future meetings.

Thompson then presented data illustrating the growth and shifts within a 46-plus billion dollar pool of capital currently held in 94 Fidelity funds. As of early August, massive influxes of new money came into municipal bond funds. Similarly, between late August and late October, there was a 2 billion dollar rise in taxable money market funds. This increase matched the massive cash exodus from Fidelity growth funds. These declines among growth funds paralleled mid-summer declines in the expected return of 9 of the 10 non-Fidelity funds tracked by Creitz. Only one international fund retained a relatively high expected rate of return.

The February Mutual Fund Sub-group meeting will be held at the WAP office on February 24 at 8 PM, while the March 19th and April 21st meetings will be at the Bethesda Library.

2. QUESTIONS PERTAINING TO MARKET TIMING TRENDS

The January meeting then discussed the recommendations recently offered by various market timers. As of January 8, Robert Prechter, editor of Elliott Wave Theorist, was reported as having put out a hot-line message warning clients that there would be a 2-day correction sometime during the next 10 trading days. Peter Eliades was reported to have given a bullish signal and gone long on January 2. Similarly, Martin Zweig, editor of the Zweig Forecast newsletter, as of late December cited certain strong market factors which suggested that the market would not be weak during the 2-week period straddling the New Year. James Dines, editor of the Dines Report, reportedly advised clients that the OTC stocks would show leadership in the next leg of the bull market. No

bearish projections were cited by members.

3. JANUARY-FEBRUARY "FILTER OFF"

In response to the December meeting's presentation by Peter Kasper and Steve Reinhart (see February WAP Journal) four participants agreed to test and compare their cycle analysis market forecast for January and February. The forecasts were as follows:

A. The Kasper/Reinhart projection of the NYSE composite began with a January 7 low of 148, gradually seeing upward to the 154 range by mid-February, a decline to 152 by 27 February followed by a sharp rise above 160 during the first and second weeks of March. Their analysis uses 1000 data points and is based on signal processing which includes low pass, infinite impulse and band pass filters.

B. John VanHorn's work using Fourier analysis resulted in a projection for the S & P 500 index, which forecast began in late December with the index in the 246 range, declined and then returned to that same level by January 9, declined sharply to the 234 range by January 23, then made a steep rise toward a top of 254 by February 6.

C. Irv Lowen updated his cycle analysis method as reported in the November and January issues of the WAP Journal. He found 24 and 54 day cycles identified by second and third harmonic spectral analyses. Both cycles, Lowen projected, will pull the market upward over the next 5 trading days from January 9 through 15. Given the short-term nature of his method, Lowen declined forecasting beyond this time period and said his new method of analysis requires a necessary adjustment of the projection several times weekly.

All four forecasters said a certain tentativeness was required in approaching their projections. Kasper said if real market values dropped 10% below their projected values, he would abandon the forecast. VanHorn said he found that his Fourier curve fit for his January projections was particularly difficult to accomplish and required unusual adjustments of cycle amplitudes. Therefore additional caution was appropriate. Lowen decided his initial challenge for having a comparison of the three projections across 30 days was beyond his revised methodology and therefore a 5-day forecast was in order.

The January meeting concluded with a brief discussion of what some members saw as the terminal inaccuracy of cycle analysis. Questions were raised as to how other variables such as interest rates, international currency fluctuations and possibly even bond cycles might enhance stock market cycle analysis. Members agreed to share data toward this purpose and explore these questions in future meetings. The February and future meetings will critique the accuracy of the above three projections based on actual market performance during January. ☺

APPLEWORKS UPGRADE

From: Lisa Van Horn, Corporate Public Relations,
Apple Computer Inc.

To: Bernard Urban, Washington Apple Pi, Ltd.

Confirming our phone conversation, the normal timeframe to receive the AppleWorks upgrade is 6 to 8 weeks. However, we have recently been in a backorder situation, which means it is taking 3 to 4 weeks longer than the normal timeframe. To sum that up, customers should receive their upgrade within three months.

Therefore, those customers that sent in their order in November should be receiving their upgrades about now. If you have specific names of customers that are long overdue, link them to me and I can check up on their order through Customer Relations.

To make sure that users are following the proper procedure, I've outlined it below:

- Send in the original AppleWorks program disk, and the cover of the AppleWorks Reference Manual;
- Send the above two items, along with a check for \$50 (payable to Apple Computer, Inc.) to: Apple Computer, Inc., AppleWorks Upgrade Program, P.O. Box T, Gilroy, CA 95021-2249;
- Orders must be postmarked no later than April 30, 1987.

Customers will then receive a complete package of AppleWorks, including new software and manuals. Unfortunately, I don't have the time to speak with each customer personally,

so I'd appreciate it if all my contact regarding this issue comes from you. If it gets to be too much, I'll refer you to the appropriate Customer Relations representative. Hope this helps.

ANNAPOLIS SLICE NEWS by Claire Johnson

The Eighth Regular Meeting of the Annapolis Apple Slice (AAS) of the Washington Apple Pi (WAP) met in the Science Lecture Hall of the Anne Arundel Community College. Jim Wint, Vice President, presided. Steve Toth, President, led a discussion on communications. AAS plans to start a bulletin board and this discussion was helpful in educating members unfamiliar with modems in what to look for when purchasing software and hardware, compatibility problems between hardware and software, communication problems between hardware and software, and private and commercial communication services available here and throughout the country. Specifically, Red Ryder was demonstrated, Jazz software was recommended for use with a 1200 baud modem, and PC Pursuit and Compuserve were discussed. An interesting concept being successfully used by one of our members is communicating from a satellite location to home base using a lap-top computer, thus simplifying his business workload.

The next meeting is Sat. March 14 at 10:00AM in the Anne Arundel Community College Science Lecture Hall. ☺

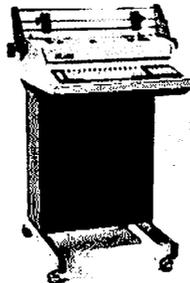
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APPLEWORKS TIPS AND TECHNIQUES

by Richard M. Rowell

Here is a collection of little (but, oh so valuable) Apple-Working Tips & Techniques.

GENERAL

When working in any of the three environments, Word Processor, Data Base, or Spreadsheet, save your work every fifteen minutes. Use Apple-S to save and replace any same-named file on the disk, or escape to the Main Menu and choose #3 "Save Desktop files to disk". Using this procedure, if disaster strikes (the electricity goes off or AppleWorks crashes) you will only lose the last fifteen minutes' work.

When working with one of your regular files, rename it as soon as you place it on the desktop. Now if you inadvertently save it, you will still have the regular working version (under its old name) on disk.

SET UP

Do you have a problem with printing after upgrading to a newer version of AppleWorks? Maybe this will help:

From the Main Menu select #5 "Other Activities", then #7 "Specify information about your printer(s)". Finally change printer specifications on your main printer (probably #4 on the menu) and change #5 "Interface card" to "CONTROL I 0N".

Even if you have only one printer, you should tell AppleWorks that you have three. The first will be your actual printer, the second a custom printer and the third an Apple Silentye. Identify the Custom Printer as being the same type as your actual printer (maybe an Imagewriter) and name it CustomWriter. For some of the codes (our favorites are superscript and subscript) tell a little white lie. Tell AppleWorks that the code to turn on superscript is whatever your printer manual indicates is the code to turn on headline. Now when you enter Apple-O, +B, ESC, your printer will switch to headline mode. You have just added a printer at no cost.

Make one of your other printers an Apple Silentye and tell AppleWorks that its location is "Disk". This "printer" will be useful when you wish to format a file ... that is, add a carriage return after every 73rd character. When you "print" to this printer you will be saving a true "what-you-see-is-what-you-get" ASCII file to disk. Very useful for formatting a file for telecommunications.

PRINTERS

If you are attempting to use non-standard paper (1.5" mailing labels or 12.5" French paper) change your printer settings. From the Main Menu select #5 "Other Activities", then #7 "Specify information about your printer(s)". Finally change printer specifications on your main printer (probably #4 on the menu) and change "Accepts top-of-page commands" to "NO".

APPLEWORKS SUPPORT DISKS

Now that you are using PinPoint and MacroWorks and AutoWorks, be sure that you make lots of copies of your StartUp and Program Disks, and CLEARLY LABEL all of them. Don't try to get several support functions onto one disk. Disks are cheap—just make lots of different copies. I always use both sides of the disk ... StartUp on the front,

Program on the back. If you plan to use the back of a disk you will need to punch a write-unprotect notch at a point 1.25" down from the top left corner (as you are looking at the front).

WORD PROCESSOR

Create and save a file with almost nothing in it—but include the Options for the printer that are your usual ones. Name this file FORMAT.1. Now, whenever writing a letter to Aunt Tildy, you can start with this file (remember to rename it) and you have all of the printer options already inserted.

I use Apple-O (for Printer Options), then:

- Top Margin: 2.5 inches
- Bottom Margin: 1.0 inches
- Left Margin: 1.0 inches
- Right Margin: 1.0 inches
- Proportional-2

When starting a new Data Base from scratch always use thirty categories; any that you do not need yet you can name "*". Later when you find, as you always will, that you need to add a category, you simply change its name from "*" to "Days Payment Overdue" and nothing else in the Data Base is altered—all reports and layouts are unaffected. Note that if by creating thirty categories you have not left yourself enough room for data entry you can change the layout (that's Apple-L) of the data entry (single record) form; place the cursor on those not-yet-used category names and Apple-arrow them off to the side.

SPREADSHEET

When creating a new spreadsheet from scratch, the AppleWorks default of automatic recalculation after every entry is in effect. Reset this feature to manual recalculation and your data entry speed will be much improved. The Procedure is:

Apple-V (Set Standard Values)

Recalculate

Frequency

Manual

WHAT IS A TEMPLATE?

I often find it useful to create an AppleWorks template to be used either by someone else, or for myself later on after I have collected some information that I don't yet have.

TEMPLATE \tem-plat\ n. [prob. fr. French *templet*, dim. of *temple*]: a gauge, pattern or mold (as a thin plate or board) used as a guide to the form of a piece being made. That's Webster's definition and we accept it. My templates are guides to the form of AppleWorks data entry. These templates are files, either Word Processor, Data Base or Spreadsheet, that are set up in a form to assist the entry of your unique data.

For the Word Processor the "data" will almost certainly be text; a Word Processor template is often similar to a standard bureaucratic form. All the printer alignments and blank lines have been included for you. In a Data Base template, the fields (AppleWorks calls these Categories) have been named and set up. Also several reports have been laid out in advance.

contd. on pg 19

TAXMASTER FOR APPLEWORKS: A Review

by Bob Oringel

As April 15th gets inevitably closer and with the IRS beginning to look forward to our contributions, this reviewer of application programs decided that it might be worthwhile to look at a computer tax package which would perform the onerous preparation job, and perhaps save the additional yearly contribution to the professional tax return preparer.

What then should this tax preparation package contain; what should it do for the user? It should first of all give the user a printout in a form that is acceptable to the IRS, with nothing more than a signature and date appended in ink. It should additionally prepare not only the 1040 form, but also all of the schedules and subsidiary forms necessary to buttress the user's 1040, and it should automatically, within the program, transfer the information from the subsidiary forms to the 1040. Finally, it should perform all of the calculations and come up with all the answers regarding how much the user's IRS contribution will be.

What the user cannot expect any preparation package to do is to provide tax advice. Enough said on this last point.

With the foregoing in mind, I contacted Douglas M. Smith at Island Computer Services, in Long Beach, N.C. He is the author of TaxMaster, a relatively inexpensive program (\$50) written not only for AppleWorks on the Apple II but for Excel on the Mac, and Lotus 1-2-3 on big blue. Mr. Smith provided his AppleWorks Demo, which is actually his 1985 package. Island Computer warrants that the printout is IRS acceptable.

This made my review job all the more easy. I pulled my 1985 return from its file and began the task of entering the figures, previously calculated by my accountant last year, into the TaxMaster program. TaxMaster is a spreadsheet template file constructed within my favorite program, AppleWorks. All I needed to do was to type in figures.

The documentation, in eminently readable form, but a little bit skimpy for those of us who do not use spreadsheets regularly, is on the disk as a word processing file. This saves the author the printing cost, which hopefully is passed on to the consumer. I for one do not find this type of documentation objectionable.

Everything then began to proceed swimmingly. TaxMaster starts with form 1040 and proceeds in order to Schedule A, B, C, D, E, G, Form 4562, Schedule R, SE, W, Form 2441, 3903 and 2106.

As I proceeded through 1040, some entries from my 1985 return were refused by the program, which beeped every time I tried to enter a number. It quickly occurred to me that these refusals from my return were places where TaxMaster would itself make a calculation, or where information was to come from schedules or forms not yet completed within TaxMaster, or where there were cells containing a formula. These are protected cells in the spreadsheet program which will not allow the user to enter data which would overwrite the formula.

I zipped right along until I encountered Schedule C, Profit

(or Loss) from Business or Profession. Here, I part company with many other folks. I normally file three Schedule C's to account for various income producing activities. TaxMaster only allowed for one. Perhaps there is a way around this dilemma, but I found none that worked. However, and presumably for the average user, one Schedule C would be sufficient. I also filed a Form 2210 for 1985 which required a penalty payment to IRS. This form was not part of TaxMaster, but not everyone needs it.

The bottom line here is that, if your tax return is similar to that of Mr. or Ms. Average American, then TaxMaster is a super program for you. If on the other hand, your income gathering, like mine, is a bit different, then it's back to the ole accountant.

One final and pleasant note on TaxMaster, paraphrasing part of its documentation: due to the limited value of this program after April 15, 1987, Island Computer Services declares it to be in the public domain effective May 1, 1987. ☺

PI-SIG NEWS by Robert Golden

PI-SIG met on Monday evening, February 2, in the WAP classroom. An extensive but largely general "Technical Introduction to the Apple IIgs" had been loaned to the group by member Ray Hobbs, and it served as the center of discussion. Due to lack of other firsthand authentic information on the IIgs, we reviewed this document and shared ideas, experiences and information.

Considerable interest was evidenced in the computer languages that may be utilized for the IIgs and the concept of the "shell" as applied to this machine. Although the IIgs is slowly becoming available, in-depth documentation has not been readily available, so members are casting about for anything and everything we can get in the way of documentation and facts. ☺

AppleWorks Tips contd. from pg 18

A Spreadsheet template includes cells that are awaiting data as well as cells that already contain formulas. You simply supply your own numbers and the template calculates and displays the relevant information.

I always put some data (names of 100 Washington, DC ethnic restaurants in one of my entertainment disks) to serve as an example as well as to allow others to try out report formats.

AppleWorks templates should provide you with both good formatting and sample data. Mine do. They were designed to teach computer novices to use AppleWorks. But even if you are a computer-expert you can probably make use of someone else's templates because you are so busy. ☺

RAMUP: A REVIEW

by Tom Gatewood

Is your computer all dressed up with a big 512K Ram card and no place to go? I think I may have a solution for you. Here was my situation, one I suspect many others out there share. I purchased an Applied Engineering Z-Ram Ultra I Card with 512K memory for my IIC, primarily to manage a couple of large databases. But with all of that memory, I also wanted to make use of another feature of the /RAM card, the ability to use it like a hard disk, loading and managing several programs at once and switching between them quickly, while also saving data to the /RAM area.

More specifically, for my applications, I wanted to have available at the same time AppleWorks enhanced by the Pinpoint Desktop Accessories and AppleWorks enhanced by Macroworks. The two cannot co-exist on the same AppleWorks startup disk. I love the macro commands of Macroworks which streamline AppleWorks so greatly; I use several of the desktop accessories of Pinpoint. Also, Macroworks disables the print buffer feature of the Z-Ram Ultra card, but Pinpoint does not. So, while I like to prepare and edit a document in word processing, for example, using Macroworks, I prefer to print it from Pinpoint or an unenhanced version of AppleWorks to enjoy the large print buffer of the Z-Ram Ultra (approximately 45K). In addition, I use Sensible Speller frequently, so I like to have it available on the /RAM card with AppleWorks for quick checking of documents.

Now I realize that all of the above features can be realized with the partition feature of Applied Engineering's Desktop Expander Program which comes with the Z-Ram Ultra, but I'm a non-techie type, and the language of Applied Engineering's manual on partitioning is unclear to me. And the advice I've read on the Pi Bulletin Board and in various publications has not been of much more help. So, to say the least, I've been frustrated.

And then I saw an advertisement for a piece of software called Ramup from Quality Computers of Grosse Pointe Park, Michigan that promised to deliver many of the features I longed for from my /RAM card. The price seemed right (\$34.95), so I ordered it. After using the product for a couple of weeks, I believe that my money was well spent. This is a very practical and useful piece of software.

Here's how it works. You boot the Ramup disk and wait for the main menu to appear. The menu contains the names of over 30 programs, including such popular ones as AppleWorks, Sensible Speller, Fontworks, Autoworks, and Copy II+ (Version 7.0 only). Space for several others of your own choosing are also available on the menu. You simply highlight the programs you want to load and then wait for the prompts which tell you what and when to place in the disk drive. When all of your selected programs have been loaded, another menu appears from which you run the programs that now reside in /RAM. The ProDOS system disk utilities are loaded from Ramup and are always available on the menu automatically. Or, you can replace the ProDOS filer program with the Utility.System file from the Copy II+ program. All of this takes a few minutes, but I load all of my programs and

then just leave the computer on for long periods of time.

For example, let's say that you're in AppleWorks and want to have a document you've just created be checked by Sensible Speller. Before you leave AppleWorks, you save your document to the /RAM Disk (a drive selection you are given after you have selected "Save Desktop Files to disk." To be safe, also save it to a regular data disk. After leaving AppleWorks, you are taken back to the Ramup menu from which you select Sensible Speller. In using Sensible Speller with AppleWorks, the ideal situation is to load the Sensible Speller program with both dictionaries AND your document file to be checked all into memory at the same time. When this is done, it makes for lightning fast spell checking. Once you've used the /RAM disk for this, you'll never want to do it any other way. No drives whir and no disks have to be slipped in and out.

You can do all of this with Ramup, but there's some bad news if you, like me, have "only" 512K or less memory onboard (remember when that sounded like more memory than you could ever think of using). By the time you load AppleWorks, Sensible Speller, and both dictionary disks, you have only 8K left on the /RAM disk in which to place your document to be checked. Furthermore, you have only 14K on the desktop. By placing only one of the dictionaries on the /RAM disk, you increase the space for your document tremendously, but you still retain only 14K on the desktop due to the partition program (Desktop Expander disk from Applied Engineering) requiring you to leave 64K free to load all of the above programs (leaving 128K free will not permit this—believe me, I tried).

This problem is not so great with both the Pinpoint and Macroworks versions of AppleWorks, and all of the Pinpoint Desktop Accessories, loaded at the same time. You can leave 128K free via the partition program, and end up with a 64K desktop and an 80K /RAM disk. An alternative method of spell checking, one I used in preparing this review when I had both versions of AppleWorks and the Pinpoint Desktop Accessories onboard, is to remove all of the programs from the /RAM area from the Add/Remove menu of Ramup and then add Sensible Speller, check your document from where it was saved on the /RAM disk, then remove Sensible Speller and add the AppleWorks programs back into /RAM again. This way, you don't have to leave Ramup. This takes a few minutes, but beats the heck out of the old way you had to do this in terms of both speed and convenience.

But if you have more than 512K, you've got these types of problems licked. When the Ramup manual says, "Memory size will be an important factor. It won't take long before you realize why we recommend 1 meg of memory," I know now what they mean. My poor old Z-Ram I is maxed out at 512K; the Z-Ram II and III versions will go to 1 Meg.

For programs which cannot be loaded via Ramup (Print Shop or many of your games, for example) you can simply warm boot (Control-Open Apple-Reset) them and when done, warm boot the Ramup disk and the program menu will

contd. on pg 28

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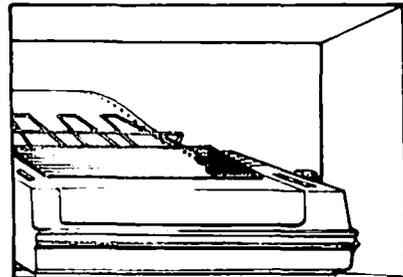
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WPL MULTI PRINT FOR APPLE WRITER

by Gary Hayman

I really enjoy the power of Apple Writer as a word processing program. So many other have left this excellent program by Paul Lutus and Liane Finstad for other newer, but less powerful, programs. Still, I read on the bulletin board how many are returning. There even is a separate bulletin board on Conference 2 of the WAP TCS that discusses this great program.

One of the things that make this program so powerful is it's separate Word Processing Language ability that allows you to do all sorts of neat things such as automatic printing, automatic replacement, file moving, automatic letters that not only use a separate address file and inserts the address in multiple print letters, but allows you to imbed names into the letter to personalize it. You will find these programs in the manual.

I have been writing some WPL programs to facilitate my office and personal correspondence, cassette labels, address labels, handouts, or any text file material that I will print on my printer.

I designed the following WPL to print as many copies of a document that you might desire—automatically. It provides you with on-screen instructions, a great feature of WPL. It

also does something that I have never seen in a publication—gives you the ability to catalog a disk from inside the WPL program. I am sure that others probably have thought of this unique feature; however I would like to share it with you along with the program.

Just type the following program into a text file. The only editing that you should do is on the second line from the end. You should replace the <CTRL V><CTRL L><CTRL V> with the real thing. Remember that all labels (START, POINT1, LOOP etc.) must be entered flush to the left margin and have at least one space after it. Also, if a line has no label, enter one or more spaces before the line command.

When you want many copies of a document all you have to do is to boot up Apple Writer, insert the disk with the following program, type <CTRL-P> to get to the [P]rint/Program line and type DO WPL MULTI PRINT with a <CR>. Then just follow the on screen directions.

(NOTE: ProDOS users who are limited with short file names and pathnames will have to adjust the name used to save this program and follow all ProDOS conventions with the ProDOS version of Apple Writer.)

```

##### PROGRAM #####
P: SAVE AS WPL MULTI PRINT
P
P: PLEASE REPLACE SCREEN CLEAR AT END WITH
P: <CTRL V><CTRL L><CTRL V>
PND
PSR CLEAR
PSR MIDDLE
PPR NOTE: BEFORE RUNNING YOU ARE REMENDED THAT YOUR [P] PRINT PAGE
PPR
PPR SHOULD BE SET UP FOR PRINTING. IE. SET PD1 AND YOUR
PPR
PPR TL (TOP LINE) AND TM (TOP MARGIN). OTHER COMMANDS
PPR
PPR CAN BE EMBEDDED IN THE DOCUMENT.
PPR
PIN <PLEASE PRESS RETURN TO CONTINUE>
START
PND
NY
POINT1
PSR CLEAR
PSR MIDDLE
PPR PLEASE PLACE DISK WITH FILE YOU WANT TO MAKE COPIES OF IN
PPR DRIVE 1. TYPE THE NAME OF THE FILE AT THE CURSOR.
PPR
PPR <IF YOU DESIRE TO SEE A CATALOG TYPE "CATALOG" --IN UPPER CASE>
PPR
PIN == => $A
PCS/A/CATALOG/
PGO CATALOG
PSR CLEAR
PSR MIDDLE
PPR HOW MANY COPIES OF THE DOCUMENT DO YOU WANT?
PPR

                                LOOP
                                PCS /O/X/SB/
                                PGO QUIT
                                PSR CLEAR
                                PSR MIDDLE
                                PSX +1
                                PPR PRINTING DOCUMENT: (X)
                                PNP
                                PGO LOOP
                                QUIT
                                PSR CLEAR
                                PSR MIDDLE
                                PPR (X) DOCUMENTS WERE PRINTED.
                                PPR
                                PIN <PLEASE PRESS RETURN TO CONTINUE>
                                PGO START
                                CATALOG
                                P: WHAT FOLLOWS IS THE LETTER O AND THE NUMBER 1
                                O1
                                P: WHAT FOLLOWS IS A DASH
                                -
                                PSR CLEAR
                                PGO POINT1
                                MIDDLE
                                PSZ 12
                                AGAIN
                                PPR
                                PSZ -1
                                PGO AGAIN
                                PRT
                                CLEAR
                                P: PLEASE CORRECT THE NEXT LINE WITH THE REAL THING
                                PPR <CTRL V><CTRL L><CTRL V>
                                PRT
                                END OF PROGRAM

```

THE FOOD PROCESSOR:

An Apple // Review
by Bob Oringel

"The Food Processor" is a highly specialized, expandable, nutrition database application program. It is not a motorized kitchen tool. Although I guess that anything which helps us determine what is in what we eat could be termed a kitchen tool.

In this era of high common concern over which nutrients and other things enter our bodies through the foods we consume, including things like calcium and fiber, there is good reason to explore the possibilities of a program called The Food Processor.

It uses my trusty Apple //e (in this case, although it is also available for the Mac and Big Blue, too) to set up an RDA (Recommended Daily Allowance) of food nutrients for an individual. This RDA is based on whether the individual is male or female, and other parameters such as age group, weight, height, and activity level. It also looks at and individualizes the program for such population categories as pregnant women. The only shortcoming that I considered The Food Processor to have, is that it might have also looked at, and calculated for, other specific population groups such as diabetics, who are a large segment of the population.

Deciding the right RDA for someone is not so easy a task as one might suppose. Data on such things must be kept up to date, which requires a great deal of research. The Food Processor is capable, according to its packagers, of looking at 1500 foods and 26 nutrients, and it was developed from over 250 sources of information, including the latest from the US Department of Agriculture.

In addition to calculating individual RDA's, the program provides a nutrient analysis of all or just one, if you wish, of 26 specific nutrients in a person's daily food intake, or in a diet plan, a menu, or a recipe. If you tell it what you ate yesterday, in specific detail, it will tell you how many calories you consumed. It can compare food intakes to the personalized RDA, and determine the percentages above or below the RDA, so you know if you have balanced your meals. It can calculate the percentage of calories from protein, carbohydrates and fats. I tried all of the program parts, and it delivers as promised.

It delivers its information in either chart form or spreadsheet form, both of which are very easy to read. In fact, The Food Processor was written for people with minimal computer familiarity. The program documentation is in clearly printed looseleaf form in a full-sized 9x12 binder, which contains valuable nutritional appendices as well.

There are two sets of two disks supplied, a program disk and a data disk. The program disk is copy protected. The Food Processor is produced and sold by ESHA Research of P.O. Box 13028, Salem, OR 97309, and retails at \$120. ☺

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COPY II+

LEE RAESLY ON 01/23

Copy II + has a design flaw, that could lead to drastic consequences. It will only handle 255 files in a directory. All above that it will not catalog, or copy. What makes the bug bad, is you don't know that! We have 455 Library files, and have been making a file copy of each Sub-directory with Library files. The largest is number LIBRARY.1 (for Conference 1). So we have only copied 255 of the 355 files on that sub-directory! Fortunately, we have had no reason to bring them back, or we would have lost 100 of them! The insidious part of the design flaw is this: If you delete 100 of the 255, we should be able to see the missing 100, right? Wrrroonngg! Even if you delete 100 of them, it still cannot see the extra 100 (what was 256 to 355)! Once it gets the original, it somehow marks the ones over 255, and you can never see them! Even if you reboot, you cannot find them, or see the ones that were extra! I talked with Central Point Software yesterday, and they said that they were aware of the problem, but that our use was unique, and nobody else would ever have the problem. Then they admitted that there had been 3 or 4 in the last several months! So if you're concerned, drop them a letter, or give them a call!

FROM KIM BRENNAN, ON 01/23 08:16PM

Lee, another company that uses only a one byte counter (Apple with Backup II was the other). Boy, this is getting very annoying.

Cable for //c <-> Avatex

PAUL SCHLOSSER ON 01/11

Brian, I made the cable for my //c - Avatex system and used these pin assignments:

| <u>DIN #</u> | <u>RS-232 #</u> |
|--------------|-----------------|
| 1 | 20 DTR |
| 2 | 2 TD |
| 3 | 7 GND |
| 4 | 3 RD |
| 5 | 6 DSR |

At the RS-232 end, place #6 in #8 if you wish to use AePro in the Auto-Answer mode. I haven't done this yet. All dip switches should be up EXCEPT number seven which should be down. NOTE: These are for the plain vanilla Avatex 1200, but probably are the same for the 1200HC.

Apple Manuals

TOM VIER ON 01/04

Apple has three levels of manuals:

USER'S MANUALS - Good packing material.

PROGRAMMER'S MANUALS - Occasional info, very shallow, really a user's manual.

TECHNICAL MANUALS - More in-depth, but sometimes outright wrong.

Worth & Lechner's "Beneath Apple ProDOS" will tell you all you want to know about the structure of ProDOS and its files

and its interface with devices and the inner workings of the floppies ...

Spell Check

DAN YURMAN ON 01/03

I need advice on which Spelling Checker for Appleworks 1.3 works best with an Apple IIC with 128K and which would work better if the user upgraded to 1 Mb RAM?

GERALD COTTRELL ON 01/03

I don't know that it's the BEST (it has flaws) but I like Webster's Spelling Checker. It's \$44.96 at Crown—probably more heavily discounted elsewhere; especially thru mail order. It has a 110,000 word directory plus permits user defined auxiliary dictionaries (a different one on each data disk if you like). It comes with both DOS 3.3 and ProDOS versions in the same package. I've used both versions and both work well. It uses AppleWorks files directly; saves a revised document (if it found spelling errors in the original) and renames the original as x.BAK. The major disadvantage is that you have to exit AppleWorks to use it—that doesn't bother me—but YOU might consider that a fatal flaw. There are some that work without exiting AppleWorks—don't recall which. I got Webster's because it seemed the best value for the buck. Most Spelling Checkers don't have as large a dictionary and I felt that failure to recognize words would be more annoying to me than having to exit. After all, I'm a pretty good speller and I KNOW how to spell the common words—it's the UNCOMMON ones that I might need help with; that's why I felt 110K words would be an advantage. I use a //e with 512K Ramworks—should work in your //c—the cover says "for the Apple II Series." My main complaint is that I haven't been able to get it to run from RAMDISK but with 128K, I don't guess that would bother you any. So, while it's not perfect, it IS very good and the price is right—I'd give it a look if I were you.

LEE RAESLY ON 01/03

Yea, this is a slightly different view. I use Sensible Speller, for several reasons.

1. It not only has two dictionaries, but you can combine them into one for a RAM disk. I have, 490 blocks.

2. While it is copy protected, the ProDOS version lets me copy it onto a 3.5, and copy that onto a RAM disk.

3. Under NO circumstances would I ever again use ANY program that would not let me copy it to a RAM disk. PERIOD. You wouldn't pay me enough!

RICHARD ROWELL ON 01/04

Your first decision is: do you require that the spelling check work from within AppleWorks or will you accept one that requires rebooting. Your second decision: how important is speed of spell checking. I find PinPoint very slow, but it works within AppleWorks 1.3 in RAM. I prefer to use SENSIBLE SPELLER. It loads easily into RAM and I do
contd.

spell checking only every other day on completed drafts so don't need "live" spell checking. Also SENSIBLE SPELLER uses the 90,000 word Random House Concise Dictionary (you get the paper copy with the disks) and the dictionary is split into two 45,000 word halves: the more common 45,000 and the less common 45,000. When you are writing something very standard (such as a letter of resignation) you can select only the first smaller dictionary and save time; when writing the great Armenian Novel you select both, and when writing a romantic letter to your girlfriend, you add the 3rd dictionary which contains your own added words (e.g. ****censored****).

Line Noise

FRANK SORRELS ON 01/18

I am having problems using Compuserve. At all prompts if I wait more than a second these symbols appear on the screen: ~r or }i or {_. They will also show up in my response. If I delete them, whatever I type where they were does not show up when I read it back. I am using Mousetalk with an Avatex 1200 on an Apple IIGs. This has also happened on rare occasion on Applepack.

TOM VIER ON 01/18

You're experiencing line noise. Either from your phone line or from the node you are on with CIS.

New //e

TOM VIER ON 01/20

Everybody's heard about the new //e with the platinum box and different keyboard, right? It's being shipped on all orders after Jan. 12 or thereabouts. Anyone spotted one yet? I'm curious as to what internal changes might have been made, ie. a new motherboard with Mega II chip? Same price. This is not the gs upgrade.

BRETT PARKS ON 01/20

Well, for one thing, all the chips are soldered in place on the motherboard. So, now if you have a \$3 chip go bad, you have to pay to have a whole new motherboard installed. The dealer I talked to said that Apple won't authorize replacements of parts at the chip level now, you gotta change the whole board. Thanks Apple, for keeping a watch on our \$'s (or should I say a death grip!)

KEN DE VITO ON 01/20

This adds some practical details to the previous messages on the same subject. Apple Computer Inc. has just introduced an updated version of the Apple //e personal computer. The new //e has an expanded keyboard with a numeric keypad, improved training and reference materials, and features the new "platinum" color scheme. The price is \$829 and is now available. It is completely compatible with all existing //e software and peripherals. The new //e has an 18-key numeric keypad, two programmable function keys, cursor control keys and alphanumeric keys in the QWERTY layout. Extracted/Condensed from MIS Week, January 19, 1987.

ED DONNELLAN ON 01/22

With the gs selling for \$999 and with the new //e's chips soldered, this sounds like the rip-off of the month.

EUCLID COUKOUMA ON 01/22

Soldering the chips on an earthbound product? Grrrrrrrr!!! I have encountered problems with sockets in Squee-Zooms and Paint Boxes but most of these can be prevented by using only top grade sockets. We always replace any suspicious sockets with Augat sockets. Bye bye socket problems. We also replace soldered in chips (if they are suspected of being bad) with new chips AND sockets. The only way that not troubleshooting in the field to component level is worth it, is if the total cost of the average repair would decrease. Apple should also remember that its roots go back to the hardware hackers and experimenters.

3.5" Disk Drives

TOM O'HAGAN ON 01/24

I'm thinking of breaking down and buying a 3 1/2" drive for my //e. I have tried talking to salesman at Computer Age on Georgia Ave. in Silver Spring, but they don't act like they know what they are talking about. I said I wanted an 800K drive and was told you can only get a 400K for the //e. I seem to remember reading that 800K are available for the //e. Right? To make sure I get what I want, what do I ask for? Also I assume I'll need a controller card and that it's extra.

KIM BRENNAN ON 01/24

For 3.5 inch drives you basically have two choices. (By the way, I agree on the people at Computer Age not knowing what they are talking about!) Choice number 1, you can buy all Apple equipment (expensive)—this would be the Unidisk 3.5 AND the Apple II Unidisk controller board (which costs about an additional \$60). The Apple Unidisk sells for \$399 list. Using your WAP discount at Clinton Computers you can knock off 25% from the list price. Second choice is to go with the Central Point Universal Disk Controller card. With the Central Point 3.5 drive this costs about \$190. 3.5 disks made with this card are perfectly compatible with Unidisks. There are several disadvantages and advantages to the CP card. First the card is a large (and long card) which consumes a lot of power and does not work with a IIGs (should you consider the upgrade). The CP disk drive does not have an in-use light (a minor inconvenience) and is slightly (physically) larger than the apple Unidisk. However, The CP card can also run a 5.25 inch drive on it at the same time as a 3.5 (Apple's can not do this). In addition the CP card can make use of MAC 800K and MAC 400K 3.5 drives (neither of which has an eject button). The one single best thing about this card is its price. Now, hopefully that gives you a little information about disk drives. I believe the January 87 issue of A+ magazine had an article about what drives could work on which computers and how.

TOM O'HAGAN ON 01/24

Thanks for the information. You said the Central Point card consumes more power than the Apple controller card. Does that mean getting a larger power supply—I also have two serial cards, mouse, AE Ramworks II(1meg), Duodisk controller and am thinking of adding a AE Transwarp. If I need a larger power supply, that would offset the savings on the controller card. You also indicated that the CP card could run a 5 1/4 floppy as well as the Unidisk. Does that include contd.

the Duodisk which is two floppies? Also is the CP Unidisk a 400 or 800K disk? Thanks again.

TOM VIER ON 01/25

For the //e you need a 800K UniDisk 3.5 drive (NOT the Apple 3.5!) and 3.5 disk controller card.

KIM BRENNAN ON 01/25

A more powerful power supply is only about \$60 (check out Applied Engineering), so you still save money. The CP card can only control TWO disks but they can be either a 5.25 or 3.5 or two of either. The CP drive is an 800K disk. If you are considering the Transwarp you should definitely consider a larger power supply. When Apple made the //e, the old power supply (from the][+) was downgraded because the //e used so little power. An old][+ power supply may be sufficient for a fully loaded //e (that is what I am using). But, as there are no (to the layman) differences between Apple's power supplies, it is probably easier and safer to get a third party power supply. My original power supply problems first cropped up when my //e had a duodisk controller, mouse controller, clock, Appli-card (CP/M), and a 64K buffered Grappler+. So you can see that you are rapidly approaching the limit of your current power supply.

LEE RAESLY ON 01/26

Tom, the ONLY drive for the //e (or + or gs) is 800K! However, there are two 3.5's out there! One is the 3.5 UniDisk, (for the OLD //c and will run fine with the OLD //e interface!), and the other is the Apple 3.5 (platinum) for the IIGs or the NEW //c or the NEW (or old) //e with the NEW Apple 3.5 interface! (Oh, yes, the OLD UniDisk 3.5 runs JUST FINE with the IIGs)! Since the price is EXACTLY the same, get the OLD //e interface with the UniDisk 3.5. It is the smart one, and you can CHAIN TO YOUR HEARTS CONTENT, mixing 3.5 and OLD 5 1/4's (as long as the 5 1/4's are on the end of the daisy chain!).

PAUL KELBAUGH ON 01/26

It is my understanding that the Central Point Universal Controller Card DOES work on a IIGs. As I recall the story, some of the very early shipments (including mine) will NOT work with the gs but CP is offering a \$15 fix to resolve that issue. So, if you have one of the newer shipments it should work. Since I don't have a gs, seems the best way to resolve this is to find a gs owner who has a CP card. Any living species out there?

KIM BRENNAN ON 01/26

Unless they have completely redesigned the card, it would not fit physically within a gs case. If it works with the gs motherboard now then it would fit inside the //e-gs upgrade.

DAN HUGHES ON 01/26

Another consideration is that the Unidrive is very slow compared to the Apple 3.5 dumb drive. If anyone wants to switch with me, I would consider it.

TOM O'HAGAN ON 01/27

If I read your message correctly I'm better off getting a

Unidisk for my enhanced //e. Can I chain a duodisk in back of the Unidisk? If yes can you boot from the floppy instead of the Unidisk with copy protected floppies?

PAUL KELBAUGH ON 01/27

Kim, then I think we have the definitive answer. The CP card will work in (a) a //e case with the IIGs motherboard update and (b) a IIGs with a large hole cut in the IIGs enclosure.

TOM VIER ON 01/28

You cannot chain 5-1/4" drives to the //e UniDisk card. The only machine the dumb Apple 3.5 drive will work on in the // family is the gs. You cannot daisy-chain floppys with the //e UniDisk interface. Only the //c and gs allow this.

More RAM

THOMAS D. ALLBEE ON 01/06

My thanks to all of you who responded to my request for your thoughts on adding RAM to my //e. From your comments, it is obvious that AE is the way to go and since all of you expressed satisfaction with RamWorks, I gather that it is preferred to RamFactor. Any one out there with any thoughts about RamWorks vs. RamFactor?

ALLAN LEVY ON 01/06

I think many more of us run RamWorks. Also it apparently is cheaper than Ramfactor—but RamFactor will work on a][+ and //e and gs (I think).

KEN DE VITO ON 01/07

The reason we all have RamWorks is because it has been out for years and is now in its third major version (i.e, RamWorks III). If RamFactor had been available all that time I am sure that most of us would have RamFactor because of the battery back-up (you can load everything into RAM, turn off the machine and the following morning, it is all there in RAM waiting for you) and the fact that RamFactor will be fully compatible with the gs—whereas neither RamWorks is. The only disadvantage I can see to RamFactor is that it uses up a real slot in the //e. Most of us have slots available or have other computers to spread out the cards, so that should not be a problem for you. All in all, if I were buying today, I'd buy the 1 meg RamFactor with everything and wait for the price of 4 or 16 meg chips to come down to something reasonable before I upgrade to more RAM than the Meg.

BRETT PARKS ON 01/07

If you have a //e (I believe you said you had a][+?), go with RamWorks. This card will replace the extended 80-col card you have in your //e aux slot. If you don't have a //e, then RamWorks will not work as you have no aux slot to put it in. In that case, RamFactor will be the way to go. HOWEVER, make sure that whatever software you want to get more RAM with will WORK with those cards FIRST. Lots of RAM is only useful if your software will use it.

Appending Programs

KEN DE VITO ON 01/19

Is it possible to take a Basic program with line numbers from 0-360 and add another Basic program to it (like Append in the contd.

AE Editor) with line numbers from 400 to 62555? There's got to be an easier way than typing in one of them and saving it to a third name.

LOU PASTURA ON 01/19

Ken, there's a program on the Dos 3.3 Master called RENUMBER that will merge two BASIC programs (as I recall, at least; it's been oh, at least a week, since I used my DOS 3.3 System Master!). There's a way to do it under ProDOS by EXECing two files, but I don't remember all the details. If you're working in ProDOS, call me and I'll look for it, although it might be easier to just work in 3.3 and then copy the final product on to a ProDOS disk, unless you're using commands reserved for ProDOS.

ERIC RALL ON 01/19

The DOS 3.3 system master and Glen Braedon's ProCMD will allow you to merge Applesoft programs. Personally I mostly use the EXECing technique that Lou spoke about. Load the program that goes from say lines 0-1000. Then type in the following lines:

```
63000 PRINT CHR$(4)"OPEN TEXT.FILE"  
63010 PRINT CHR$(4)"WRITE TEXT.TILE"  
63020 LIST 0-62999  
63030 PRINT CHR$(4)"CLOSE TEXT.FILE"
```

Then type GOTO 63000 at the Applesoft prompt. This will create a text file of your Applesoft program (either DOS 3.3 or ProDOS). Now load the second program and type EXEC TEXT.FILE. That is it. This is so useful that I suggest you make a textfile of the four Applesoft lines shown above. That way you can EXEC them into any program you want at some future time. Most programs do not use line numbers of 63000 or higher.

LOU PASTURA ON 01/19

Eric, isn't there also a way to merge and renumber from within the Apple Programmer's Assistant, using HOLD, MERGE, and RENUMBER? Seems to me it went something like:

```
LOAD FIRST PROG  
HOLD  
LOAD SECOND PROG  
RENUMBER SECOND PROG X,Y (X must be higher  
than the the highest line number in FIRST PROG  
and Y is the increment)  
SAVE THIRD PROG
```

Now if I could only find the disk that APA was on!

ERIC RALL ON 01/19

I forgot about the APA. Yes that too has a merge capability. The problem with all of these add-on modules is that usually they are not in place when you start out. Then you want to do something (like a merge) and lo and behold, you lack the APA, or ProCMD. So this is a way to achieve a merge without being prepared for it in advance. You would be amazed at how often, I have used the feature on this system. From remote, I CANNOT have any of the programming aids in place. The ONLY way to get a merge in, is using the EXEC feature. I will download the module, modify the lines, delete all unmodified lines and create a text file. Then all I do

is upload the textfile, load the module into RAM and then EXEC in the modifications.

PAUL SCHLOSSER ON 01/19

You can renumber (and merge) Applesoft programs with editor programs such as Braedon's PRO COMMAND and Apple's own APA. Also, save one of the programs to a text file, then load the section to be merged into memory, then EXEC the text file. ProDOS will merge the files, then you can save the combined program file. ps—if you do much programming Glen Braedon's 'Pro Command' is very useful. After using it you'll wonder how you ever got along without it.

TOM VIER ON 01/19

There are a number of utilities that do this. One is Beagle Bros' DOUBLE-TAKE. You may have to renumber the second program so that line numbers in the first do not conflict with those in the second. Also, you may have to make changes to actually make them work together logically.

Keeping Cool

RICHARD ROWELL ON 01/05

On a system saver: I had long accepted the two bits of advice ... (1) use a fan and system saver on a //e if you have 3 or more cards, and (2) leave your computer on most of the time. I now think that these two bits of advice don't go together. I leave my primary work machine on ALL the time. It's a loaded //e with a system saver and fan. However, the most frequently failing part in this system is the FAN itself. (I have disassembled the fan casing and can find no lubrication holes on the fan motor). With the machine (and fan) on all the time the fan often stops turning and its motor throws out more heat than a //e ever thought of producing. Better solution seems to be to place the power supply outside and don't worry about a fan. In that vast vacant //e case the card heat seems to be well within tolerable limits.

JERRY COTTRELL ON 01/05

No bet. I don't think it's the switch either but like I said, I'd already planned to get the fan. I figure that whatever is the most expensive, THAT'S what is bad. It doesn't always hold true but it's a fairly good rule of thumb. Interesting thought about putting the power supply outside. How many cards do you have in your //e? I assume it's running "sans fans" with the power outside. How long has it been running like that?

RICHARD ROWELL ON 01/06

I have 6 - 9 cards—varies month to month. If you count a piggy-back to a RamWorks as a second card that changes the number. I have also had my Novation 1200 Baud upgrade card in the 'slot saver' location—splices into the power supply line and lays on top of the power supply. Although, as I said I think the fan is unnecessary, I still use it because I continue to tinker with the problem and want to get it straightened out.

My primary computer—a //e—has been on since 1985. I remember Burrell Smith (designer of many of the Apple ROMs) saying that he got into computing because he had no money to heat his shack, but did have a big vacuum tube computer to tinker with—so left it on for warmth. Mine is mini-version—I heat my house with a Vermont Castings contd.

wood stove and warm my cold little appendages on that external //e power supply.

ERNIE LANE ON 01/15

As my //e is about to become filled up, I probably should consider a fan. How does the Kensington System Saver stack up to the "no-names", especially as regards noise? I have borrowed a "Super Cooling" (no other ID) fan from a buddy to check out, but he says it is noisy—is the System Saver as well? Is there anything to justify the higher price? What about a heftier power supply? Is it likely to be needed? What is the rated power of the standard Apple power supply versus the Applied Engineering power supply? I have not had any power supply problems so far, that I could recognize.

BRETT PARKS ON 01/15

With my Kensington System Saver, I can't even tell if it's on or not unless I look at the light or feel for the air coming out the side. The other advantage it has is that the two plugs on the back side are surge suppressed (as to how well they are protected is another matter all together). We have KSS on all our Apples here, and I can give them a definite 'thumbs up'. However, at better than \$80 a pop, they are rather overpriced. As for the power supply, that is probably not a bad idea, esp if you have the slots stuffed to the gills. Tom Vier is probably the person here who would know best about that. And then, you've always got the 'old' one as a spare, right?

RICHARD ROWELL ON 01/15

My experience in running stuffed //e's is that you are better off to move the power supply to the outside of the case—a fan is then probably unnecessary. The Kensington fan is soothingly quiet—why I often use it to go to sleep by at night. Two sources of power supplies are: Applied Engineering and JDR Devices. Both around \$50 for a 70+ watt power supply (as opposed to Apple's 50 watt). (I once got delivery from Applied Engineering 18 hours after calling them!!)

LOU PASTURA ON 01/15

Another way to "keep cool" is leave the lid off. This works OK and I don't think it's any worse dust-wise than the System Saver that drags dust in forcibly rather than letting it settle in gently on its own. (I say all this as a System Saver owner.) ☺

Ramup contd. from pg 20

reappear without having to reload all of the program disks all over again. Whatever files from AppleWorks that you had saved on the /RAM disk will even be retained.

Some preparation of some of your programs will be necessary before they can be read by Ramup and loaded to the /RAM card. For example, with AppleWorks, you must expand and partition the program disks you will use with Ramup using the Desktop Expander program. Directions for doing this are contained in the Ramup manual and on two ASCII text files called "Program Notes" and "Read.me" on the Ramup disk. These files must be printed from an ASCII text file by AppleWorks so that you can read them and get a hard print copy. Directions for modifying all of the other programs are also in the files. If you have a problem interpreting the directions, or if the directions may not apply to a particular version of a program you have (my old version of Sensible Speller would not load from the directions given), simply call

BUTTON-DOWN GUIDE TO THE APPLE

by Ray Hobbs

I must apologize for the month-long vacation I took, and again for not writing on the subject I promised (soft switches) this month. My excuse is that for the last 45 days I haven't had an Apple on my desk, and I insist on testing out the things that I write about before they are put in print. Now, at last, I have my beloved Apple again, but it's no longer a][+. Instead, it's a IIgs! I've spent the last couple of weeks trying to get acclimated to it, and finding out what works and what doesn't work.

First, the good news: The IIgs does, indeed, work pretty much like my old][+ did, at least when you tell it to. The Monitor is there, at the same old place (CALL -151). Actually, the IIgs is placed into *emulation* mode, so that it just acts like our old 6502-based pals, the][,][+ and //e. Anyway, the old ProDOS and DOS 3.3 stuff works just fine, at least for the things I've tried.

The bad news is that a lot of the firmware (cards) that we got used to for our old][series machines don't work out so well. As nearly as I can tell in the absence of technical material from Apple, anything that lives off of interrupts will go into cardiac arrest residing in the IIgs. This means the old CP/M cards, my Alpha Syntauri synthesizer (sob!), Wildcards and other things like that. In addition, I got the 3.5" Apple Disk and the 5.25" Apple Disk with the system, along with a 1-meg Ramcard. Although one is supposed to be able to use a Ram Disk with the Ramcard, my gs refuses to recognize the 3.5 Apple Disk as the startup disk whenever the Ram Disk is enabled. This might work out if the 3.5 Unidisk is used in lieu of the Apple Disk. Other than that, the disk drives seem compatible enough.

Some system development software is coming out this month, so I expect to be able to POKE around a bit and find out a few more things shortly. In the meantime, I'm in the process of testing out the soft switches, so hopefully by next month I'll be able to continue the BUTTON-DOWN series where I left off. So long for now... ☺

Quality Computers, as I did a couple of times. The programmer I talked with was very helpful, talking me through the process as I sat at my computer. Once, when he didn't have an immediate answer, he called me back the next morning with the information. If some of your programs are not on the Ramup menu, Quality Computers will configure all of them and put them on the menu for a onetime fee of \$39.00.

Ramup can be obtained by writing Quality Computers, 1365 Berkshire, Grosse Pointe Park, Michigan, 48230, or by calling (313) 885-4270. It comes with one program disk (non-copy protected) and a manual with tutorial.

Footnote: Just before sending in this review, the shortage of memory necessary to have all of my most used programs available at one time finally got to me, so I broke down and replaced my 512K Z-Ram Ultra I with a 1 megabyte Z-Ram Ultra II. So, now I'm all set (but then what could I do with 16 megabytes? HMMMMM....) ☺

EDSIG NEWS

by Patricia Kirby and Jessica Weissman

EDSIG Calendar

Thursday, March 26 at 7:30 PM - "Educational Computing for the Disabled", by Richard Rowell.

Thursday, April 23 at 7:30 PM - "Educational Technology in Software Design", by Jessica Weissman.

EDSIG meetings are held at the Washington Apple Pi office, 8227 Woodmont Avenue, Bethesda, MD.

Meeting Reports

A belated write-up is in order for the October meeting of EDSIG, hosted at Trinity College by the Computer Education Department. Bill Lynch, Pi member and head of the department, put together a dynamic evening of Apple educational applications, primarily in AppleWorks. Attendees could walk from one "station" to another and try out various original applications.

The meeting attracted the largest group to attend EDSIG in recent memory. Estimates were that attendees were about half from EDSIG and half from Trinity, with some overlap. Bill Lynch described Trinity's budding Computer Education program (M.A. level); and Peter Combes, EDSIG Chairman, discussed Apple Pi.

Having sat through one of Bill's courses on the design of educational computer curriculum (and being part-time on the Trinity faculty), I can vouch for the quality of Trinity's program and Bill's course in particular. If this sounds like a plug for Trinity, it unabashedly is! There are all too few colleges in the area offering anything like this program, especially one offering a chance to really work through the philosophy of educational computing alongside the nuts and bolts of Pascal.

But it is also a plug for the excellent format of the meeting. There is nothing like the chance to browse through rooms full of Machintoshes and Apples laden with intriguing educational software. Obviously, it takes a lot of work to put together such an event. It requires the skills of an orchestra director. It also takes much space, requiring several rooms. It's even better when you have superb coffee and refreshments such as Trinity provided!

EDSIG would like to host other meetings with schools in the area. We are thinking about a "parents' fair" (perhaps open to children as well) in the late spring that would allow a similar opportunity to look through software at a number of computers, and discuss software choice. Or, just to host a "plain vanilla" type meeting. It's a chance to get to know what the school has to offer as well as delve into a specific topic. If you know a school—at any level—that might be interested in hosting such events, please call Peter at 251-6369. You'll usually get his answering machine, but his cheerful English accent will assure you he will return your call soon. (Often, that will be when he gets back from frequent job trips to the likes of Swaziland and Honduras!) - Patricia Kirby

At the December EDSIG meeting, software discussed included: Puppy Love, World Builder, Geometry, Balance of Power, How a Bill Becomes a Law, Turbo Turtle, Chipwits, Run for the Money, and Make Millions. Jessica Weissman presented and discussed a series of educational applications for

the Macintosh. There has not been the flood of "kid stuff" for the Mac that there has been for other computers. Why? Is there a perception that the Mac is too expensive a computer for kids to touch? Were the first buyers so overwhelmingly yuppie that market researchers assumed there weren't enough kids in Mac-owning families? Is the typical educational application too linear to make sense in the world of the Mac where a menu selection can change the course of the program at any time? Were people sure that kids responded only to color?

Whatever the reasons, we are now beginning to see more educational items for the Mac. In our session we looked at some of the stronger ones.

Balance of Power is one of the famous Mac games. The player assumes the role of a head of state (you pick the state—Russia or the US). The goal is to advance your aims in the world and your prestige without causing a nuclear war. It is frighteningly easy to blow up the world, and no fun either. Instead of an animated explosion, designer Chris Crawford decided to have an all-black admonitory screen about The End. He has faced squarely the major problem of all educational game designers: making it more fun to get it right than get it wrong.

Anyway, once you've seen the non-explosion, you go back to trying to preserve the world. On each turn, news events and other information tells you what your opponent has done; and you react by public posturing, by aiding your friends, by placing troops, and by other means of international influence. Your prestige advances or retreats; and if you choose the wrong position to stick to, your opponents blow up the world. And you. The decisions you make are realistic ones, requiring the kinds of analysis a real diplomat or policymaker might make. The pressure is intense.

This game represents a class of realistic simulations which exist on the Mac, most ported over from other computers. Millionaire, Baron, Oilman, and a few others let you simulate the real world of financial decision-making. In these games, the role of the computer is to track the variables and compute the consequences for the player. They don't have the playability or the sheer fun of Tom Snyder's economic games.

Make Millions and **Run for the Money** are in another class altogether. They are economic strategy simulations intended for kids from 10 up to the oldest person who isn't embarrassed to play an animated game. These two games are products of Tom Snyder, possibly the most creative designer of educational games in America. In **Make Millions** you try to control an economic empire in Hawaii. You buy and sell stock, but mostly you make decisions about running the companies you own. Realistic economic and management strategies are possible. Perhaps this sounds dull, but the superb animation (you watch wood blocks being made into guitar bodies in your factory) and imaginative touches, such as a plant in your mogul's office that dies if you forget to water it, make this game fun. You learn management and economic strategy in a mostly-painless and absorbing way. I still don't know what happens if you control all five companies and win.

contd.

Run for the Money has you compete against the computer or another player to sell synnannas to simians and buy paint to repair your space ship first. It combines animation and a little arcade action with the usual Tom Snyder economics and strategy. You have to make pricing and supply decisions. For example, if you buy low-quality materials the simians will keep buying your products for a turn or two, then notice the change and turn away. The judgment lies in knowing when to switch back to the higher-quality supplies.

Both games were ported from other computers. Make Millions is the more successful port, using more of the Mac interface, but both games work just fine. Comparing the Mac version with the Apple II version of Make Millions is an interesting exercise in seeing just how a computer artist substitutes the high resolution of the Mac for the color of other computers.

Puppy Love, Turbo Turtle and ChipWits are all programming-oriented. Each one dresses up the programming in a different way, but all teach the classic things that programming is supposed to teach: disciplined and logical thinking, creativity, and problem-solving. Some might argue that if you're going to teach programming, you may as well use a real live programming language and let the kids select their own projects. On the other hand, some kids are lost when they have to select their own projects. And some kids who don't work well with numbers and words can have the experience of programming with one of these packages.

Animated puppies or moving robots are beyond the skills of most beginning BASIC programmers.

Chipwits, which has been reviewed here before, lets you program a robot using an icon-oriented programming language which is halfway between circuit design and BASIC. Not only do you have to get the robot to do what you want it to do, dealing with such classic programmer's frustrations as infinite loops, incorrect specifying of conditions and just plain bad "code" but you also have to fit your program to the environment the robot is working in. Chipwits doesn't hide the fact that you're dealing with programming, but it does make programming fun.

In Puppy Love, you train an animated puppy. At first all you can do is watch the tricks. You use an animated hand and bone to reward the puppy for doing tricks or punish her for doing the wrong trick. When you see a trick you want to train the puppy to do, you stop the action, name the trick and reward the puppy. In this stage of the game, you are rewarded for being observant. The main pleasure is the animation. That puppy does some amazing things!

When the puppy knows a few tricks you can take her to the dog show and win a ribbon. Here the main skill is knowing what the judges call each trick. The puppy is obedient if you give the right commands—and here the game is most unrealistic!

After you've won a few ribbons, the programming part of the game comes in. You choreograph dances for your puppy by combining tricks and conditions. The things you can do mirror regular programming fairly closely. You can monitor conditions, for example having the puppy do a flippo trick until the squirrel appears in the mailbox, or having the puppy roll over until she reaches the middle of the stage. Initialization is important—if you start a trick in the wrong

place, most of it happens off the screen.

The animation in Puppy Love is a tour de force, and the programming skills it teaches are real ones. The initial part of the game, in which all you can do is watch your puppy and hope she does the trick you want to "capture", can be frustrating. Even if you do learn to choreograph wonderful dances, after a while seeing the puppy do the right dance gets dull. But that's a long while and a fairly large reward.

Turbo Turtle is a cut-down version of Logo. It has all the graphics commands of Logo and a few sequencing commands, but leaves out much of the complexity of Logo. At the time the program came out, there was no other version of Logo for the Mac. Turbo Turtle is a low-cost way for a parent to start working with a child on Logo concepts at home. It is a robust implementation, too. I tried several of my best Logo-crashing tricks, and Turbo Turtle came through them all.

Geometry is a curious item. It is a tutorial and drill program covering an entire semester or year of elementary plane geometry. All the concepts you remember (or don't remember) are covered. It is divided into sections and topics. Each topic includes a tutorial exposition, some interactive problems and demonstrations, and a short quiz. The interactive demonstrations are good. They include such useful graphic demonstrations as letting you change the angle or side of a triangle and watch the other dimensions of the triangle change. The computer screen makes a very good animated blackboard. Seeing the graphics move makes geometrical concepts clear. In each section you can complete the proofs of some of the more important theorems. For each step of the proof either the conclusion or the logical reason for the conclusion is shown, and you supply the other half.

All this is classic tutorial instruction, which up till now has been absent on the Mac. Tutorial instruction is the subject of debate in the computer-aided instruction world. The argument against it is that it doesn't use the capability of the computer to do things a book or a teacher couldn't do. The argument for it is that it is individualized, patient, and accurate. The student can study the hard parts over and over again without holding up the class.

Geometry is a sterling example of tutorial instruction. It does nearly everything right, and uses the graphic capabilities of the computer to get geometrical concepts across. It is heart-warming for those of us who see a lot of really poor tutorials. But it has the limits of tutorial instruction. Who would use it? Perhaps a bedridden student or one living in Patagonia where there was no school. More realistically, maybe someone reviewing geometry for the GRE or SAT. A school training students for the high school equivalency diploma could make good use of Geometry—an individual student without a high school diploma probably couldn't afford either the Mac or the program for home use!

Brøderbund, the publisher of Geometry, promises more tutorials in the future. For math, the computer offers obvious advantages in interactive presentation. It will be interesting to see how other subjects take advantage of the capabilities of the computer in a tutorial setting.

How a Bill Becomes a Law is a dog. It is one of a series of similar programs from Queue Intellectual Software which were ported from other computers. In the Queue series the student sees a series of text screens. Some text screens

contd.

present information and others ask questions. In some cases, as in HABBAL, the questions are actually a list of actions from which the student can select. The student's responses determine the course of the simulation. There is some educational value to this kind of simulation. The student can have the experience of making decisions and seeing their consequences. But the format takes no advantage of the Mac. No graphics, no real interaction, no use of the Mac interface. The program plays the same way each time, with a tiny bit of randomness thrown in.

HABBAL illustrates the perils of developing educational software for the Mac. The situation simulation technique that it uses does a perfectly respectable job of teaching, and is more lively than a textbook. In some other context it would be a worthy, if slightly dull, use of the computer. But Mac users expect more. HABBAL wastes the capabilities of any computer, and it wastes the Mac more spectacularly.

Now we come to **World Builder**. World Builder is a game system from Silicon Beach, who used it to produce *Enchanted Scepters*. In World Builder you can construct and program a little world in which the user moves around. Most people will use the system to make games, but it is possible to use the system to make instructional simulations.

In World Builder, you work with scenes, characters, and objects. You assign characteristics to objects and characters, and put the scenes (or rooms) together into a configuration around which the player can travel. In a game the rooms might be parts of a castle or a dark wood or a baseball stadium or whatever. In an instructional simulation the rooms could be Congressional offices or the streets of Lima or the parts of a nuclear power plant. In a game the characters would be Orcs or Nimrods or whatever, and in an instructional simulation the characters would be plant operators and members of Congress.

World Builder takes care of standard game operations such as moving from room to room, picking up objects, inventory, fighting, running away, etc. You write "scene code" in a dialect strongly reminiscent of BASIC to handle other events.

Unfortunately the assumptions built into World Builder make it much easier to create games than other kinds of interactive simulations. You must assign game-like characteristics such as bravery, hit-resistance, propensity to run away and strength to your character. Characters are designed to carry weapons, and most objects are designated to belong to one category or another of weapons.

A clever designer could use these characteristics in producing a non-game simulation. One example which comes to mind is a trip through the streets of Lima where you have to speak and understand Spanish. The hard part there would be to make it more fun to survive than to mess up. If you get shot by fascinating bad guys when you use the wrong tense of the verb but just cross the street uneventfully if you use the proper tense, what kid would ever bother to get it right?

Other educational software exists for the Mac, and good educational use can be made of programs that weren't intended for that purpose. Things like *Coin Works* and *Kids Time* are starting to come out, going beyond Mac Edge in educational value and quality. The Smoothtalker people are beginning to produce interesting programs that use speech, though the implementations are not always educationally sound.

Jessica Weissman ☺

Smart Computer: More Reasons to Buy Our Generic PC.

by Bud Stolker

In the IBM PC-compatible world there are many kinds of computers. Though they may look alike, they all differ under the cover—in the quality of the components, in the scope and usefulness of software, in the degree of care and foresight with which they're engineered and built. Some are better buys than others. Herewith we present a few criteria useful in comparing PC-compatibles. No matter what you need in a personal computer or where you buy it, you should ensure that the PC comes with the following features:

- **Fully IBM-compatible.** We've tested our systems extensively, and have found them to work with all software designed for the IBM PC. Our PCs are strictly compatible with the IBM hardware standard, too. The cheaper clones, though attractive in price, sacrifice full hardware compatibility, in effect locking you out of major future upgrades.
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- **Carefully performance-tested.** Parts that don't meet our standards wind up in our reject pile, not in our clients' PCs. (Ask about our second-tier systems at scandalous prices. They're great buys if you don't mind a noisy fan, a mushy keyboard, or an out-of-square video display. All are guaranteed to drive you crazy, but they're cheap, and they work. Yes, Virginia, there really is a \$500 PC, but do you really want one?)

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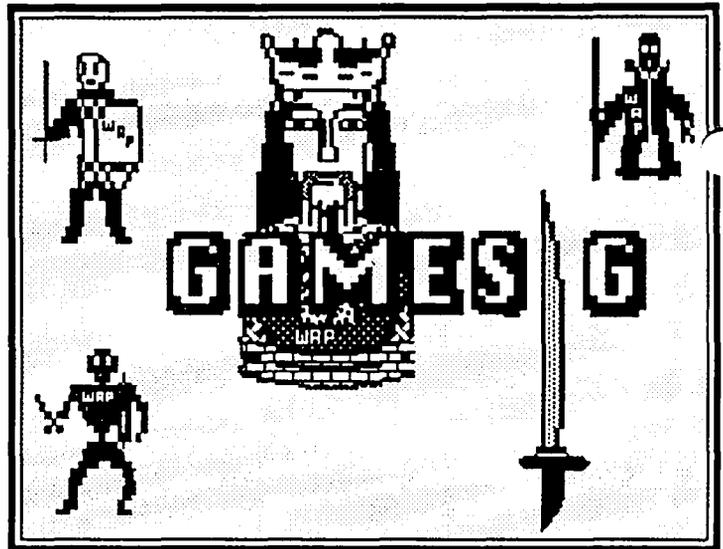
GAMESIG NEWS

by Steven Payne

Attention, readers! This month we're featuring an amazing "blue light special": two GAMESIG reports for the price of one ...

At the belated January meeting, Jeff Stetekluh started us off by showing a new Macintosh program he designed, for fans of chess who have trouble mentally visualizing matches as presented in the algebraic or descriptive notation used by newspapers and books (e.g., "B-B4ch"); here you can type in the moves, call up a chessboard, then actually watch the game being played out. Next, Thomas Johnston distributed several new programs for review, including WAR IN THE SOUTH PACIFIC, WARSHIP, and GEMSTONE HEALER (all from SSI for the Apple // series), NFL CHALLENGE (XOR, Macintosh) and MAKE YOUR OWN MURDER PARTY (Electronic Arts, Apple // series with 64K and printer); some are reviewed in this issue. Ron Wartow then announced forthcoming games, including QUESTRON II, BARD'S TALE II, and an ALTERNATE REALITY follow-up. Ray Hakim demoed MIGHT AND MAGIC for the Apple // series, while Marc Hoff gave us a peek at FERRARI GRAND PRIX.

At the February 5th meeting, there was little new software to pass out for review, but we began planning for another GAMESIG party. Chairman Tom described the latest of Charles Gulick's flight simulator books, FLIGHT SIMULATOR COPILOT (Microsoft Publications)—enjoyable, but with somewhat sketchy directions for the Apple // series, since apparently Gulick lacks easy access to that kind of computer. We then went around the room describing what games



the members are now playing: MIGHT AND MAGIC, SILENT SERVICE, UNINVITED, BARD'S TALE and LEATHER GODDESSES OF PHOBOS(!) were among the favorites. Some members are even developing their own games, which we hope they will eventually premiere for us. The meeting ended with demos of the rereleased ULTIMA I (Apple // series) and SUB BATTLE SIMULATOR (Mac).

With two months worth of reviews on hand, we've developed a bit of a backlog. GAMESIG contributions to this issue include reviews of NFL CHALLENGE, SUB BATTLE, ULTIMA I, BATTLEFRONT, HARDBALL, two wrestling simulations, and whatever fits. Meanwhile, look for a report soon on DARK CASTLE and WORLD BUILDER, two Mac programs from Silicon Beach Software which are attracting a lot of attention. Our next regular GAMESIG meeting will be held on Thursday, March 5th at 7:30 PM in the main WAP Office. ☺

NFL CHALLENGE: A Review

by Marc S. Hoff

NFL Challenge (XOR Corporation, Macintosh, \$99 list) is a sophisticated and highly realistic simulation of professional football. This game was first published for the IBM PC in 1985, receiving rave reviews from every corner of the Big Blue world and selling by the thousands. The Macintosh version was ported over by Digital Illusions, the folks who Macintized GATO and ORBITER (president and Pi member Gordon Walton provided GAMESIG with the review copy). The Mac version is quite impressive and worthy of the same high marks.

The game starts with selection of opponents from among the 28 NFL teams (1985 versions are included with the current game); one or two humans can play, or the computer can play itself. Next is the coin flip (with an authentic-looking coin flipping onscreen). Now we get into the game itself, which provides the player with a choice of 49 offensive plays and 26 different defensive sets. Once player(s) have made their selections, the display switches from a gridiron/scoreboard display to a closeup view of the X's and O's, such as one would see on a coach's chalkboard. The play is now run in graphic fashion on the screen, with each individual X (defense) and O

(offense) moving according to his assignment on the play and his own ability. Each player is rated numerically in the categories his position requires (one or more of: running, receiving, blocking, passing, and kicking—for defensive players, ability to defend against the particular activity).

After each play is run, we return to the gridiron/scoreboard, with a short bit of text recapping the play; the scoreboard is updated, and play selection begins again. Penalties are called every now and again, accompanied by the referee's spoken announcement. Injuries occur several times per game, seemingly when one can least afford them (as in real football). Any big event (fumble, touchdown, etc.) is accompanied by a large banner announcement and appropriate crowd noise (loud cheering or booing).

Everything about this program is well thought-out and executed. Conformity to the Mac user interface is excellent. The manual and playbooks are well-written and very informative. The game takes its realism pretty seriously, so the casual football fan might have a bit of trouble at first, having to tell a flood from a curl and learning when to twist and when to stack; but the documentation does a very good job of contd.

explaining and simplifying these concepts, so that the novice will soon be at home on the "sideline." The game provides a number of special features, such as up-to-date team statistics at any time, instant replay, and a "Learn" mode to save new players from the perils of the 30-second clock. My special favorite is the Extra-fast mode, in which the computer plays itself at breakneck speed. I was fascinated to see an entire football game flash before my eyes in under 15 minutes; what if real football were like this?

Having said all this, I must add that no software is perfect, not even NFL Challenge. Most of my complaints are

mere fine-tuning, however: the ball is not spotted correctly with respect to the hash-marks; no trick plays (i.e. reverses) are included for the offense; not enough time elapses during plays, producing too many plays per game and overly high-scoring games in some instances. Overall, however, I found NFL Challenge to be an exciting, enjoyable game any football fan would find worth the price, even at \$99. Kudos to XOR for not copy-protecting the program, and for allowing team rosters to be modified, so that program owners can update teams to 1986 and beyond. NFL Challenge gets nine out ten from me. ☺

SUB BATTLE SIMULATOR: A Review

by Jeff Stetekluh

SUB BATTLE SIMULATOR (Epyx, Inc.) is a new submarine simulator for the Macintosh requiring at least 512K. The programmer, Gordon Walton, a WAP member living in Texas, sent the GAMESIG pre-release versions for review. Gordon also programmed GATO, an excellent submarine simulator from Spectrum HoloByte, Inc. (see the review in the September 1985 issue).

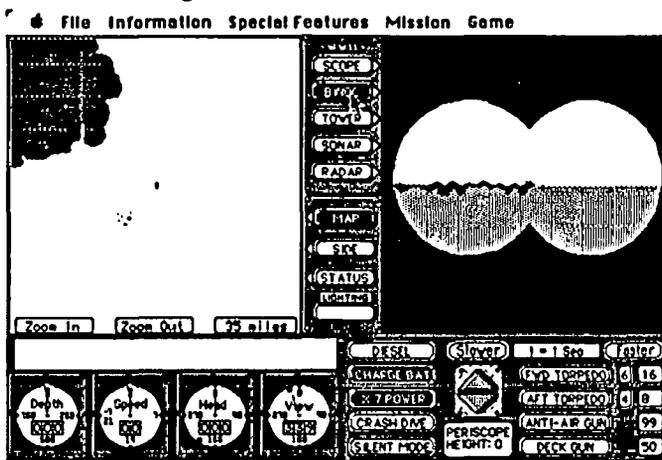
SUB BATTLE is a stunning advance in simulator realism over GATO. Rather than an arbitrary grid, as used in GATO, SUB BATTLE actually has a built in Mercator projection of the world and the player must navigate his submarine across vast distances. (In the easier levels a built-in navigator can do this automatically.) I wonder if it pays to sail the great circle route? A system of time compression speeds things up but I was not satisfied with the way this worked. Once, I slowed down the time compression just too late and found myself deep into an island. Not only did I incur damage from this but it took a while to back up off the island! The sounds are well done. There is a fine "AOOOGAA" sound before a crash dive and a fine roar when the submarine is buzzed by an airplane. I found the crew speech feature annoying, and it slows down the game but it can be turned off so this is no problem.

According to the manual, "There are 60 different missions (24 American, 36 German). American missions are very close to historical occurrences, while German missions are not as exact since patrol records for the Germans were mostly destroyed at the end of the war." I was impressed when, dutifully patrolling off of Okinawa, I received a radio message directing me to patrol near a Korean port! I got quite a feel for the real thing. I am greedily delighted when I come across a defenseless tanker or merchantman, and destroyers make for an anxious fight or flight situation.

I especially like the way the Macintosh interface is used for the controls. I can click on the image of a ship to select it as a target. Depth, speed, heading and viewing angle are each controlled by their own combination analog/digital gauge/control (see illustration). As an example, I can select a heading by clicking on the gauge. (I would click near the label 180 for a bearing of 180°.) This marks my intended heading. The actual heading is shown by a needle that would start to swing towards the intended heading and digits that roll exactly like an odometer. This combines ease of use, quick informa-

tion for the eye and a precise readout. What a nice touch!

For anyone with interest and patience enough to master the skills necessary for the simulation, I can enthusiastically recommend this game.



One of the many screen combinations in Sub Battle. At the upper left is a map. To the right is a view of an island. The combination gauges/controls would delight anyone in human factors. ☺

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ULTIMA I: A REVIEW

by Ron Wartow

(Since becoming GAMESIG Chairman Emeritus, Ronald Wartow has been writing his memoirs, which will be available soon at better bookstores.)

A serious computer gaming generation gap has just been filled. *ULTIMA I*, the classic beginning in the popular Ultima fantasy role-playing series, has just been rereleased for the Apple // series by Origin Systems (Londonderry, NH), Lord British's (Richard Garriott) own company. *ULTIMA I*, originally released in 1980, has been unavailable on the Apple for several years. An entire generation of computer gamers has been unable to play this saga, my favorite Ultima until the fourth scenario. While I enjoyed Ultimas II and III, the former had many places to go but few of any significance, and the latter had interminable combat and convoluted spell casting. When released, *ULTIMA I* carved new and ambitious territory for computer role-players and introduced the striking outdoor graphics that have continually improved in each successive Ultima.

For prior players, except for some subtle differences, the plot and gaming system are essentially the same as the original. The outdoor (including your character's icon) and text screen (e.g. stats) graphics fall somewhere between Ultimas III and IV. The towns continue to be simply drawn with stick figure characters, but now have a dash of color. The dungeons are still line drawing "3D", but without the former time-consuming screen redrawings after every attack on a monster. Program execution is lightning quick now, and those with an Apple IIGs and other Apple II's with some accelerator cards can play even faster. With tongue firmly in cheek, I used to say that I read *War and Peace* while waiting to enter towns, castles, and dungeons in the original Ultima. It wasn't that bad, but in this version the complete redoing of the code in assembly language causes practically instantaneous responses to your keypresses.

All of the improvements brought forward down through Ultima IV are incorporated here, like the ability to quit and save without rebooting. From the striking animated color title sequence to the now-familiar twirling cursor, this new-old Ultima has a lot of its successors in it, including monster animation. In keeping with its practice, Origin Systems, in addition to the single game disk (a character disk must be made) includes a stylized manual, four nicely color-drawn cardboard maps of the 4 continents, a reference card, and the ever-present doodad, coin of the realm in a cloth pouch.

Those who have played Ultimas II through IV have seen references, usually quite disparaging, to the evil wizard, Mondain, whose destruction is the goal of *ULTIMA I*. It was Mondain who started the Age of Darkness that fell over Sosaria hundreds of years ago. Ultima II's Minax was Mondain's apprentice, and obvious lover, since Ultima III's Exodus was a machine-like offspring of the two. (I would have loved to have witnessed the consummation.) Mondain's skull shows up in Ultima IV and plays a key role.

You create your single character from among four classes, four races, and five attributes. The *ULTIMA I* world, which

you explore with ease via a tight keyboard cluster and single keypresses not requiring a carriage return, consists of eight castles, eight monuments, and over 30 towns and dungeons, sprawled over four island continents. You must also travel into space, one of those Ultima anachronisms—wipe out a few bats, knights, and the dungeon-dwelling carrion creepers with a mace or great sword, then hit the spaceship, armed with your phaser or light sword. Magic spells are bought in a magic shoppe, rather than earned by experience.

The castles contain quests such as killing a balron only found on, you guessed it, certain levels of the dungeons, or locating a specific sign post or monument. When completed, you are rewarded with increased attributes, or more importantly, objects vital to the final solution. There are no mind-straining puzzles. Much of the solution is very linear in progression and, not surprisingly, requires lots of monster whomping, and gold acquisition, with resulting rises in experience level and attributes. As in all the Ultimas until Ultima IV, getting a frigate is essential to heavy duty hack-and-slash, and stealing is a way of life. The space portion of the game has a slight arcade feel.

I highly recommend that all fantasy role-playing fans play this game. The time for completion is less than the other Ultimas, but not so short that it's over in a few hours, and the game is the easiest of the Ultimas to get started in and complete. For those who have played it before and like to replay games, you'll be in for a pleasant surprise with the graphics and speed enhancements. I am often asked, what would be a good game to play to get the feel of fantasy role-playing. Because it was unavailable, for years I could not recommend *ULTIMA I*. Now, I can!

Footnote: In late January, I talked with Richard Garriott. For a treat, while the Origin logo is on the screen, hit Shift-K, then wait at least for one of the startup animated sequences to rescroll. There is another special treat at this phase of the program, but you'll have to find that one out for yourself. As for Ultima V, he said.....and.....(To be continued!) ☺

BOP 'N' WRESTLE: A Review by Davy Hakim

BOP 'N' WRESTLE (Mindscape, Apple // series with 64K) is slapstick version of the game of wrestling. In this game you control a wrestler, Gorgeous Greg. He fights other wrestlers that are controlled by the computer, such as L.A. Bob or Redneck McCoy. You can also have a two-player game. Each of the matches has a time limit, except for the title match which has none.

Gorgeous Greg can be controlled by the keyboard or by joystick. While you can, in theory, do such real moves as a front headlock or full nelson, the game mechanics are hard to learn. Kicking strongly is the easiest. All the moves lead smoothly into one another. If you have someone in a full nelson, you can quickly give him an atomic drop. You can also run (I did a lot of that).

The animation is okay but not spectacular. The characters
contd on pg 36

BATTLEFRONT: A REVIEW

by Chris Hancock

BATTLEFRONT (SSG, Apple // series with 64K) is a simulation of land combat in World War II from the Strategic Studies Group. Roger Keating and Ian Trout have adapted their basic game mechanics from previous designs to yield both a challenging and unique wargame.

The game deals with combat between corps formations on a map with a scale of 1 km per hex. The total map area can represent up to 39 km by 28 km. There are four turns per day with a maximum of 63 turns. One may elect to play either side in each of the available scenarios. Alternatively one may choose to observe the game being played entirely by the computer.

It is possible to handicap one or the other side to adjust for player experience or desire. However, this feature does not affect the artificial intelligence or combat effectiveness, but merely acts as a multiplier on points accumulated toward victory conditions. I believe this to be a much more acceptable means of providing a handicap. Tinkering with artificial intelligence often leads to game play that is less than logical.

Individual units represent battalions of infantry, armor, artillery, airborne and engineers. Unlike most wargames it is not possible to give precise orders to every unit. As a corps commander the player issues orders to regimental size groups made up of a number of battalions. Each of the battalions attached to that regiment attempts to execute the same general

order under computer control. This feature is an extension of the concept used in CARRIERS AT WAR and EUROPE ABLAZE. In the land battle arena it took me some little while to get used to this. I grew up with conventional board wargames where I was generally able to move my cardboard armies exactly as I wished, if not always effectively. However, I do consider that this technique adds a degree of (dare I say) realism to the simulation.

Order entry is via a menu structure just as in previous games from SSG. It is both logical and easy to pick up. One may also receive reports on the condition of one's troops, their status and position, together with a running record of the victory point tally.

The object of the game is to secure a number of objectives such as towns, airfields or other key hexes together with destroying as many enemy units as possible. Victory points are earned in varying proportions for these actions and the victor is determined on a direct comparison basis taking into account any handicap multipliers.

Four scenarios are included with the game and feature such diverse settings as Crete, Stalingrad, Saipan and Bastogne. Each offers a quite different challenge.

As in all previous SSG games one may create one's own scenarios. However, unlike previous designs, changes are automatically recorded, which does save time. It is also possible to edit scenario conditions even during play, a possible way out for all you inveterate losers out there!

All in all, once again I have to thoroughly recommend this game to all. SSG have yet to produce a poor game; they have set a really high standard for themselves and I sincerely hope their future offerings continue to give us the most interesting computer wargames around. ☺

HARDBALL FOR THE MAC: A Review

by Peter Lindstrom

It's tough enough being a baseball fan in Redskin-rabid Washington: it's much worse if you are a Macintosh owner. The Senators left over ten years ago and, as I enter my third year as a Mac owner, there is a dearth of truly good baseball programs.

There is SSI's COMPUTER BASEBALL, but the game is a bit on the buggy side and, worse, it was ported over from the Apple II version—hence, no mouse, no Mac graphics. Microleague keeps promising us that MAC MICROLEAGUE BASEBALL will be out "soon." As a weak substitute for the Senators and a true baseball strategy program, Washington Area Mac owners could buy one less-than-satisfactory arcade "baseball" program. While I am a loyal GAMESIG member unto death, I do not have a penchant for arcade games. Actually, I do own one arcade game, but I think the last time I played it was about the same time the Red Sox took a Series.

So when I got the nod to review HardBall (Accolade, \$49.95 list for Mac version), billed as a "strategy arcade baseball game," I had doubts. I was doubly doubtful when the package told me I was in for "lifelike" graphics, not the "inanimate, sticklike figures" common to other games. Let's be frank: no ball players generated by graphics programs will ever match the real thing—the spectacular grab of Ron

Swoboda's in the '69 Series or the explosive Kirk Gibson home run that won the '85 fall classic—these feats will be forever outside the realm of computer science.

But if you are expecting a bad review, forget it. Even a serious cynic like me was taken with HARDBALL. It wins the highest compliment I can give any game: I'll be playing this one for a very, very long time. HARDBALL combines real strategy with arcade-simulated action. The game is easy to learn, but it is a bit harder to master and that's part of the fun. I was clobbered in my first game by 18 runs, but soon improved enough to battle the computer into extra innings—fourteen innings proved to be my longest game. And while I have only won three of some thirty-five games—shades of the '85 Cleveland Indians!—HARDBALL, like real baseball, offers enough variety to keep me coming back.

After booting up HARDBALL you are treated to a jaunty little tune. Then it is down to business. First, you need to select your line-up. Instead of names like Ty Cobb or Satchel Paige, HARDBALL uses fictional players from two teams—the Champs and the All-Stars. After a while, you come to appreciate the HARDBALL crew, from tiny Jose Guy to lumbering Moose Lorenzen. You can also play a one person or two person game and you have an option on using the contd.

designated hitter rule.

After your line-up card is filled, the action begins. **HARDBALL** uses detailed graphics and screens that make it easy to follow the action. The principal screen uses a center field view of the pitcher, batter and umpire—there is also a manager back in the dugout who is chewing gum and blowing bubbles like crazy. If a ball is put into play or a runner steals, another screen pops up showing either the right or left side of the field, depending on where the action takes place. These play screens feature a smaller inset screen showing the runners' positions and movements on the diamond. After every out, hit, half inning, or anytime you press the space bar, you get a "Manager's Decision Screen" which gives you basic information on players, allows you to substitute or exchange players, and allows you to set a special defense or intentional walk. Pitch selection and offense strategy are selected with the mouse on the principal screen.

Another feature of **HARDBALL** is the realistic, digitized sound. If a strike is thrown, you hear the umpire's voice shout "STRIKE!" Sharp hits, bunts, and the slap of horsehide into a leather mitt are also heard, as well the roar of a real crowd.

The sound is nice, but it is the play that's the thing in **HARDBALL**. This is no simple-minded arcade shoot-'em-up game that substitutes baseball suits for spacesuits: this game requires some serious thought and planning. On defense, you have to select your pitch, set the defense and control the play. You also control batters and runners as they hit, bunt, and steal. Managers can also make last minute substitutions or position exchanges.

More importantly, the numbers you see in **HARDBALL** mean something. A .310 hitter is more likely to connect than a .240 hitter. A .240 hitter with a lot of home runs will strike out a lot, but if he gets a piece of the ball, look out! You are better off with a pitcher who boasts a 3.01 ERA over a 6.00 ERA, but all pitchers lose their edge after six or so innings, so you have to check for signs that your hurler is tiring late in the game. And if you get into one of those troubling righty-lefty, pitcher-batter confrontations with one out and runners at second and third, you are well advised to issue

the intentional walk. You have also got to pay attention: once I substituted a hitter for a pitcher and forgot to put in a new pitcher. As you might expect, an outfielder cannot throw a decent pitch, but I made a change before any harm was done.

This need for information to make informed decisions sparked one of my few big complaints with **HARDBALL**. To check on running speed, number of home runs, and some other stats, you have to go back the menu to look up a player—it is not on the main screen. Worse, you can only look up your own players, not the opposition. Also missing is a "pick off" option for pitchers. Fielders can attempt to pick off runners when a ball is in play, so why can't pitchers try to cut down on steal attempts by keeping a runner close to the bag?

Some more minor complaints about **HARDBALL** concern the sound. Between each half inning there is a snatch of music similar to that heard in a ballpark. Apparently, you can't turn this feature off between innings except by slapping the space bar after the music starts. I have a more petty complaint about the crowd noise—they blindly cheer for anyone. A pitcher will receive a wild round of screams after a strikeout, but if the next pitch is a home run ball, the crowd goes ape for that too—*twice*, yet. I would have greatly preferred giving cheers to the selected home side and catcalls to the visiting bums.

The documentation is the weakest part of the **HARDBALL** package. The pamphlet that comes with the program includes some grammar bad enough to make a sixth grade schoolmarm wince (e.g., "the pitcher of choices are presented at the bottom of the screen"), some suspect baseball terms (one section is entitled "Chasing after the ball"; when I was kid, we used to call that sort of thing "Fielding"), and a slap-dash approach to organization (after you insert the disk, your first screen is "Game Options," yet the docs tell you to insert disk, go on to give several tips on how to play, *then* tell you what to do with the "Game Options" screen).

But these points do not detract from one important fact: whether with the computer or a friend, **HARDBALL** is a cleverly engrossing game that gives you an all-around good time. I even pulled off a quick game during the Super Bowl when things got boring. For those interested in the results, it was Mac-3, Lindstrom-0. ☺

CHAMPIONSHIP WRESTLING: A REVIEW

by Michael and Joel Schor

CHAMPIONSHIP WRESTLING (Epyx, Apple // Series with 128K) begins after the player selects from one of eight gladiators to represent himself in the ring. They have appropriately endearing names—Zeke Weasel, Prince Vicious, Howling Manslayer—and mottos like "Scalps? I'm talking heads!" The selected wrestler then must scrap with a second wrestler, the player's computer-driven opponent. Once the player has mastered the necessary moves, holds, swings and slams, while managing to hold onto his strength which is constantly diminishing throughout the match, he will prevail. A time clock keeps track of the seconds and the strength. It announces through a bell sound who is the winner.

On our new Apple IIs, the colors, resolution, sound and animation are excellent. Up to eight can play. Michael (age

10) and Joel (age 10 plus 39) both liked the game. They recommend it for killers of any age, bored Karate Kids, boxers, players of these older games which suggest immediate comparison with **Championship Wrestling**. ☺

Bop 'N' Wrestle contd. from pg 34

are very rough looking and not too detailed. This is not that bad a rendition of a wrestling match and once you get the hang of it, it becomes quite enjoyable. At this point my characters are still clumsy! ☺

Operant Systems

--- HARDWARE ---

DOT-MATRIX PRINTERS---

| | |
|---|--------|
| Epson FX-86e (200 cps, 32 cps NLQ model)..... | (call) |
| FX-286e (200 cps wide carriage)..... | (call) |
| LX-86 (100 cps, 16 cps NLQ model)..... | (call) |
| LQ-800/LQ-1000 (180 cps, 24-pin NLQ model).... | (call) |
| Okidata 192-Plus (200 cps, NLQ model)..... | 369 |
| 193-Plus (192 column version of above)..... | 549 |
| 292/293 (200 cps draft, 100 cps NLQ, 18-pin) (call) | |
| Toshiba 321 (216 cps draft, BEST print for the buck)... | 519 |
| 351 (288 cps, wide carriage version of above)..... | 1099 |
| NEC P5/P6/P7 Pinwriter (24 wire high-quality matrix) (call) | |
| Panasonic 1091i (160 cps, Epson-compatible "Best Buy").. | 295 |
| 1080i (120 cps, as above)..... | 229 |
| Citizen MSP 20 (200 cps matrix, Epson-compatible)..... | 349 |

DAISYWHEEL & LASER PRINTERS---

| | |
|---|--------|
| Epson DX-20 (20 cps daisywheel, Diablo compatible).... | 369 |
| Citizen Premier 35 (35 cps, fastest for the money).... | 499 |
| Qume LetterPro 20 (20 cps daisywheel)..... | 449 |
| Silver-Reed 800 (40 cps, Diablo-compatible)..... | 759 |
| 600 (25 cps daisywheel, wide carriage)..... | 569 |
| NEC Elf (16 cps, par & ser interface, NEC/Diablo emul.).. | 419 |
| 8830 (55 cps daisywheel, built like a tank)..... | 1195 |
| Diablo 635 (55 cps daisywheel, replaces 630 model).... | 825 |
| Canon Laser Printer (8 pages/min, Diablo compatible).. | 1995 |
| Epson, Okidata, H-P, QMS, AST, Quadram, Qume lasers. (call) | |
| Postscript upgrades for Canon-based lasers..... | (call) |

MODEMS---

| | |
|--|-----|
| Hayes Smartmodem 1200A (1200/300 card for J[+]/J[Ce]).. (call) | |
| Micromodem J[Ce] (300 baud card for J[+]/J[Ce] w/sft).. | 145 |
| Smartmodem 2400 (2400/1200/300 baud, RS-232)..... | 599 |
| Smartmodem 1200 (1200 baud, RS-232)..... | 389 |
| Smartmodem 300 (300 baud, RS-232)..... | 145 |
| Anchor Automation Express (1200/300 loaded w/ features) 219 | |
| Volkmodem 12 (1200/300 baud, RS-232)..... | 139 |
| Lightning 24 (2400/1200/300, RS-232)..... | 325 |
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| US Robotics Password (1200/300 baud, auto-dial/answer).. | 199 |
| Courier 2400 (2400/1200/300, autodial/ans)..... | 395 |
| Zoomodem J[Ce] Plus (300 baud card w/adv software)..... | 119 |

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| Applied Engineering Z-Ram Ultra 3 (256K+, clock, CP/M).. | 259 |
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| Practical Peripherals SeriALL (for modems or printers).. | 99 |
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| SuperCalc 3a (super spreadsheet/graphics for J[Ce]/c) 135 | |
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| | |
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| | |
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| Micah AT 20 or 30 (fast internal hard disk)..... (call) | |
| Peripheral Land 20 or 30 meg SCSI drive..... | 795/949 |
| Video Tech 800K external floppy..... | 259 |
| MacSnap Memory (upgrade 512K to 1 meg or 2 meg) 169/475 | |
| Omega 10/20 meg removable cartridge drive..... (call) | |
| Kensington Mac System Saver (fan & surge protector).. | 75 |

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Pascal News

by Robert C. Platt

Errata. Two typos crept into last month's animals program: (1) In procedure *Init*, insert a *begin* after *with root^do.*; (2) The global variable *done* declared in the 14th line of the program should be type *boolean* instead of *char*. I regret any inconvenience this may have caused.

MacApp. Heaven knows that "stand-alone" applications on the Mac and the IIGs are tough to write. Fortunately Apple is *trying* to make it easier with "MacApp," a standardized application shell into which you add routines to implement your customized menu selections. MacApp is now being sold through APDA. They are also offering their own disk of MacApp applications. MacApp requires Lisa Pascal, MPW Pascal or TML Pascal ver 3.0 to run. Now that I have bitten the bullet and actually purchased MacApp, I hope to cover it more fully in future columns.

The reason why so few Pascal implementations support MacApp is that it uses "objects." Objects are an extension to Pascal which associate procedures with particular data structures. An object oriented language focuses on these data structures and the actions taken upon them. This is a good way to think about the Mac interface, because visual items, such as windows and menus can be treated as objects.

Object Logo. MPW Pascal and TML Pascal are not the only Mac languages to adopt an "object-oriented" approach. The grandfather of object-oriented languages is Smalltalk. APDA sells a non-commercial implementation of Smalltalk-80 for \$. Another "object-oriented" language available on the Mac is Coral Software's *Object Logo*. This is an extension Logo, which was developed by Seymour Papert at MIT. The Apple Logo implementation is still very popular in introducing children to programming. Yet, Apple Logo and Object Logo are much more than a kid's toy. They support recursive programming and list processing. Hence, they are well suited for artificial intelligence experiments. Object Logo implements all of Apple Logo except for "packages." In addition, Object Logo supports the Mac interface. I will give Object Logo a full review in a separate Journal article. (Coral Software, P.O. Box 307, Cambridge MA 02142; \$79.95)

Apple Pascal 1.3. I am pleased to report that Apple is "for the present" planning on continuing Apple Pascal as a retail product. This is the greatest triumph for a fan-letter writing campaign since Star Trek was uncanceled as a TV series. Thanks for your letters.

Handles. Last month, I discussed *pointers*. A more advanced topic is *handles*. Handles are the key to using the ROMs on the Mac and on the Apple IIGs. A handle is a pointer to a second pointer.

Handles address the following problem. The memory managers on the Mac and IIGs want to move data around so as to free up space. Because a pointer holds the address telling where the base object is stored, if the object is moved in memory, the pointer must be updated to keep pointing to the intended object. Consider the following diagram:

Figure 1 shows the Mac's memory before free memory is

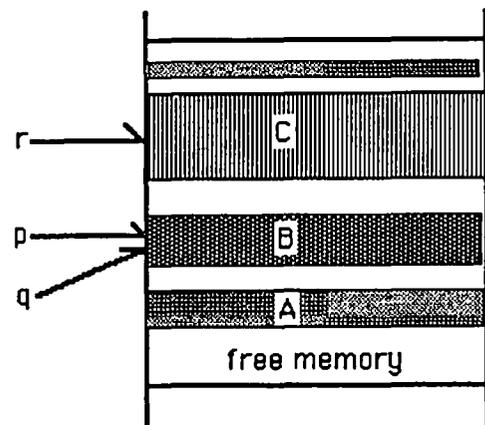


Fig 1

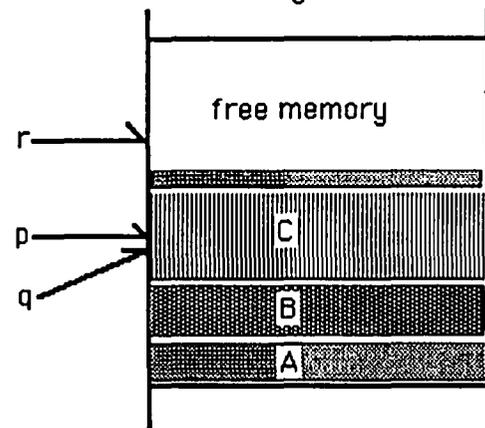


Fig 2

consolidated. Figure 2 shows memory after the shift. The pointer *p* must be updated. However, even if the Mac's memory manager knew that *p* was to be updated to follow object B through memory, a Pascal program could assign several pointer variables to refer to the same object. For example, pointer *q* could be made to point to object B by the assignment statement: *q:=p*.

Handles solve this problem. A block of storage is marked so that it will not shift when free memory is collected. Pointers to the various objects are then allocated from this fixed block. They are called, "master pointers." Your Mac and IIGs programs then use pointers to these master pointers ("handles") to refer to the objects. Because the master pointers are allocated from the fixed block, the value stored in the handle doesn't require updating when the free memory is consolidated. However, the system knows which master pointers belong to which data objects, so that the memory manager automatically updates the addresses in the master pointers when the objects are shifted around in memory. Figure 3 illustrates a handle system.

To allocate an item, a Pascal program calls function *NewHandle* instead of calling procedure *new*. *NewHandle* will allocate memory for an object, allocate a master pointer to the object, and will return the address of the master pointer. The memory manager will continue to update the master pointer

contd. on pg 47

WHO ME, A SYSOP?

by Leon H. Raesly

SURE, WHY NOT? It's fun, develops contacts and friendships with other Apple users in the Pi, and performs a service to your Club! "But I can't do that." Sure you can, come on, it's a hobby! Let me give you an idea of what SYSOPs do. Then you'll see!

First, let's look at the environment where SYSOPs live. The TCS (Tele-Communications System). This is the expanded BBS (Bulletin Board System) of the Washington Apple Pi. Available to you with your computer, a MODEM (MOdulator/DEModulator), and a software program. A simple call (986-8085) gets you connected to a 5-line system. It automatically rolls over to the next available telephone line. Once connected to the TCS (with a password obtainable from the Pi office for only \$6 per year), you are able to access four separate conferences, each with 32 separate Boards. Like 128 DIFFERENT BBS's all on one telephone line!

Each Board is organized around a topic, and each has an additional 99 Library files with permanent information maintained there. Each message is just the same as one posted on the Bulletin Board of your school, or the local grocery store. Asking for information or giving it, it is a giant community paper, updated hourly or more often.

The four conferences (and their related Board)s can be seen with the list of SYSOPs at the end of this article. Perhaps you know some of them!

HOW & WHY OF SYSOPING

An active SYSOP can mean the difference between a dull, not often used, Board, and a challenging, active, exciting, regularly visited Board. Here are some of the "Secrets" of the more active SYSOPs. (You might also leave a PRIVATE message (asking for tips) to some of the following SYSOPs on their Boards:

1. Karen Rall - Pascal Programing (Conference 2)
2. Paul Schlosser - The Redskin line (Conference 1)
3. Richard Rowell - Lists-Lists-Lists (Conference 1)
4. Tom Vier -][, +,e,c Hardware (Conference 2)

and ask David Gursky (WIZOP - Conference 3) for any especially good ones there. (You can leave a PRIVATE message to him on the Misc. Board on Conference 3).

INTEREST

Clearly, the first requirement to be a SYSOP of a Board is INTEREST! Interest in the Boards topic (you thought I was going to say knowledge, didn't you!). Interest in the Topic, and in people using/knowing about the Topic. This is far more important than an exhaustive knowledge of the subject. Sure knowledge at some level is both useful and helpful, but interest leads the parade.

STOP BY AND BE HELPFUL

First, check your Board. At least 2 to 3 times a week if possible. You will be given more calls being a SYSOP (as well as more time) so use it to your Board's advantage. Read not only new messages, but check back several days (the date and time is a part of each message) and see if earlier questions were answered; if not, try a stab at it yourself. Or suggest where the individual might get help or information—other

Boards, or outside sources (libraries, books,etc.).

MOVING MESSAGES

Also, you need to help people find the right Boards to leave messages. If they leave a message inappropriate for your Board (Such as a Pascal Programing question on The Gourmet Board) make it PRIV, ask them to move it, and suggest which Board is the appropriate one. Keep the tone of your message light. Offer to tell them how, if they need help, or suggest the Library file on TCS Comments and SUGGS titled "How to move a Message" for help. By making the message PRIVate, instead of deleting it, no one else will see it and thus a long (T)hread of messages will not develop, and they can (A)lter it, capture it to a Temporary file and then they can (D)eleate the original message.

Don't forget to ask them to delete it after they move it to the correct Board. The problem with inappropriate messages to a Board is twofold: If it is a message that has general interest, you will soon have a thread going on it, none of which is related to your Board's topic, and, second, others that might be interested in the subject of that message may not see it, since they could have Z'ed your Board out. (No, as much as you might like everyone to read your Board, some people just won't be interested in your topic. Sorry, that's just a fact of life!

DELETE

Clearly, check the PRIV and public messages for "out-of-line" or "illegal" messages, and delete them, leaving a PRIVATE message as to why you did. Check the "Guidelines" in the Library at Main Menu for the SYSTEM guidelines.

THORNY ISSUES

Copy protection is a particularly thorny issue. The TCS policy is no discussing that at all, even to move copy-protected programs to /RAM or a hard drive. You can't tell whether it is a purchased disk, or simply "Borrowed" from a friend. In addition, software companies and dealers representatives use this SYSTEM, and we do not in anyway want the Pi to get ANY negative reputation as a pirate Board, or even SEMI-pirate Board! This policy was affirmed (after a lengthy discussion) by the Pi BOD (by a vote of 9-3) at their January 1987 meeting.

LIBRARIES

Besides trying to be helpful, and the unavoidable policing function, there is another very important function you can do to serve your readers. This is the Library. You may have (currently) up to 99 Library files. We can probably increase this later if we need to. Try to collect and save files to the Library on topics related to your Board's topic. This can make a Board very active and useful for your readers. If you ran the Gourmet Board, then files of recipes, the ambience and how to create it for an ethnic meal, all would be appropriate. Other ideas for such a Board would be: Source of ingredients for unusual recipes; list of stores selling ethnic food and cooking supplies; books and sources of books on ethnic, regional and other Gourmet cooking; public and other libraries with special Gourmet sections; classes by recreation departments (in the contd.

TOTAL metro area, not just the county you live in) on Gourmet cooking; local and national schools on Gourmet cooking; and perhaps typical ingredients required for certain ethnic Gourmet cooking by ethnic group; and many other ideas you might come up with.

Encourage people to leave topics for files, or even send you such files. (They can leave a message up to 100 lines (and very long potential files can be broken in to several segments by them, left in several messages, then you can capture them, combine them together, and create one long Library file), and you can leave files up to 200 lines. Or have them send it to you in the mail. For how to upload to Library files, check the file in the Library of the TCS Comments & SUGGs titled appropriately enough, "How to upload Library files". If the file is too large, leave a message on the TCS Comments & SUGGs Board to Lou Pastura, and arrange to get it to him. This can be by disk, modem, or however the two of you arrange. Be sure to give him the name you wish to use for the file, as well as where you wish to place it (use the Board name, the TRUE number, if you know it), as well as the file number.) Shortly, however, it will be possible for SYSOPs to upload and copy directly to their Board files of any size.

Another source for files is messages. As an example, quite a few files on the][+,e,c Hardware Board were originally left as messages, but seemed to have a lasting value as information, and were "Archived" to the Library. You can also combine several messages together (as done in the "Neat Graphics & Sigs" on Eric's Room Library (true number C1.B10).

Libraries are a very important adjunct to the Topic's message base, and will help maintain an active Board. Each time you leave a Library file, leave a general message to your users that it is there. Tell them the Name, and file number. Leaving a message announcing a new file serves three useful services.

1. Alerts your readers to its presence.
2. Reminds readers of the function of Library files (since we get 20-25 new people on the SYSTEM each week, many people don't even know of these Libraries!).
3. And last, but far from least, it leaves a new message on your Board.

Even if the SYSTEM users have Z'ed (the process of a user selecting only certain Boards to be shown to them, so that they can skip Boards whose topic they are not interested in. The command to do this is Z (which stands for Zilchbrejkn) IN your Board; most use the command R)ead-all, which now SKIPS all Boards with no new messages! So by telling people that there is a new Library file, you are, in effect, alerting your readers to read your Board!

SYSTEM PRIVILEGES

You have added to your profile several privileges to enable you to do some of the things indicated above. These privileges are:

DELETE
 FILER
 POLLING

Delete = Delete any message from anyone, except me! This is restricted to your Board only. It also gives you the ability to read Private messages on your Board only. Not so much the ability, as they are simply presented to you in the

normal course of your reading messages. This is for security reasons. If anyone needs PRIVate messages that are TRULY PRIVate, they should arrange to meet the individual in the lower level of a parking garage at midnight, and exchange info there! PRIVate messages are mostly for the convenience of others—so that unrelated messages between two individuals do not clutter the message path (especially now that Paul Schlosser has his MOD to skip all PRIVate messages if you are not the recipient (or are the Board SYSOP, which you are!)

Filer = Create and work directly with Library files. This is a Community effort, and you can work with any Board's Library files. So far, there have been no conflicts, just helpful activity (such as moving a particularly appropriate message from your Board, to someone else's Library who has started a file for that type of info).

Bulletins = Create and modify the Bulletin for your Board. There are basically two types of Bulletins:

1. Static. This type of Bulletin is general graphic in nature, and doesn't change. For two excellent examples, check out "The Lists" Board on Conference 1, The Lists Board. Also see "The Word Processing" Board on Conference 3.

2. Current info. This type of Bulletin attempts to keep you up-to-date with events relating to your Board. Such as meetings for SIGs, special events in the area, etc. Two examples of this are: "AppleWorks" on Conference 2, and "The Game SIG" on Conference 1.

Polling = The ability to leave interactive messages as a method of polling your readers for information and other types of responses. For an excellent use of them, check out Paul Schlosser's "The Redskins Line" on Conference 1.

PERKS

Some of the "Perks" of being a SYSOP. Expanded time and expanded number of calls. You get to read PRIVate messages. Not as big a deal now as it used to be, now that PRIVate messages are skipped for all but the recipient (and you). I think the two biggest "Perks" are: it's fun! And it's satisfying! And you get respect for your efforts and accomplishments!

Remember, the primary function of the SYSTEM is information. Both providing it, and as a forum to secure it. And BOTH the Message Bases themselves, as well as the Library files, serve that function!

VOLUNTEER

So, you see you could do it! And if you look over the Board names below, glance at those with no SYSOPs name beside it. Maybe you would be interested in that Board. Or think of a topic that interest you that is not listed, give me a call (or leave a message on the TCS Comments & SUGGs Board, and maybe we can try a Board with that topic, and see if there is a wider interest in it!

Good SYSOPing, and have fun!

WHO'S ON FIRST?

The List of SYSOPs for the Pi TCS

Conference 1 - PI & GENERAL INFO

| Conference | WIZOP | Leon Raesly | 1 |
|------------|--------------------------|----------------|-------|
| B# | BOARD | SYSOP | TCS # |
| 1 | Pi Club <u>NEWS</u> Only | Nancy Seferian | 1636 |
| 2 | Pi Journal | Bernie Urban | 43 |
| 3 | Pi Journal Indexes | Harvey Kaye | 338 |
| 4 | Heard Any Good Jokes? | | |

contd.

| | | |
|-----------------------------|-----------------|------|
| 5 Apple /// | Dave Ottalini | 359 |
| 6 World Events | Robert Langston | 1106 |
| 7 The Scene & Reviews | | |
| 8 Other Computers | Mark Sheftell | 14 |
| 9 Music Groups & Performers | Dan Mahaffey | 967 |
| 10 Eric's Room | Eric Rall | 23 |
| 11 Apple Link | Bernie Urban | 43 |
| 12 Micro Industry Report | Joe Chelena | 6 |
| 13 TCS Comments & Sugg. | Lee Raesly | 1 |
| 14 The Gourmet | Fred Puhan | 1208 |
| 15 Game SIG | Thomas Johnston | 409 |
| 16 Lawyers' SIG | Harvey Kaye | 338 |
| 17 The Redskins Line | Paul Schlosser | 29 |
| 18 Historical War Gamers | John Massey | 51 |
| 19 Micro-Genealogy | | |
| 20 IBM PC & Clones | Euclid Coukouma | |
| 21 Computer Music | Ray Hobbs | 265 |
| 22 Senior Net | Robin Hopes | 1520 |
| 23 The Lists Board | Richard Rowell | 58 |
| 24 Guest SYSOP | | |
| 25 The "Investor" | Mark Sheftell | 14 |
| 26 Pi DOV's | Lee Raesly | 1 |

Conference 2 - Apple][, //e,c,gs

| | | |
|-------------------------|--------------------|------------|
| <u>Conference WIZOP</u> | | |
| <u>B# BOARD</u> | <u>Lou Pastura</u> | <u>572</u> |
| 1][Telecommunications | Allan Levy | 883 |
| 2 AppleWorks | Ken De Vito | 67 |
| 3 Pascal Programming | Karen Rall | 812 |
| 4 Other Languages | ??? | |
| 5][+ e c Prog. & Dos | Tom Vier | 76 |
| 6 CP/M | Art Wilson | 1470 |
| 7 dBase II & WordStar | Nick Veloz | 121 |
| 8 Apple II Tech Notes | Tom Vier | 76 |
| 9 Apple Writer & WPL | Richard Rowell | 58 |
| 10 Word Processors | Kim Brennan | 561 |
| 11 Data Bases | Kim Brennan | 561 |
| 12 Graphics & Related | B. B. Stanfield | 1191 |
| 13 Software Misc. | Henry Donahoe | 338 |
| 14 Hardware Misc. | Tom Vier | 76 |
| 15 Digitizing & OCR | | |
| 16 //gs Software | Bob Rusk | 1371 |
| 17 //gs Hardware | Rich Mlodoch | 0164 |
| 18 //gs Miscellaneous | Bob Rusk | 1371 |

Conference 3 - MacIntosh

| | | |
|------------------------------|---------------------|------------|
| <u>Conference WIZOP</u> | | |
| <u>B# BOAR</u> | <u>David Gursky</u> | <u>945</u> |
| 1 Accessories | | |
| 2 Business Accounting | | |
| 3 C Programming | | |
| 4 Data Bases | David Gursky | 945 |
| 5 MacDesk Accessories | | |
| 6 Desktop Publishing | | |
| 7 Educational Software | | |
| 8 Entertainment Software | Dave Romerstein | 1398 |
| 9 Graphics & Design Software | Bill Baldrige | 1051 |
| 10 Hard Disks | David Gursky | 945 |
| 11 Other Hardware | | |
| 12 Misc. Programming | | |

| | | |
|---------------------------------|--------------|-----|
| 13 Organizational Tools | | |
| 14 Pascal Programming | | |
| 15 Printers | | |
| 16 Rumor Manager | David Gursky | 945 |
| 17 Software Misc. | | |
| 18 Spreadsheets | | |
| 19 Tech Notes | | |
| 20 Telecom. Hardware & Software | | |
| 21 Utilities | | |
| 22 Word Processors | Bill Qualls | 275 |

Conference 4 - Classifieds

| | | |
|--------------------------------|-------------------|------------|
| <u>Conference WIZOP</u> | | |
| <u>B# BOARD</u> | <u>Allan Levy</u> | <u>883</u> |
| 1 Auto-Motorcycle Etc. | * | |
| 2 Household Furnishings | * | |
| 3 Household Misc. | * | |
| 4][][+ // e c Software | * | |
| 5][][+ // e c Hardware | * | |
| 6][][+ // e c Miscellaneous | * | |
| 7 Mac Software | * | |
| 8 Mac Hardware | * | |
| 9 Mac Miscellaneous | * | |
| 10 Vacations & Resorts | * | |
| 11 Employment Wanted | * | |
| 12 Employment Offered | * | |
| 13 Tutoring - Offered & Wanted | * | |
| 14 Not Otherwise Listed | * | |
| 15 Boats & Boating Related | * | |
| 16 Yard-Lawn-Farm Implements | * | |

* These Boards covered by the Conference WIZOP.

| | | | | | | | | | | | | | | | | |
|---|---|--|----------------|-----------------------|------|------------------------------|------|---|-----------------------|------|-----------------|--------------------|-------|-----------------------|-------|--|
| ALL ASSEMBLED & TESTED WITH ONE YEAR WARRANTY | | | | | | | | | | | | | | | | |
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| 128K RAM BOARD <ul style="list-style-type: none">• Expands II+ 64K to 192K• Saturn (Titan) Software Compatible• Combine with PLUSWORKS XM and Expand Your APPLEWORKS DESKTOP to 135K on Your Apple or Franklin <table border="0"> <tr><td>Above BD w/o memory</td><td>\$65</td><td rowspan="3">\$89.00</td></tr> <tr><td>PLUSWORKS XM Software</td><td>\$39</td></tr> <tr><td>128K Baseboard Ltd. Quantity</td><td>\$10</td></tr> </table> | Above BD w/o memory | \$65 | \$89.00 | PLUSWORKS XM Software | \$39 | 128K Baseboard Ltd. Quantity | \$10 | 256K/80 COL. BOARD <ul style="list-style-type: none">• 256K Expandable to 1.0 Megabytes!• Software Selective 40/80 Columns• 100% Extended 80 Col. Card Compatible• FREE! Software Expands APPLEWORKS DESKTOP to 252K (1014K with 1.0 MEG) <table border="0"> <tr><td>Above BD w/o Software</td><td>\$89</td><td rowspan="2">\$109.00</td></tr> <tr><td>512K with Software</td><td>\$139</td></tr> <tr><td>1.0 MEG with Software</td><td>\$238</td><td></td></tr> </table> | Above BD w/o Software | \$89 | \$109.00 | 512K with Software | \$139 | 1.0 MEG with Software | \$238 | |
| Above BD w/o memory | \$65 | \$89.00 | | | | | | | | | | | | | | |
| PLUSWORKS XM Software | \$39 | | | | | | | | | | | | | | | |
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| Above BD w/o Software | \$89 | \$109.00 | | | | | | | | | | | | | | |
| 512K with Software | \$139 | | | | | | | | | | | | | | | |
| 1.0 MEG with Software | \$238 | | | | | | | | | | | | | | | |
| SUPER SERIAL BOARD <ul style="list-style-type: none">• II+/IIc• Similar To Apple's Super Serial Card• 50 19,200 Baud Selectable• Communication & Terminal Use \$49.00 | 80 COLUMN BOARD <ul style="list-style-type: none">• II+/IIc• Similar To Video Videterm• Upper & Lower Case Generation• Inverse Video \$49.00 | | | | | | | | | | | | | | | |
| RS 232 CABLE 10' MALE MALE All 25 Lines Connected | \$12.95 | 40/80 COLUMN SOFTWARE SWITCH For Above Board | \$14.95 | | | | | | | | | | | | | |
| Z80 CP/M BOARD <ul style="list-style-type: none">• II+/IIc• A Low Cost Microsoft Compatible CP/M Board• Supports 48K And 64K Apples• Turbo Pascal Compatible \$39.00 | SUPER COOLING FAN <ul style="list-style-type: none">• Sticks on Side of II+/IIc Color Matches Apple• Power Switch Controls AC to Computer & Dual Rear 3 Prong AC Outlets \$29.95 | | | | | | | | | | | | | | | |
| JOYSTICK III FOR II+/IIc/IIc | <ul style="list-style-type: none">• Similar to HAYES MACH III• Large Fire Button on Stick• Selectable Self Center & Non Self Center \$24.95 | IIc NUMERIC KEYPAD <ul style="list-style-type: none">• 16 Keys Total• 0-9 and Decimal Keys• . . . * and Return Keys \$39.00 | | | | | | | | | | | | | | |
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THE JOURNAL INDEX: or Did We Bite Off More Of The Apple Than We Can Chew? by Harvey Kaye

Washington Apple Pi has been publishing its newsletter, later to become known as this Journal, practically since the day the organization began. Washington Apple Pi began in late December of 1978 and the first newsletter was issued in January of 1979. At first, it was more a newsletter than a Journal, but around 1980, with 142 paid up members, it began to acquire some of its characteristics which makes it such a fine Journal today.

In January 1980, meetings were being held at George Washington University, and Genevieve and Bernie Urban were responsible for publishing the Journal each month. For a period of about 8 months Mark Crosby took over the publishing of the Journal, and then back to the Urbans. In the October 1980 issue, the WAP Bulletin Board was announced and on-line. By the following year, the membership rose to over 500 members.

The indexing of the Journal beginning with the January 80 issue has now begun, and some of the completed Journal indexes can be viewed or even captured on the WAP Telecommunications System (TCS). Shortly, the same indexes which are in the library of the TCS, Conference 1, Board 3, will be available in the WAP Office library and anyone may review them to find an article of interest.

The indexes for the complete years 1980, 1981 and 1986 are finished and each is a separate file in the library of the Journal Index Board (Conference 1, Board 3). This is a relatively new Board and it is not clear how much use the library section is being given. Of course, when the indexes for each year are combined and an overall index prepared, this will eventually include all years between 1980 and 1987. Such an index will be massive, and it probably will not be available on-line on the TCS. Rather than take up so much space on the TCS hard disk, users will be instructed on how to use AppleWorks (and probably other data base programs as well) to download the index for each year and then combine them into a single file for sorting and searching.

Unfortunately, those with AppleWorks unexpanded will probably not be able to handle more than a single year at a time due to the 1350 record limitation in unexpanded AppleWorks.

For this year (1987), the indexes are completely up-to-date and the authors of articles written and published in a 1987 Journal are encouraged to carefully review these indexes sufficiently to ascertain whether they are satisfied with them. It has been difficult to mobilize Journal authors to review the indexes and send us their comments so that we can improve on the indexes while we are still in the process of creating them. So please take some time to provide comments to us, and we will take each one into consideration when making some changes to the already completed indexes. Of course, this will also help in indexing future Journals with a minimum of problems. Once this process is complete, it will be a massive task to make any significant changes.

The idea is that at first the indexes will continue to be

posted in the library of the Journal Index Board on the TCS, and that later they will be available in the WAP library at the WAP office. There is, on the TCS, a Board called the Lists Board (Conference 1, Board 23), onto which all of the indexes in text format are being located year by year. This Board presently has a file for each of the completed years, 1980, 1981 and 1986. The 1987 index for January and February is also available. On the Journal Index Board itself, the library, which is now in ASCII text form, will be in word processing format. The intention is that for those who wish to download the indexes they do so from the library of the Lists Board (the ASCII text files), and for those who simply wish to use the indexes on line, they may browse through the indexes in the library of the Journal Index Board (the word processing files).

To make the indexes more useful for on-line users, each year will be presented and sorted in three different ways on the Index Board: alphabetical by title, alphabetical by author, and alphabetically by subject. There will be some years combined, but we will probably not be able to provide a single index with all the years 1980-1986, because it will create too massive a library file. (So far three years worth of indexing has created a data base file with over 800 records, each with 10 fields.) However, the WAP Office library will have hard copies of three different 1980-1986 indexes, one by title, another by author and the third by subject. A notice will be published in the Journal when hard copies of the indexes are available in the WAP Office library.

We are still looking for indexers. Anyone who is interested in indexing one or more issues of the Journal is requested to call Harvey at 493-6875 for a Journal to index and a list of instructions. If you will do more than a single issue so much the better, but we certainly appreciate any assistance you care to provide.

Unfortunately, there have been few who have actually done hands-on indexing. Therefore, with the limited number of people available, the process has been slow. For example, the indexing to-date has taken about three months to do, or about one year per month. Years presently to do are: 1982, 1983, 1984, and 1985. We would expect that these will be complete by the end of 1987. The reason it appears that we will be indexing more slowly now than before is that with the extra time off from work for the end of year holidays and the few snow days, our indexers had been able to accomplish more than they will probably be able to do during the remainder of this year.

To answer the question posed by the title of this article: "No! We have not bitten off more than we can chew, because while it has taken WAP seven plus years to produce the Journals being indexed, they will have been totally indexed in less than one year!"

SEQUENCING: Performing in RAM

In the often complex field of computer music synthesis, sequencing is one of the simpler tasks that the computer must perform. It is also an unquestionable miracle of software technology—that part of the system which enables the computer musician to enter music one part at a time, and have the composition come out with all parts synchronized. Using a sequencer, I can (and regularly do) record compositions requiring piano, violin, harp, oboe and other instruments, one part at a time, and have a complete, multi-part composition as output. If Mozart had possessed this kind of music-writing power, he would probably have written another hundred symphonies (and burned out about ten years earlier, I'd wager).

HISTORY. Back in the early days of music synthesizers (that's pre-Apple, gang—really archaic), performing musicians found that a good deal of their effort was going into playing short sequences of notes repetitively. Manufacturers of synthesizers responded by building into the instruments (or adding onto them) small amounts of memory, capable of storing sequences of a few notes. The synthesizers could then be directed to play these memory-based sequences of notes over and over, like a programming loop. This type of firmware addition quickly became popular, and was dubbed a "sequencer". Although sequencers are still made as firmware for performing musicians, the function is more ideally suited to a computer, which generally contains much more available memory than does a synthesizer add-on. Thus, most sequencers today are software products which run on almost all microcomputers.

MIDI IN/MUSIC OUT. The implementation of the MIDI (Musical Instrument Digital Interface) standard has made it possible to interconnect several synthesizers through a single microcomputer. The MIDI interface sorts out musical information being transmitted between the computer and the synthesizers into *channels*. Sixteen unique channels are normally supported by MIDI sequencers, allowing sixteen different sequences to be transmitted to sixteen synthesizers simultaneously (why sixteen? A natural analogy to the sixteen-track tape used by recording studios). It is up to the musician to decide to which channel each synthesizer should be assigned. The operation is similar to telecommunications, except that sixteen "modems" are accessed simultaneously, with only that information directed to each individual unit getting through. In this way, a better analogy would be a network, with the computer as the server and the synthesizers as satellite workstations. Audio output comes from each synthesizer—the computer itself does not generate the music.

So how does the musical information get into the computer in the first place? The sequencer records sequences in just the reverse manner from the way it plays—the synthesizer sends the sequence via the MIDI interface (and over the channel to which it was assigned) to the sequencer, which

records it. The sequencer will record on as many channels as can be activated simultaneously, and this will vary from sequencer to sequencer, but many can record all sixteen channels at once. A second method of music entry exists in some (but very few, actually) sequencers: music may be entered directly from the computer keyboard through a Music Editor. This feature is not strictly speaking, a part of a sequencer, but it is sometimes included as a software enhancement. Additionally, the sequencer may include an editor to alter musical information already input into the sequencer, or to change a sequence file which was previously saved to disk. The editor may permit editing of raw MIDI data, a block-representation of MIDI data, or musical notation, or any combination of the three (see Figure 1):

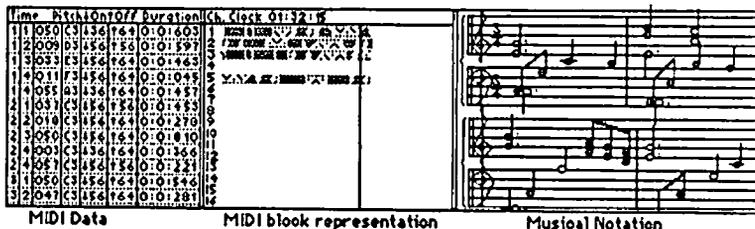


Figure 1

Sequencers normally include global editing features, such as transposing keys, changing metronome settings, dynamics, and so forth. Additionally, some sequencers allow cut-and-paste operations and loops (repeats). The entire input/output process of a full featured sequencer is shown below, in simplified form, in Figure 2:

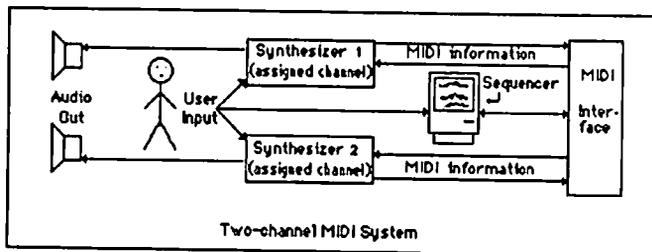


Figure 2

ADVANCED OPTIONS. Because MIDI information consists of more than just which key was pressed when and how hard, a sequence can contain data other than note information. Today's synthesizers contain electronic controls (usually called *parameters*) for substituting and altering instrument definition settings. By entering such data into the sequence, instruments may be modified or substituted on-the-fly directly from within the composition. Another feature of sequencers is the ability to CALL a sequence from within another sequence, a kind of musical GOSUB. Utilizing this feature, we can create a "master sequence" which consists only of calls to other sequences. Suppose, for example, you wish to enter a composition with an A-A-B-A form. You can contd.

record sequence A, then sequence B, then create sequence C, which consists of nothing more than four CALLs, two to sequence A, one to sequence B, and finally the last CALL to sequence A again. Of course, for variety, instrument modification or substitution data could be included between the CALLs (Roll over, Beethoven!). Sequencers also generally include a facility for *step-entering* music—putting notes into the sequence one-at-a-time, without regard to tempo. Since the music can be edited later on, this feature allows non-performers a method of entering musical events beyond their real-time performing capabilities, and thus opening up the world of music to those who, for one reason or another, lack the ability to play the music that they wish to express.

MUSIC, MACHINES AND MIRACLES. The sequencer is the glue, then, that puts together the technological promise of music synthesis. Music is now available to anyone who seeks it. While traditionalists argue that synthesizers and sequencers take the "art" out of music, it can be argued in return that Bach's pipe organs were nothing more or less than primitive synthesizers, and that the symphony orchestra puts multiple instruments under the direct control of the composer and conductor, who may or may not possess the ability to play the instruments they command. Today's technological miracles, both hardware and software, simply put those same resources at the disposal of the average person, not just the musical "aristocracy".



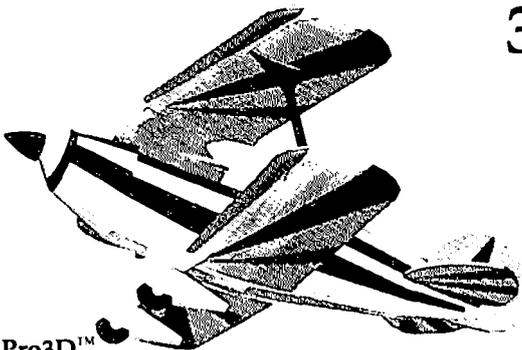
MUSIC SIG is a special-interest group dedicated to music lovers. We use all software and synthesizers, and run on Apples, Ataris, Commodores, IBMs and Macs. Our meetings are held on the second Saturday of each month, in the early afternoon. Call me (490-7484) or Gary Larson (337-4267) for meeting place and time information.

Our January meeting was held at the Public Library at White Oak, Maryland. We inaugurated a library for patch information, limited to user-created configurations, and got together a performing team for the April WAP meeting.

The January program concerned sampled instrument waveform and envelope modifications, and included a demonstration of the Donny Blank's Sound Lab software for the Macintosh and the Ensoniq Mirage synthesizer. Sound Lab is quite powerful, and enables the user to manipulate sampled waveforms and envelopes quite as much as the patches on analog or digital synthesizers.

The next meeting will be held on April 11. Call for time, place and directions.

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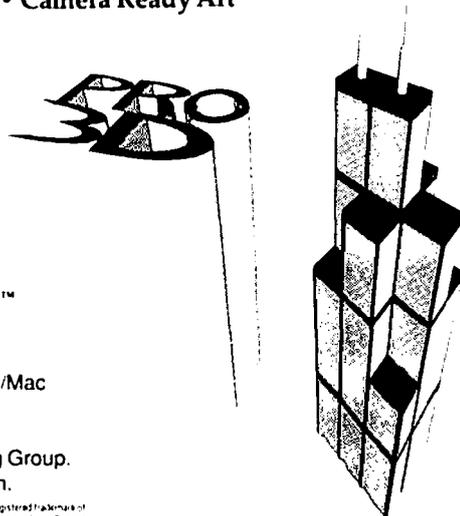
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GROWING UP MAC

by Jay Rohr

On page 3 of the February 1987 issue of the WAP Journal was a rather surprising editorial. "Letraset" is a well-known name in the graphics industry—i.e., those printers and individuals who could not afford the expense of elaborate typesetting equipment. The "poor" side. It was great fun, and in a pinch, one could burnish down their rub-off letters and make lovely headlines in a variety of sizes and styles from the sheets they sold at \$1.50-2.50 a shot, and available still in art stores. They make border tapes, pattern sheets, felt tip pens, etc. We did all this years ago.

With the Mac, who needs it? Letraset realized this, and, according to the editorial, is flitting back and forth between MacPublisher and ReadySetGo. Manhattan Graphics is a solidly-based N.Y. graphics firm, and I considered this information about Letraset picking up the excellent RSG3 improbable, but on checking have found it to be true.

Having an excellent rapport with Manhattan Graphics, and having paid licensing fees for additional copies of their work for distribution to associates/co-workers, I've found RSG3 to be an extremely competent and fast program. Innovative.

Manhattan Graphics beat the other paging programs to the finishing post. Why? They are primarily a graphics business, and they had the incentive to work on a program that would help them in their business NOW. While Aldus is focusing on an IBM version and we're still waiting for version 2.0, RSG has already done what the others have only hinted at.

Plus it is one of the few programs (JustText™ comes to mind) that integrates PostScript into page design, and offers additional control and flexibility to page make-up. (They are, however, going to have to do something about their corny, fake "reverses" and letterspacing on their "reverses". Aldus has successfully written out the outlining around the letters and made them true "white", but this has a lot to do with their verbose "Aldus Prep" routine file—a joke in the industry for anyone who has an inkling of PostScript. By the way, if you use the LaserWriter or LW+, it does become confused when you send both PageMaker files which use only Aldus Prep, and other files which use the LaserWriter Prep. For a safe operation, reboot your Laser when you're done with Aldus.)

If you are using Century LaserFonts, replace the Aldus Prep with the Century version. The icon that appears on the screen will have an LF embedded in it so that you can tell the difference. Michael Mace has done an excellent job with his fonts, and in resolving the problems with Aldus Prep.

The very first version of ReadySetGo3 we obtained had a problem in importing graphics, especially larger graphics. They would disappear all of a sudden on the Laser printout. But Manhattan was quick to update all my disks when I made them aware of this. We are all guinea pigs, to some extent, whenever we purchase programs because our needs and demands, in many cases, were not foreseen by the developers. SuperPaint™ is a case in point. Cumbersome, yes. But on the right track. It is extremely difficult to resolve raster (bit mapped images) with object-oriented images. The QuickDraw routines in your Mac do a double take when they see the two together, and do a flip-flop.

This is what Adobe's Illustrator, Silicon Beach's SuperPaint, Bill Bates' JustText, and both Comic and Graphic Works (a funky set of programs NOT professionally oriented) have chosen to address. It's a serious problem. But since they all communicate, solutions are well on the way. A lot of anguish here for the developers, and frustration for us sometimes. But remember, the alternative to our Mac system are systems costing tens of thousands of dollars.

We are witnessing many well-known graphics companies becoming involved with the Macintosh because of the Mac's super graphics and type capabilities. The Mac IS a typesetter system on the low end: it has freed a lot of us, hasn't it?

Allied/Mergenthaler was one of the first to hook up with the Macs via Adobe, developers of PostScript, and the LaserWriter. Adobe is not adding more true fonts into PostScript for the fun of it. The Mac is fast becoming an industry standard. Agfa-Gaevent, DEST and a host of other corporate giants are throwing in with the Macs. Having been heavily involved with graphics and typography for 20+ years, this comes as no surprise to me. Throw in with a winner.

The 1986 Mac advances have been more revolutionary in terms of forward thrust and development than since the original 128K unit. Programs we used to love 2 years ago are as old hat as a Bogart movie; and the hardware has become SIGNIFICANT.

I have a vested interest in the Mac: I've been living off it since May 15, 1986, and it IS my business-generating machine. It works. But I also want to advise that there is very little time for fun and games: programs are needed that work NOW in this kind of environment, and that's what I use. Hey, they are out there, folks! And both businesses and individuals need a lot of help.

As the title of this article suggests, the Mac has grown up. It's a real CONTENDER. It's delightful if you know what you are doing, and if you are willing to devote most of your spare time keeping up with all pertinent information, programs, hardware, and golden oldies, too. In short, the Mac has become as sophisticated as you want it to be, or as simple as you'd like it to be. It depends now on what you wish to use it for. The programs and the technology are there, and we are in for ONE EXPLOSIVE 1987-1988! The Mac IS the computer of the future. We will all be going into specialty areas from this point because of the vast computer graphics potential it has opened up.

Read the HOTLINE in this issue and you will have an idea of the market specialties and potential represented by those who are experts in specific Mac programs and applications. These are very helpful, dedicated individuals wherein reside the very spirit of the Mac concept; and you have instant reference to them at your fingertip because you belong to the finest User's Group in the nation. These are valuable resources and valuable individuals.

(Jay Rohr has a private practice as a Macintosh consultant and tutor, and has set up Mac systems in newspaper offices and graphics studios for 2 years. His specialty is graphics, commercial art and typography.)

dPubSIG NEWS

by Steven Payne

The Desktop Publishing Special Interest Group held its regular monthly meeting on February 2nd. The session began with questions and answers, including a further report on the the problems and possibilities of refilling your own Laser-Writer toner cartridges (Ron Moore now says it may be too much to fill up both the top and bottom compartments). There were inquiries about interconnecting the Macintosh and the Wang VS.

Chairman Tom Piwovar noted again that all 1987 dPub-SIG meetings are scheduled for the first Wednesday of each month, and then solicited proposals for future topics: among the ideas suggested were possible demos of Ventura Publisher and various scanners, as well as a presentation on different methods of importing charts and graphs into page makeup programs. Announcements were made about the Federal Office Systems Expo on March 10-12 at the DC Convention Center (tickets free), and about the IBM Desktop Publishing SIG (chaired by Mary Stanley) which meets every third Wednesday of the month in the STSC Auditorium, 2115 East Jefferson Street (corner of Executive Boulevard), Rockville, MD. Tom passed out copies of ROLL CALL which he recently converted over to desktop publishing, and briefly discussed a new desktop publishing package called XPRESS as well as the continuing wait for the upgraded version of PAGEMAKER for the Macintosh.

Stuart Silverstone (whose recent article in MacWorld featured dPubSIG member Judy Treible) reported on the Mac World Expo, which included word processing programs such as WRITENOW, WORDPERFECT for the Mac, MIND-WRITE, FULLWRITE, and SCOOP (the latest incarnation of SPUD), utilities such as SMARTSCRAP and THE CLIPPER, and a new flat Abaton scanner which allows you to scan books. Highlight of the Expo was Adobe's ILLUSTRATOR, in which you can trace over scanned pictures to get line images which are then saved as true Postscript files.

Because the overhead projector was unavailable—volunteers still needed to transport it back and forth from the WAP Office!—the group huddled around a tiny Mac screen for demos (by Ron, Rosemary Connelly and Tom) of different spelling checkers, including HAYDEN SPELLER, MAC-LIGHTNING running under PAGEMAKER, and the spell check incorporated into WRITENOW. "The Battle of the Font Makers: Fontographer vs. LaserWorks" is still scheduled for a future session, as soon as the presenters recover from the flu. In March we hope to show various drawing and clip art programs such as CRICKET DRAW, SUPER PAINT and so on. The next regular meeting of the WAP dPubSIG will be on March 4, 1987 at the PEPCO Building (Pennsylvania and 19th, NW) at 7:30 PM. ☺

Pascal News contd. from pg 38

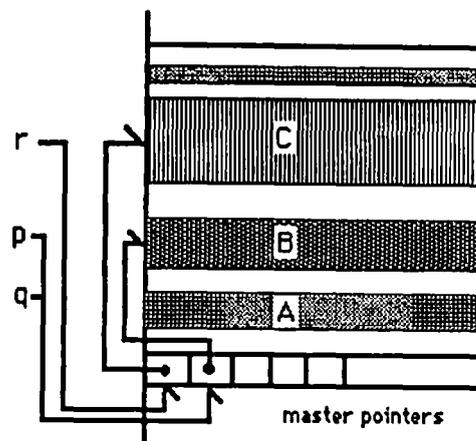


Fig 3

until procedure *DisposHandle* is called.

Accessing fields within a object known by its handle is tricky. If the program copies the value of the master pointer into a second pointer variable, the object should be locked to avoid having the object shift around in memory. Failure to lock the object may result in the copy of the master pointer pointing to the wrong place after the object shifts in memory. Procedures *HLock* and *HUnlock* can be used for this purpose. See *Inside Macintosh* for further details. ☺

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INSTALLING AND USING "THE ROMSWITCHER": A Review

by David A. Hurd

"The ROMSwitcher", is a hardware modification package developed by Orphan Technology and marketed by DAFAX Processing Corporation, 14 North Drive, Malba, New York 11357, (800) 782-7823. This package, combined with the "Macintosh XL Screen Kit" sold by Apple Computer, Inc. will allow a LISA owner to have both a LISA and a Macintosh for continued use.

The RomSwitcher consists of a "piggyback board" for the LISA motherboard, and an external switch for changing modes between the LISA and Macintosh. The Macintosh Screen Kit is a set of ROMs for the LISA and a transformer. The Macintosh Screen Kit is installed by an Apple dealer, who will remove the original LISA ROMs and return them to Apple. This leaves the user with a Macintosh, and no more. The investment in LISA software, such as the "Office System" or "Pascal Workshop" is now lost since the LISA mode of operation has been removed.

The ROMSwitcher, if you install it yourself, allows you to place both the original LISA ROMs (referred to as the 3H ROMs) and the new ROMs (referred to as the 3A ROMs) onto the piggyback board, and insert the piggyback board right into two of the sockets where the 3H ROMs were removed. A simple plug-in jumper cable connects the third 3H ROM socket to the piggyback board.

The instructions which come with The ROMSwitcher are complete and fully tutorial (which is good for an electronic klutz like me). The reasons behind what you are doing are often described and this insight makes for confident installation.

Probably the most difficult part of the whole operation is the installation of the switch and the transformer. The wires which you need to connect up to the video board of the LISA are barely long enough to do the job. The reason is to prevent wires from hanging loose and coming into contact with things that they should not touch. Except for actually attaching the screw which mounts the switch to the under side of the front of your LISA (a piece of cake), all of the connections take place inside the LISA video compartment where there is VERY HIGH VOLTAGE. This is DANGEROUS COUNTRY. The instructions caution you as to the danger and why. They also give very comforting steps for you to follow in discharging the video tube of your LISA. This tube is a large capacitor which stores up to 20,000 volts. That will jolt even the staunchest of electrical wizards, so follow carefully and if you are not comfortable, find a friend who has done this sort of thing before and who is not afraid.

The one thing which the instructions did not spell out clearly was the way by which the covers of the LISA are removed. The back plate is independent of the other removable covers, but the front cover must be removed to remove the top. The front cover also installs onto a lockout switch, so that for the steps at the end where you may have to adjust the fine tuning potentiometers of your video circuit, you will need to leave the top cover off and reinstall the front

cover, then turn your LISA on and boot up so you can observe that your adjustments are going the way you want.

It took me a couple of hours to complete the mod successfully and that really involved doing it twice. I had broken a pin on one of the 3H ROMs as I was removing it (you will be very careful won't you) and my repair must have been a bit insecure because after turning on the power and trying to boot as a Macintosh, all I could get was a frown and an error message outside the range of any documentation I had ever seen. So after a call to Sam Neulinger at DAFAX (owner, designer and developer of Orphan Technology products) who listened patiently, advised that I retrace my steps and in general provided an additional level of confidence to set out again, I actually disinstalled the whole set of mods, fixed the ROM again, reset up as a LISA and tested the machine. It worked fine so I made the whole mod again and this time it booted fine, both in LISA and Mac modes.

I cannot say enough good about this product. You should be aware that the switch should be changed ONLY WITH POWER OFF. This is not a "switch on the fly" system. The documentation advises that changing the switch while power is on may damage your computer. Therefore, this mod may not be for those who have LISAs sitting around the office for anyone to play with. Of course, one could put a little metal box around the switch and put a lock on it, but that might be a bit much. It may be possible to mount the switch somewhere internal to the LISA where curious fingers cannot easily reach.

Finally, having both a LISA (with its still superior software) and a Macintosh with a bigger screen is wonderful. If you don't have a couple of thousand to plug into a Mac and want one, and if you find it difficult to part with your wonderful LISA—try out this product. For about \$245 (including the Apple Mac XL mod and shipping) you can keep what you have and get a lot more. ☺

THE FEDSIG CORNER

by Steve Crawford

The January FEDSIG meeting was held at Apple's brand new Federal marketing office. The AFGO (Apple Federal Government Operations) Briefing Center is located in Reston, Virginia. At the invitation of Apple executives, FEDSIG members were offered a tour of the building as well as a sample of their high tech briefing capabilities. Although far behind the eight-ball, Apple's initial efforts in this market are indeed impressive.

Apple's facilities in Reston consist of training areas, a product showcase of Apple and third party products, and a briefing room with fantastic audio-visual support. In addition, the facilities include offices for the whole crew at AFGO, and an office for John Sculley to use while on the East coast.

Ed Romson, AFGO Area Systems Engineer Manager, demonstrated Apple's ability to catch the executives attention. Ed pointed out that several executive briefings have already perked interests at a number of key agencies. Federal computing issues being aggressively addressed by Apple are: systems standards, desktop communications and multi-vendor compatibility. Additionally, Apple's strength in desk top publishing should have an immediate impact in virtually all organizations.

Getting Macs, or any micros for that matter, into the government is quite an adventure. Federal end users, for example, must wade through not only their own organization's standards and requirements, but must also comply with federal procurement regulations as dictated by the General Services Administration. Once a decision is made as to what equipment to acquire, the award must be made competitively. In the end, after technical specifications have been met, a bid award is usually made based principally on price. This means that a pro-active dealer may lose his investment in pre-sale support to another dealer that has no interest or intention of providing post-sale support. In addition, because of the price issue, an organization risks getting equipment brands of questionable quality that barely meets the procurement specifications. End users who desire to use Apple's technology must also contend with "standards" that often dictate the use of MS-DOS based micros. But there is hope! Organizations fed up with long learning curves and high training costs are taking a second look at Macintosh technology.

WAP's FEDSIG is open to any individual with an interest in Apple's federal efforts. Meetings are normally held at WAP's offices on the third Wednesday monthly at 7:30 PM unless otherwise posted. This column will keep you informed of our activities and will bring you news and interviews relevant to government microcomputing. Let's all welcome Apple's new efforts and wish them the best of luck in shaking those MS-DOS standards. ☺



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MAC Q & A

by Jonathan E. Hardis

Leftovers: In January's Quickies, I mentioned a tip for getting the Imagewriter II to print bidirectionally. I hid it there, since I couldn't test it, and since I didn't know the antidote. A reader called to confirm the tip, and to offer the reverse operation. That is, hold down Caps Lock, Shift, Option and Command when clicking "OK". On another topic, Rich Fay wrote to say that Assimilation Products trackballs are manufactured by Cambridge Automation, 20230 State Road, Cerritos, CA 90701. They can provide parts and maintenance. The ads in the major Mac magazines from Kensington show that they've picked up the product, too.

Q: I don't have a LaserWriter. But I prepare documents for printing on one. How do I be sure that things like margins will be correct?

A: The main thing is to make sure you have current System software. Today, that includes System 3.2, Finder 5.3, and the LaserWriter driver 3.1. (After the new product announcements in March, these will be updated.) Then, using the Control Panel, mark AppleTalk as connected, even if it isn't. Using the Chooser desk accessory, you can select "LaserWriter" as your printer. Thereafter, programs you run (such as MacDraw) will adjust their page margins accordingly. (You may have to select "Page Setup" from the menus if the program is already running in order for it to notice the adjustment.) Some programs, such as MacWrite, will have rulers that don't scale right on the LaserWriter. But LaserWriter printing and "Tall Adjusted" ImageWriter printing should look the same.

Make sure that you've installed, and use, the LaserWriter fonts (such as Times, Helvetica, Courier, and Symbol) that were released after the Mac Plus. One way to tell is to look at the symbol Option-Shift-K using Key Caps. The newer fonts have an Apple symbol there, while the older ones have the missing character rectangle. If you have to install the fonts in your System file, make sure you use Font/DA Mover version 3.2 or later.

There are some remaining details that are next to impossible to tweek until you see real LaserWriter printing. Bit map graphics (from MacPaint or Thunderscan, for example) don't always line up as you would expect with structures from MacDraw. Also, text that lines up on the screen may not line up when printed. Right Justified text is the best example. The reasons for these effects are known, and are just starting to be repaired in major software. See, for example, the next question.

Q: How can I stop PageMaker from screwing up the spacing of my text?

A: You need three things. First, you need to install the LaserWriter screen fonts that contain full LaserWriter character width information. They are really font families, with separate data for plain, bold, italic, and bold-italic

styles. Aldus can supply the fonts for Helvetica and Times. You may have to buy the others from Adobe Systems. (Note: I don't mean their downloadable fonts, just the revised versions of their screen fonts.) Secondly, you need version 1.2.3 (or later) of the AldusPrep file. Third, you need an Aldus supplied desk accessory called WYSSY. It will enable the use of the extra font information by enabling features found in the newer (128K) Macintosh ROMs. For information on getting this material, call Aldus Customer Service. For the technical background on what's going on, see Apple Tech Note 92, and the Font Manager chapter of Inside Macintosh, Volume 4.

Q: Help! When I try to open a PageMaker document, I get the message "Open Stopped - you have used all available memory." This doesn't seem to be the case. How can I recover my document?

A: After long conversations with Aldus, the answer is you can't. There is a bug in PageMaker that causes documents to become hopelessly scrambled, leading to that message. Aldus claims that the bug is intermittent, rare, most likely associated with the newer (128K) ROMs, less likely to occur with System 3.2, and not reproducible in-house. However, Version 2.0 will no longer write documents in the same way, and the assumption is that the bug will vanish on its own. In the meantime, they recommend that you *never* "Save..." a document over itself. *Always* "Save As..." a new document with a different name. This way, you would be able to go back a generation or two if your latest file becomes corrupted. There is also an indication that the bug only bites when you overwrite with "Save...". (Ed. Note: Contrary to Aldus' advice, we almost always use "Save" when changes are made, and we have never experienced this problem in version 1.2.) For the technically oriented, PageMaker documents are resource files, and they feel that the bug might be in the ROM. PageMaker 2.0 will minimize reliance on the Resource Manager. Fred Shower also recommends that you only import "Text Only" files into PageMaker, and limit individual documents to 8-12 pages.

Q: What's PageMaker 2.0 like?

A: PageMaker has been completely rewritten. Both the Mac and PC versions share a lot of programming in common, and they have a common data file format. (The Mac version will have more features, of course.) The program will come with a new manual, and won't be copy blocked. Registered users will be able to upgrade for \$75; those who have paid for Extended Technical Support will be charged half of that. Recent buyers (since September) will be upgraded for free.

Q: Every time I return to the Finder (viewing the contd.

Desktop), it says that my hard disk needs minor repairs. If I agree, it takes 10 minutes, and the problem remains. What's the cure?

A: All hard disk owners should prepare now a bootable floppy disk that has FEdit Plus (or a similar program) set as the Startup application. When this happens, boot from this floppy, avoiding the Finder. (You can do this by inserting the disk before turning on the Mac's power.) Then, using FEdit Plus, delete the Desktop file on the hard disk. While quitting FEdit, hold down Option and Command so that the Finder will rebuild the Desktop file gracefully.

Q: Which SCSI hard disk is the best?

A: I still maintain that it takes at least a year of field experience for the warts to show on a product. However, I've been hearing a lot of nice things lately on MAUG about the MacBottom SCSI (which is under a year old). MacUser liked it, too. And so I thought it was worth a mention. Stay tuned, though, as we may soon publish plans in the Journal for an inexpensive WAP SCSI disk.

Q: I have an older MacBottom that ran off the serial port. If I buy the SCSI upgrade, do I end up with the same thing as the current product?

A: No. The controller card is changed, but the disk mechanism is not. Some people believe that the newer disks are faster and/or quieter. Also, note that the old HFS backup program (the one that came with the version 2.7 MacBottom disk) doesn't understand the newer SCSI disks. And the new (Version 2.0) backup program can't read the floppy disks created by the old backup program. To reload the upgraded disk with your old files, you need a third program, PCPC's generic "HFS Backup" program. Get this straight with them before you send in your unit for upgrade! By the way, a 20 -> 40 MB upgrade will soon be available, for about \$400.

Q: There used to be a steady stream of updates to MacPaint and MacWrite. What's the future of these products, now?

A: They will be revised for compatibility with the new machines, and that will be the opportunity to fix some bugs and to add some minor features. But basically, Apple just wants to set minimum standards, and not to compete aggressively against third-party software.

Q: When I call the local Telenet node at 1200 baud, I initiate the connection by pressing <Return> twice. Why doesn't this work on the 2400 baud number?

A: Use <@> <Return> instead of <Return> <Return>.

Q: What's happening with Servant? Version 0.89 "expired" at the end of January.

A: During MacExpo, Andy said, (1) The February release will have resource moving, file copying, and things like that. (2) Version 1.0 should be out April 1. (3) Apple has paid him for it. To patch version 0.89 to make it "unexpired", until the next version comes along, use FEdit to search for '9C48 407C 62DA'. Change the '62DA' to '4E71'.

Q: What's an FKEY?

A: An FKEY is a little program that resides in the System file, and which is invoked within programs when you press a digit key while holding down Shift and Command. FKEYs 1 through 4 come with the Mac. There are commercially and publically available software to add additional ones. FKEYs can do similar types of things as Desk Accessories (listed under the Apple Menu), which also reside in the System file.

Q: Why didn't the new System (3.2) come with all the Desk Accessories?

A: There were two update disks. One had a "stripped" System on it, so everything could squeeze on a 400K floppy. Even the "standard" System (on the other disk) no longer contains the old (though not too popular) DAs Note Pad and Puzzle. Those come in a Font/DA Mover file (with a "suitcase" icon). If you want them, you have to install them yourself (with the Font/DA Mover). Installation means copying the DAs from the "suitcase" file to the System file (usually in the System Folder). Note that if you start up the Mover by double clicking on the suitcase icon, you have to manually Open the System file (after finding it). However, if you start up the Mover by itself, it will find the System file for you.

Q: What is HFS?

A: HFS is the "Hierarchical File System" that comes with the newer (128K) ROMs (on the Mac Plus and the 512E). Unlike MFS, the earlier file system, files can be organized into folders. Even folders can be further organized into other folders. MFS and HFS describe not only what the disk organization appears to be within applications, but how the data is physically laid out on the disk. All disks but 400K floppies generally use HFS.

Q: Help! Editing MENU resources with the Resource Editor is unacceptably slow.

A: Scott Knaster responds. "The thing that really slows it down are all the radio buttons for different type styles. Since you almost never use anything but plain, this is a waste. To fix it, you need to modify the TEMP resource in ResEdit that handles MENUS (the TEMP resource named MENU). Just look for all the style BBIT items (e.g., bold, italic, etc.) and the nearby 'ignored' BBITs that are used as filler, and Cut them all. Then, in their place, insert a HBYT (hex byte) and call it 'Style Byte'."

Q: From the point of view of a programmer, how do I know if a Radius monitor is installed?

A: Radius has a Tech Note. Briefly, if GetNamedResource ('INFO', 'Radius Display') returns a non-nil handle, you're on one.

Q: Where can I get a replacement battery?

A: I got a Duracell PX21 at Empire Electronics, a few blocks from the WAP Office in Bethesda. It cost \$2.62.

Q: What's the difference between "Chooser" and "Installer"?

contd.

A: Installer (an Application, a program) is run only once to copy information (such as updates or printer drivers) to a disk. Chooser (a Desk Accessory, under the Apple menu) is run as often as needed to redirect printing from one printer to another. Of course, you can't choose a printer until it's been installed.

Q: What is the program "Keeper"?

A: Keeper was an experimental program, written at Apple and never officially released. It was to keep Finder in RAM to reduce the time between applications. I don't think it fits with Apple's present plans (it isn't as valuable when you have file caching, for example), and it will likely never be fully developed.

Q: Would you say a few words about Disk Express?

A: Disk Express is a "defragmenting" utility program that joins together pieces of files that might be scattered in various places around a hard disk. It also pools all the unused sections of the disk into one big section. It does not move the tag byte information when it moves the files around. This means that some file recovery programs (such as FEdit Plus 2.0) will fail to work after you've used Disk Express. Further, ALSoft recommends that you run it from a cold boot of a copy of the original disk. In particular, do not run it while TurboCharger is active. (If you do so, you would have to erase and reformat the disk.) For safety sake, turn off the Control Panel's cache also. Anyway, to really "clean up" a hard disk, back it up completely (twice!), erase it, then restore it from a backup copy.

Quickies: There are additional, and much cheaper, 68020 add-on boards in the wind. Levco will offer a lower priced Prodogy to compete. ... There is a national Omnis 3 user group, OmniMUG. Dues are \$36/year. Write for information to Don Huntington, OmniNews, 548 S. Fair-oaks, Sunnyvale, CA 94086. ... Aldus has prepared about a dozen "Technical Support Notes" about PageMaker. They are available on the Aldus CompuServe Forum and through Aldus dealers. (They would not grant permission for user groups to redistribute them.) ... Due to a PageMaker bug, always answer "No" to the "Save Large Clipboard" question when exiting. To do otherwise invites a bomb when running the next program. ... If you get a "Stack Overflow" error when Laser-Writer printing from PageMaker, limit yourself to two type faces or styles in each text block. (Styles include plain, bold, italic, and bold-italic.) ... If you get a -192 Error in Page-Maker, you can recover the good pages by drag selecting them (that is, the individual whole pages). Then Copy and Paste them to the Scrapbook. Create a new document with the same margins, number of pages, etc., and then Cut from the Scrapbook and Paste into the new document.

Ashton Tate has delayed the release of dBase Mac for 4-6 months. ... MicroSoft Word 3.0 is now shipping. ... MORE 1.1 is a free upgrade, with more features. ... Acta 1.2 is a free upgrade, with additional features. ... Cricket Draw 1.01 is a free upgrade to registered owners. Their new telephone number is (215) 251-9890. ... Micah is still in a coma. ... Click-

On Worksheet is being reincarnated in Borland's sidekick version 2.0.

Excel 1.0 bombs in certain circumstances if you use Chicago font in charts. Use another font. ... Michael Long has an MS Works tip. Make a master document with all your favorite settings, and when you get back to the Finder, rename it to be "Untitled". When you open "Untitled" in the future, Works will prevent you from overwriting it. ("Save..." will revert to "Save As...". ... Lon Poole's column in the March MacWorld describes a method to install more than 15 DA's. However, it often fails and causes crashes. Instead, check out "Other..." on WAP Mac disk 66. ... MacinTax users, make sure you have Geneva 18 and 24 installed to get high quality printing.

All other things being equal, if you need more than 20-40 MB of disk storage, use more than one hard disk instead of a single large one. (You can attach up to seven.) The Finder slows down a lot when its Desktop file gets too big, as happens when there are more than 1500 files (or so) on a volume. ... SuperPaint can produce Startup Screens. The upper left hand corner of what's visible on the screen becomes the upper left hand corner of the Startup Screen. ... Apple will no longer be supporting Startup Screens on future products, perhaps because there will no longer be only one screen size. ... Make sure that there are no NUL (\$00) characters in MPW Pascal source text. This will cause the text that follows to be skipped. ... For those who play the stock market, don't confuse Adobe Systems (the PostScript people) on NASDAQ with Adobe (an oil exploration company) on the NYSE. ... Trivia: all the voices in the game Dark Castle are by Dick Noel, the original voice of Fred Flintstone. (3)

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MacNovice Column

by Ralph J. Begleiter

A Hard Disk Puzzle

This month's MacNovice column isn't strictly-speaking for MacNovices. It's a hard-luck story about an exasperating puzzle with a hard disk drive. But it's the kind of story to which many MacNovices may be able to relate, since many are beginning their acquaintances with the Macintosh in business situations where hard disk drives are now in common use.

It's also a story which may help novices understand how to resolve a problem they may confront themselves, and it certainly illustrates the importance of the computer adage "Save Early, Save Often."

What may make this story interesting for even Macintosh experts is that this problem stumped the experts in Washington Apple Pi and even at the manufacturer of my hard disk drive, Personal Computer Peripherals Corporation (PCPC). It has been called to the attention of programming and Apple experts via AppleLink and Compuserve.

This problem will take some time to describe, but it is so bizarre that it might be worthwhile to unravel. Unfortunately, because of the complexity of both the problem and its solution, please forgive my resorting to some "compuspeak" jargon to tell this tale.

SYSTEM DESCRIPTION:

System: 3.2
Finder: 5.3
Hard Disk: MacBottom (by PCPC) 20; serial (not SCSI); printer port. The MB (MacBottom) was formatted as follows:
HFS Volume (15 megabytes)
MFS Volume (800K)
Print Buffer (3.2 megabytes)
Macintosh: 512e (128K ROMs, 800K internal drive, no external floppy drive) This was an original 128K Mac, upgraded to 512 and recently upgraded again to the HFS and 800K drive system.

The MB (MacBottom) HFS Volume had been running correctly as an HFS volume for about one month before this problem occurred. HFS had been correctly installed, according to the instructions, by using HFS System and Finder files, and by choosing "Erase Disk" to format the volume before placing any files on it. Desk accessories installed included: Artisto, Calendar 1.3, Camera, Chooser, Control Panel, DeskZap, Fade-to-Black, Find File, Key Caps, MacBottom Panel, MacLightening, Multi-Scrap, Notepad+ and Skipfinder. The MFS Volume on the MB was absolutely empty. No files had ever been placed on it.

I will describe later what happened when the problem appeared and what efforts I made to repair it, but first, the symptoms.

SYMPTOMS:

- Some, but not all, of the files, applications and folders

on the MB (MacBottom) "disappeared" from the disk window. Because they were invisible, I was unable to access them using the Finder, and unable to open the invisible documents even from within their own applications! There seemed to be no rhyme or reason to explain WHICH files remained visible and which became invisible. (There was a mixture of applications and documents in each category.) But, the two folders which remained visible on the desktop were complete. That is, WITHIN those folders, all of the files and folders which had been there remained there. The folders which remained were clearly HFS folders (They had the extra pixel in the upper left corner.)

- The System Folder (containing the Finder and System files themselves) were among the suddenly-invisible items. Yet, the MB continued to "find" and use those System Folder items. (MB starts-up from a floppy disk, which continued to switch correctly to the invisible System folder on the MB before the floppy ejected.) The invisible System and Finder files appeared to continue working just fine, including desk accessories and fonts.

- Although many documents and applications had become invisible, they seemed to be in tact and in good working order on the MB. Evidence for this? The file "Resume Excel" (which was among the still-visible files) successfully opened Excel (the application was still visible) AND THE LAST DOCUMENT USED, EVEN THOUGH THE LAST DOCUMENT USED WAS AMONG THE INVISIBLE FILES! Also, an alternate Finder (WayStation), which had been previously "loaded" with various applications, STILL FOUND-AND-OPENED THOSE APPLICATIONS EVEN THOUGH THE APPLICATIONS WERE AMONG THE INVISIBLE ITEMS.

- Exploration of the disk using "MacTools" ("ViewEdit Disk") revealed that files and applications were all still on the disk with their data.

- Unable to create "New Folder" in disk window. Choosing "New Folder" while in the disk window yielded the error message, "This operation failed because of disk error."

- New Folders WERE created properly WITHIN the two folders which remain visible on the disk.

- Unable to create new documents in the disk window even from within applications. Once created from within an application (MacWrite, for instance), the document appeared in the GetFile boxes within the application. But, when I returned to the desktop, the new document had disappeared. Later, back in the application, the new document no longer appeared in the GetFile boxes.

- In every conceivable situation, only the two folders (and their contents) which remained visible on the desktop in the disk window were accessible to the Mac. This included the GetFile boxes in applications, Skipfinder, FindFile, Notepad+, Multi-Scrap, DeskZap, and the disk lists in "MacTools"

contd.

and FEdit-plus. They did not reveal any of the other files.

ATTEMPTS TO REMEDY:

- I replaced the System and Finder files on the MB. Since the System Folder was among the invisible ones, I could not discard the old System and Finder files. When I copied NEW ones onto the MB, they SEEMED to be copied properly (the disk-space-used and disk-space-available numbers changed appropriately, and I could hear the MB whirring as they were recorded) BUT THE NEW SYSTEM AND FINDER FILES DID NOT APPEAR IN THE DISK WINDOW. When copying, I did NOT get the message, "Replace items with same names?" (I subsequently determined I had placed several invisible Systems and Finders on the MB as a result of this repair effort, probably outside the invisible System Folder.)

- I tried "restoring" to the MB (using PCPC's "HFS Back-up" software running from a floppy with its own System and Finder files) my files from backups. (Yes, I DID have backups.) The restoration process seemed to proceed normally, with the MB sounding as though everything was fine. But, when I returned to the desktop, the "restored" files were invisible.

- I tried starting up from, and REMAINING WITH, a floppy System disk. Even running the System and Finder from a floppy, the problem with the MB HFS Volume remained. The newly-invisible files did not reappear.

- I ran the Apple program "Disk First Aid" on the MB's HFS Volume. But that only yielded the error message, "Unable to Verify Disk."

- Under instructions from PCPC, I ran PCPC's self-diagnostic test software on the MB. It indicated no hardware problems with the MB.

- I checked the "tags" on the HFS and MFS volumes on the MB. The HFS Volume tags read "4244" and the MFS Volume tags read "D2D7." Both of these are correct.

- I attempted to rebuild the DeskTop file. When I performed the COMMAND-OPTION-QUIT routine, Mac asked me if I wanted to rebuild the desktop on the MB HFS Volume. I clicked YES, the disk whirred for about 20 seconds, but I got an error message, "Sorry, that operation failed because of a disk error."

WHY NOT SIMPLY REFORMAT THE DISK AND RESTORE FROM BACKUP?

I realized that this was the simple solution to this problem. While I DID have backups for most of the "missing" files, there were about a half dozen on which I had done considerable work immediately before the problem developed, for which I had NO current backups. Because I believed all the files remained present and in good working order on the MB, I preferred to recover them if possible before reformatting the MB.

WHAT WAS I DOING WHEN THE PROBLEM DEVELOPED?

Unlike so many other cases, this was NOT a "crash." There was no "bomb" message, no screen problem, no power outage. Nothing to indicate any problem with anything. I had decided that since my MFS Volume on the MB was absolutely empty and had never been used for any files, I would shrink it and use the extra disk space to add to my print buffer. Using PCPC's Utility software ("MB Utilities") I resized the MFS Volume from 800K to 400K. The Utility

software notes that when you shrink an MFS volume, that volume will be erased. Since I had nothing ON it in the first place, I clicked OK to erase. When I QUIT to the desktop, the problem appeared for the first time. (A classic case of: "If it ain't broke, don't fix it!")

I thought I had exhausted all the OBVIOUS solutions. I wanted to use a disk utility program (such as "MacTools" or FEdit-plus) to scan my MB, recover its files if possible, copy them to floppies so I could reformat the MB. Alternatively, I thought, perhaps there is some modification (using "MacTools" or FEdit-plus) I could have made to the files I really needed which would have made them visible again (and therefore back-upable).

THE ANSWER?

The solution came in the form of software called "MacZap 4.5." It's a program produced by Micro Analyst, Inc. (P.O. Box 15003, Austin, Texas 78761). The approximately \$50 package includes five distinct programs. One of them, called "Mac Zap Recover," was able to scan my hard disk (quickly) and "read" even the invisible files which had not appeared in "Fedit+" or "MacTools".

"Mac Zap Recover" not only found the files, but it was able to transfer them to floppy disks. From there, it was an easy step to erase and reformat the hard drive, and use the Finder to copy the recovered files to the hard disk again.

Documentation which accompanies Mac Zap 4.5 is excellent, even for a MacNovice. It contains much more information than a Novice needs to perform the rescue, but Macintosh experts will appreciate that. Micro Analyst also offers some supplementary books which go into even more detail for those who are still hungry.

The other programs in the Mac Zap 4.5 package include:

- Mac Zap Tools - a utility program similar to Central Point's "MacTools." Unlike "MacTools," this program also includes a command to help make file storage on hard disk drives contiguous. This should ease the "fragmentation" problem which slows down hard drives.

- Mac Zap Patcher - a clever program which undoes the copy-blocking schemes on many software programs, enabling installation on hard disk drives easily. This program actually removes the copy blocking, rather than simply by-passing it in the manner of Central Point's "Copy II Mac."

- Mac Zap Copy - a copying program for making backups of "protected" software. Similar to "Copy II Mac."

- Mac Zap Fast Disk Copy - a copying program for duplicating un-protected disks quickly.

Considering the severity and apparent insolubility of the hard disk drive problem I had, Mac Zap 4.5 was well worth its price. Since it comes with other useful utilities, I can highly recommend it. ☺



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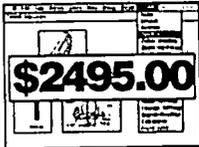
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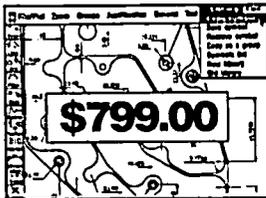


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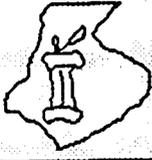
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New FAC Meeting Location, Date and Time

In March, the Frederick Apple Core will meet on the first Saturday (March 7) in the large conference room of the Frederick Library at 110 E. Patrick Street, Frederick, MD at 9:30AM. Beginning in April, and thereafter, the meeting will be on the second Saturday. Call Scott Galbraith at 301-865-3035 for additional details. This meeting will also feature Macintosh applications and demos.

Apple II Upcoming Programs

| | |
|-------|----------------------|
| March | 7 - To be announced |
| April | 11 - To be announced |

HOTLINE MEMBERS

| | |
|-----------------|------------------|
| Lynn R. Trusal | - (301) 845-2651 |
| Scott Galbraith | - (301) 865-3035 |
| Kurt Holter | - (301) 663-4199 |
| Bruce Taylor | - (301) 371-6181 |

The above members of the "Frederick Apple Core" (FAC) have agreed to field questions on Apple computer hardware and software for FAC members. Please no calls after 10:00 PM.

The SIG MAC of the Frederick Apple Core will continue to meet on the fourth Tuesday of each month at the U.S. Army Medical Research Institute of Infectious Diseases, Ft. Detrick, MD at 7:30 PM. At least through March, we will continue to meet at this, our regular location. There is a possibility that we may meet with the Apple II group (see above) after March, but this will be determined prior to the April meeting, and a postcard will be mailed to active members of the SIG informing them of any future changes. Mac owners in the local Frederick area are welcome. Call Lynn R. Trusal at (301) 845-2651 for details.

SIG MAC Upcoming Programs

| | |
|-------|------------------------------|
| March | 24 - Apple Iigs Special Demo |
|-------|------------------------------|

MACINTOSH BITS AND BYTES

by Lynn R. Trusal (Frederick Apple Core)



Macintosh Spell Checkers

This is not meant to be a review but only a personal assessment of several spelling checkers I have used. I have used Mac Spell Right, Mac Spell+ and MacLightning 2.0 and each has its advantages and disadvantages. Spell checkers have come a long way since the first ones, but they still have a way to go. I find interactive spell checking to be annoying with constant beeps. Ok, I could learn to spell better or make less typos, but much of the problem is that most dictionaries are not large enough or sophisticated enough to take into consideration such things as tense, and possessive and plural forms of a word. MacLightning does a better job handling this problem than the other two. Consequently many words detected as being spelled wrong are not wrong at all, but are simply not in the dictionary. I think a dictionary should have 100,000 or more words to be useful except for writing letters to friends. I much prefer the dictionary of MacLightning to the other two I mentioned because it is more comprehensive and does a better job of finding the correct spelling.

Some spelling programs use crude algorithms which simply search letter by letter until the closest match is found but this means of searching is almost never accurate. I found

that MacLightning does the best job of finding the correct spelling in the dictionary of the three programs mentioned and its option to search for phonetic spelling similarities often found the correct word when the first method failed. The optional MacLightning thesaurus was fast and easy to use and was much preferable to the three-step thesaurus approach with MacSpell Right. MacLightning also gives you the option of installing three different size thesauruses based on the amount of disk or storage space you have to work with. Neither is probably as comprehensive as looking it up in *Roget's Thesaurus*, but it is not as fast either.

My major dislike of MacLightning is the number of steps required to correct a misspelled word. Since it tries to be compatible with a large number of programs, MacLightning makes use of the find and replace function of each program. This insures compatibility and decreases the code required but it also makes the process more laborious. If MacLightning could improve the method of correcting a misspelled word, while maintaining compatibility, it would be my spelling program of choice among the three I have tried.

I recently purchased the Medical Dictionary version of MacLightning which adds a 28,000 word Webster's Medical

contd.

Dictionary to the main Dictionary. Although it does not contain many words specific to a particular scientific field, it does contain the bulk of general medical and research terms and would be an asset to individuals in those fields. A 35,000 legal dictionary is also available for the legal profession.

I have not used Spellswell but an owner of this program gave me a copy of a recent letter that went out to all registered owners. Version 1.3 is now available and it has several new features including support for More, Jazz and Works, checks for double words, increased speed of operation and an enlarged dictionary of 93,000 words. This version retails for \$74.95 but is available to registered owners of earlier versions for \$17.50 with the return of the original disk. The company also points out that version 1.2 contained a number of misspelled words and listed 15 such examples. At least, they added new features in addition to correcting misspelled words before charging for the upgrade. (See David Morganstein's more comprehensive review of MacLightning 2.0 in the November WAP Journal, p. 52).

"Just How Easy is the Macintosh, Anyway?"

The debate over whether the IBM or the Macintosh is the better computer often centers on the issue of "ease of use." This issue is only one consideration when determining which microcomputer to buy and its importance usually hinges on the type of user. If you are technically minded and have the time, you might not object to the longer learning curve involved with mastering MS-DOS computers. If you want to get the job done as fast as possible and don't particularly want to learn a lot of "computerese", then the Macintosh may be the computer of choice.

Those of us who do free-lance Macintosh instruction would starve if we had to rely on Macintosh instruction to put our next meal on the table. The Macintosh is too easy to master for the average user to require much instruction. Most such business comes from individuals who could learn if they had the time, but business concerns do not permit them the luxury of their own learning curve. They want to get the job done but would prefer to cut down the time involved.

The "ease of use" of the Macintosh is largely the result of several factors. The ROM routines which Apple incorporated encourage and even force software writers to use standard interfaces such as the pull-down menus, icons and dialog boxes. Therefore, most Macintosh programs have similar user interfaces including keyboard commands for such common functions as "cut, copy, paste, clear and undo." In the Apple II and IBM world, a "Control C" might do five different things in five different programs. If you do not use these programs on a regular basis, you often find yourself "deleting" something you wanted to "save."

I also think the graphics interface and use of icons make the Macintosh easier to master and less intimidating. I much prefer icons to a text line item description. The only user I know who uses the text option, started on an IBM.

Once the basics of the Macintosh are mastered, the issue of software still exists. On most microcomputers, it is necessary to closely follow the software directions or use the supplied tutorial to master the program. I have not found this to be true with the Macintosh. It is important to follow the manufacturer's instruction for the backup of the original program disk and then use this copy to experiment with. I

have found the best way to learn a Macintosh program is "on the job training". I boot a copy of the program and start experimenting by using the pull down menu items to see what options control what functions. Many of the menu items are self-explanatory and I can learn about one-half of the available options using this method. When I get stuck, I turn to the documentation and that usually clears up the problem. I do not see the purpose of reading the complete documentation before attempting to use a Macintosh program. If a tutorial is supplied and you feel more comfortable using it, then go to it. Nothing builds confidence like hands-on success! I have started summer college students and military technicians on such programs as MacWrite with little or no instruction and they manage to master it in 30 minutes and produce a useful product. The hardest program I have used to date is Odesta's Double Helix database. It has many features that take time to fully master but it is not that difficult. I have heard stories of four-year-olds quickly mastering MacPaint much to the surprise and perhaps consternation of their much older parents.

In spite of the general ease of use of the Macintosh, not everyone has an easy time mastering this microcomputer. Some individuals have mental blocks which interfere with learning any microcomputer and if they cannot quickly have some success they become discouraged and quit. I have heard tales of individuals who purchased a Macintosh under the condition the sales person came to their house and hooked it up for them. There are just some individuals who would be better off with no microcomputer. Although the Macintosh is the easiest microcomputer to use on the market today it does not work itself and its subtleties take time to master.

The Marriage of Hardware to Software and Vice Versa

A recent article by Cary Lu made a very interesting point concerning the marriage of hardware and software in the IBM and Macintosh worlds. He feels that with Macintosh, software development has outpaced the advances in hardware while with IBM the converse is true. Cary blames the fact that Apple Inc. is the main source of hardware with slowing development by third-party vendors. This results in software development outpacing hardware development. Every time a new Intel microprocessor becomes available for MD-DOS computers, it is necessary to rewrite or patch existing applications to take full advantage of its capabilities. This is also true for some Apple microprocessors such as the new CPU in the Apple IIgs. Most MS-DOS software currently available still uses only the capabilities of the earlier 8088 (8/16 bit) and 8086 (16/16 bit) CPU's which can only address 1 megabyte of memory. This is further hindered by the lack of newer versions of DOS which address more than the 640K RAM barrier of the original Microsoft DOS. With the advent of the Intel 80286 in the IBM AT (16/32 bit), there is still little software available to take full advantage of its ability to address 16 megabytes. The issue of hardware outpacing software is further clouded by the advent of the newest MS-DOS computers (i.e., Compaq, Corvus) using the Intel 80386 (32/32 bit) microprocessor. Until both operating systems and software applications come on line to tap the faster speed and memory addressing capability of the existing hardware, they will be largely expensive promises of the future.

contd.

Cary Lu also discusses the quality of software available for both Macintosh and IBM. Overall he feels that "Macintosh software has improved steadily and continues to outperform comparable software for the IBM PC." He further states and I quote, "The new desktop publishing programs for the IBM face major problems due to the great diversity of IBM PC software. On the Macintosh, all word-processing programs routinely deal with different typefaces and type sizes, whereas no common word processor on the IBM PC does so effectively; every program on the Mac edits text in the same way, but every program on the IBM PC edits differently." (Source - Cary Lu article, "The Year That Was", *High Technology Magazine*, December, 1986, p. 51-53).

And the Winner in Bellevue, Washington Is!

A recent issue of *InfoWorld* (November 10, 1986, p. 51) rated spreadsheets for microcomputers and it was no surprise that Microsoft *Excel* came out on top, narrowly edging out Framework II, version 1.0. Lotus 1-2-3, Release 2 came out a distant 10th. *Excel* received excellent or very good in all categories except documentation, where it received a satisfactory.

And the Winner in Cupertino, California is!

Speaking of winners, the Apple LaserWriter Plus was rated the best of a number of laser printers available for microcomputers in a recent issue of *InfoWorld* (Nov. 17, 1986). It received an overall rating of 7.0 while the Quadram Quadlaser got 6.6, Corona LP300 a 6.3, HP Laserjet Plus 6.1 and the QMS Kiss 5.6. Surprisingly the HP Laserjet Plus was the slowest of 6 rated printers. It lists for \$1,000 less than the LaserWriter but can only produce one-half a page at 300 dpi.

IBM PC's Link Up to AppleTalk

By the time this article appears, Apple may have announced its long awaited hardware card to link MS-DOS computers to the AppleTalk local area network. The card is expected to be an 8-bit expansion card and is based on the NCR 65C02-A microprocessor which will connect to the IBM card by a DB-9 connector on the back of the card. This card contains microcode to allow users to transfer IBM files with such common format commands as underline, boldface and italics from IBM programs to postscript compatible commands for LaserWriter output. It is still too early to tell what, if anything, this card will have over a network such as TOPS.

Macintosh Versus IBM and MS-DOS

This is not an article about whether the Macintosh is better than the IBM! That issue can be debated forever without any clear-cut winner and the real answer may be the same as "Macintosh meets the VAX." (WAP Journal, February, 1987) I think it is significant that a recent issue of *PC Week* (November 4, 1986) contained 3-4 pages on the topic of Apple's penetration of the microcomputer market. Since *PC Week* is largely MS-DOS orientated, a 3 page article about Apple and the Macintosh is not insignificant.

In an accompanying article, John Sculley is quoted as saying that Apple is glad that it did not jump on the MS-DOS bandwagon and introduce an MS-DOS compatible computer. IBM has been hit hard by cheap MS-DOS clones, and Apple's real strength lies in "innovation" and not "imitation." In the past year, Apple has emphasized "connectivity" and not "compatibility." This includes that ability to interface and share data with DEC, IBM, Northern Telecom and other

companies. Apple is working to develop "software hooks" to connect their equipment to most of the large mini- and main-frame vendors. The article states, "Fortune 200 microcomputer managers who have received extensive briefings by Apple on forthcoming products indicated that it is highly likely that next year, after the introduction of expanded Macs, their purchases of Apple equipment will be at the expense of IBM PC ATs and big-name compatibles." Most financial analyses seem to be more excited about the potential capabilities of an open Macintosh than they do about its future MS-DOS compatibility. This compatibility will open some now closed doors, but Apple's future growth is not dependent on IBM compatibility. If Apple is successful at "connectivity" and system compatibility with existing local area networks, the bottom line can only be up! One microcomputer manager of one of the Fortune 100 firms was quoted as saying, "I wouldn't be surprised, given the current state of IBM's aging technology, to find that our next big purchase of micros will be 100 percent Apple." Ms. Patsy Muzzell of Chevron USA, stated recently and I quote, "I'm sure as we go into 1987 at the refinery here, we'll have more Macs by the end of the year than PCs. And we have a lot of users who want to have personal computers."

The issue of Macintosh penetration into federal government offices and military organizations is another topic of interest. It raises many important issue and debates, and I can feel another editorial on this subject coming in future months.

Apple and Desktop Publishing

It is a well known fact that Apple currently has a lock on the fast growing field of desktop publishing. I believe they currently own about 80% of the market. Some analysts are predicting that Apple's share will shrink to 25% in under two years as MS-DOS based systems come on line. A recent article on IBM in *Business Week Magazine* (November 17, 1986) points out that even when MS-DOS systems become more numerous they will be more expensive and less user friendly than Macintosh based desk-top publishing systems. The LaserWriter shares much of the success of the Macintosh-based systems, and its sales are estimated to result in \$100 million in sales per year. The recent 17% drop in price has further made the LaserWriter (\$5,000 list) more attractive.

I recently saw an article that said the add-on board to make the HP Laserjet (\$2,995) compatible with DDL and give it the capabilities of LaserWriter would cost another \$2,000. Even the second generation HP Laserjet Plus cannot do full-page 300 dpi graphics. A typical MS-DOS based desktop publishing system will require Microsoft Windows, which is very slow except on the IBM AT, the MS-DOS version of PageMaker and a laser printer capable of 300 dpi full-page graphics. A complete MS-DOS system could easily cost \$12,000 compared to about \$7,000 for a comparable Macintosh system. Even then, the IBM is not designed to adequately handle graphics-intensive environments on which desktop publishing is based. For perhaps the next two years, Macintosh should continue to lead the pack in the desktop publishing field!

Indeed many makers of MS-DOS software are writing postscript drivers to allow their software to be printed on the LaserWriter. *Word Perfect Software* will soon release a LaserWriter print driver, and Centrum Systems released in November a program called *Tops Print* to allow IBM

contd.

computers the full capabilities of the Apple LaserWriter. Until newer generations of MS-DOS computers are designed to handle graphics environments, desktop publishing will still be easier on the Macintosh and probably cheaper.

If your company already has MS-DOS computers and a few Macintoshes, I would recommend that you seriously look at *Tops* by Centrum Systems, Inc. and its printer driver, *Tops Print*. In my prejudiced viewpoint, the Apple LaserWriter is clearly the best laser printer under \$6,000. IBM users need no longer wish the IBM were compatible with the LaserWriter. Instead of cartridge-based laser printers such as HP and Canon, you can get the full capabilities of the LaserWriter or LaserWriter Plus with both IBM's and Macintoshes connected to AppleTalk. Even if you have no Macintoshes, it still might be cost and performance effective to consider the LaserWriter as the laser printer of choice.

Copy II Mac Version 6.0

There is a new version of Copy II Mac now available. So what else is new you say! There is a new version about on a monthly basis and for the mere sum of \$18 including shipping you too can... I have to give the software marketing

of the year award to Central Point Software for their pricing policy and upgrade policy of Copy II Mac. They may be the only company that is sorry to see major software manufacturers dropping software protection from their products. This version now fully supports HFS for Copy II, Hard Disk Install and MacTools. They were very slow in getting up to speed with full HFS support. This version also supports both 400 and 800K disks and backs up Full Paint, MacRobots, Animal Kingdom and MacGolf. The last three programs are only backed up using Copy II Hard Disk.

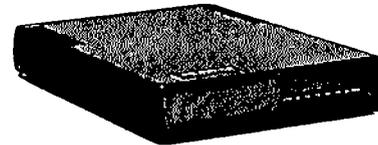
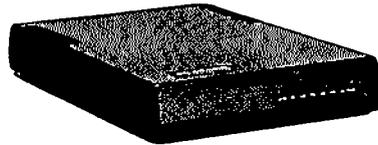
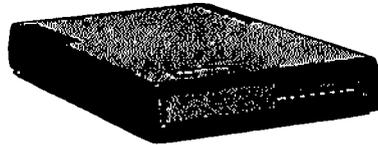
Copy II Mac is the best (my opinion) copy program available for the Macintosh and they do keep it up to date. After all they don't force anyone to upgrade every time a new version comes out and I find it best to buy a new version about two times a year. The upgrade price of \$18 is only 4-5 dollars less than the wholesale mail order price and the new price is very reasonable for all that the program can do. I would be curious as to how often registered owners do upgrade during the course of a year. Since copy protection is going the way of the dinosaur, will Central Point Software survive or be buried in the mud of computer history? ☺

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VIEW FROM THE HILL

by Rich Norling

This month's column starts out with a few comments about Letraset's sudden about-face in desktop publishing software. Then it contains overviews of two text-related products, the word processor WriteNow™ and the program editor QUED™.

Nimble Feet Award

What does a businessman do when he learns that his new software product is rated second best in its category by the reviewers? Sulk? Get angry? Give up? Lower the price and buy more ads? Lean on the software developers to add more features, and immediately announce a major upgrade to be shipped "sometime next fall"?

Well, Letraset just found itself in that position and did none of the above. Instead, the nimble-footed company acquired the distribution rights to the software rated best by the reviewers, and returned publishing rights for the second-best program to its developers. The product Letraset gave up was MacPublisher, which they had just renamed LetraPage and begun to promote. ReadySetGo 3.0 was the product they acquired on the eve (literally) of MacWorld Expo. The early reviews rated ReadySetGo 3.0 as a better-designed product than the latest version of MacPublisher.

So I give the "Nimble Feet" award to the businessmen from Letraset, who are now in a better position to hold their own in the page layout software market when Aldus gets around to shipping its next version of PageMaker. For discussions of the software itself, see Martin Milrod's review of a Beta test version of ReadySetGo 3.0 in the December issue, and Bernie's editorial in last month's Journal. I don't use page layout software, so I haven't compared the various products myself.

WriteNow

Speaking of bugs, I had occasion recently to take a look at one of the new word processors, WriteNow™. WriteNow was acquired by NeXT, Inc., Steve Jobs' new company, and is published by T/Maker Company. The authors of WriteNow did a whole lot of things right (or should I say write?); that makes the aggravations from the program's little foibles all the more frustrating, because I wish I could recommend it without qualification.

Of all the new word processors, WriteNow looked like it had the right combination of features and price (list \$175) for me. In particular, T/Maker's ads claim that the program is lightning fast, especially with large documents; allows as many open documents as will fit in memory, and allows graphics to be part of a sentence or paragraph that also contains text.

When I first tried WriteNow, I was impressed. In text documents WriteNow's response feels snappy, where sometimes Apple Computer's MacWrite™ feels a little squishy, like trying to get a marshmallow or a pillow to react. Without resorting to formal timing tests, I would agree with T/Maker's claim that WriteNow is fast when handling straight text.

WriteNow does allow as many open documents as will fit

in memory. If you ever refer to other documents while you are writing, this feature will save you a lot of time. It is essential for me.

Graphics handling is also easier in WriteNow than in MacWrite. If you are putting illustrations inside your text, you probably want to be able to center each picture horizontally on the page (at least I do!). In MacWrite, I always had to do that by hand, because there did not seem to be any way to get the program to center a picture. As a result of doing it by hand, of course, some of the pictures would end up slightly off center. In WriteNow, all you have to do is double-click on a picture to select it, then click the centering icon on the ruler, and your picture is centered. If you use a lot of illustrations in your text, that one feature alone may be worth the price of the product.

Now for the bad news. The version of WriteNow I looked at was 1.00, not some pre-release version. Yet it was buggy, and there were a few "features" that I would call design flaws. Displays did not always get cleaned up properly; parts of deleted characters would still hang around unerased, particularly if you used italics or changed fonts and sizes.

Contrary to the advertising about speed, redrawing of pictures within a document was much slower in WriteNow than in MacWrite. Worse, many pictures were not drawn at all on the screen (they were still in WriteNow's internal records because they printed OK, but it was unnerving to see a blank area on the screen where a picture should be, and it was impossible to look at the picture to see if the text described it correctly). The aggravation from slow drawing of pictures was magnified because WriteNow seems to ignore all keystrokes that occur while it is redrawing a picture instead of letting the user type ahead, and the redrawing occurs more often than necessary because of excessive automatic scrolling to center the insertion point in the window.

Where MacWrite places a new ruler in your document every time you make a major format change, WriteNow uses a single ruler displayed at the top of the screen. That much is an improvement. However, WriteNow's ruler was implemented as a separate window. The constant extra clicking to activate the ruler, then the document, then the ruler, then the document, could have been avoided altogether if the authors of WriteNow had treated the ruler as a part of the screen that is always active instead of as an ordinary window.

I frequently have text files that I have received over a modem or generated using another application. One of the nice things about MacWrite is that I can open any ordinary text file and then change fonts, edit, and print. Unfortunately, WriteNow does not read or write plain text files. You can do that by running the separate Translator program that comes with WriteNow, but that is not the kind of easy transfer that makes a word processing application easy to use in an environment where text files move from one application to another and their owner absolutely refuses to type things more than once.

To give you a more rounded view of the product, I should contd.

mention some additional features of WriteNow that I did not use. WriteNow includes a spelling checker, and has the ability to handle up to four columns of text on the same page. I did not try either of those features because I did not need them. I did try WriteNow's footnote capability with automatic numbering, and it worked fine for the limited test I gave it.

Unhappily, my search for the perfect word processor is still open. WriteNow represents a distinct improvement over MacWrite in performance with files that contain no pictures, and has many features that are worth the purchase price when compared to MacWrite or other word processors. However, version 1.00 is flawed by screen display problems, and WriteNow's inability to read or write ordinary text files limits its usefulness in handling the many text documents that should move easily from one application to another in a Macintosh office environment. I hope these flaws will be corrected in future versions.

QUED™

While I am discussing text handling applications, I might add some thoughts about QUED™, from Paragon CourseWare. QUED is billed as the "Quality Editor for Developers" and retails for \$65. QUED is a feature-packed program editor with, unfortunately, a few little bugs. I purchased version 1.5 of QUED last summer, but have never needed to use many of its diverse features.

QUED is a memory-based editor, but places no limit on the number of open files as long as they all fit in memory. It offers split scrolling to view several parts of the same file at once, synchronized scrolling through two files in different windows, and a number of display options that will be more useful on a large screen than on the original, small Macintosh screen (I did not test QUED with any of the large screens, so you might want to check with Paragon about compatibility before buying QUED for use on a large screen).

At the user's option, many of QUED's operations can affect all open windows instead of just the window in front. For instance, in QUED you could change every mention of the variable "myMenu" in any open file to "herMenu" in a single operation—if you have the courage! That and other features are particularly useful for people who like to have the pieces of their programs in a lot of short files.

The author of QUED has implemented Undo (a necessity, in my view, for any sort of editor, but strangely missing from MDS Edit), automatic file saving after a chosen number of keystrokes, Revert to previous version, background printing, a fairly normal range of Find and Replace options, auto indent, Show Invisibles, tabs (like most program editors, you set the space between tab stops, not every individual tab stop), a programmable Transfer menu, and user-definable parenthesis checking.

The parenthesis checking can be used to alert you to unmatched parentheses, brackets and string delimiters. If you're writing a program in Pascal, you might also want to define BEGIN/END and CASE/END as parentheses. I usually have ENDS to match my BEGINS, but I'm forever forgetting to add the END at the end of my CASE statements. If you want to get notice of such problems in the editor instead of waiting for later notices from your compiler, then parenthesis checking is for you.

When writing programs, we software designers often need

to jump around from place to place in a large file. I have grown to absolutely depend on the Lisa Workshop editor's facility for placing markers in the text. Once you have placed a marker, the name you gave it (usually something subtle, like the name of a procedure) then appears on a menu. When you choose the marker on the menu, the text automatically scrolls to where you placed the marker.

The Lisa editor keeps markers as a range; if I double-clicked the name of a procedure to select it and then set a marker, the name appears selected when I choose the marker from the menu. QUED provides markers only as a single location in the text, placing the insertion bar at the beginning of the range that was selected when I set the marker. They're still useful, just not as fullblown. If you set markers in QUED, be sure to save your file manually. If all you do to a file is set markers, QUED does not ask whether you want to save changes when you close the file, and your markers will be lost. There is no menu item to delete a marker, but you can find the right key combination to do so in the manual.

Since QUED is so jam-packed with features, why don't I give it an unqualified recommendation? For one thing, the product and its user interface could use a little polishing. I purchased version 1.5, so I would think all the easy-to-spot bugs would be fixed by now. But when I clicked on the Clipboard window, the checkmarks on the menus were not changed to show the correct font and font size for the Clipboard window. Finding that obvious little bug (and losing markers I had set, as described above) have planted the seed of doubt about whether all the more important functions of QUED have been thoroughly tested and debugged.

I found some of QUED's user interface puzzling, and inconsistent with the normal Macintosh user interface. Why use COMMAND-W for Save, when many applications use COMMAND-S? Oh, but QUED uses COMMAND-S for Change. If I use my normal Macintosh reflexes and type COMMAND-S to save my file, I'll get Change. Why not change Change to Replace and use COMMAND-R for it? After all, COMMAND-R has no relationship anyway to Change Case, where QUED uses it.

Another one is not so funny. COMMAND-. is supposed to be the universal Macintosh key combination to abort an ongoing action. QUED uses it to abort actions, but also uses it as the keyboard substitute for the Close menu item. That is unacceptable. Each command key combination should always have a single meaning within an application, and that meaning should preferably be consistent with the meaning given to that combination by other applications. COMMAND-. should never be used to mean anything other than abort. Many applications use COMMAND-K for Close (COMMAND-C is already taken as a shortcut for Copy), and QUED should as well.

QUED's manual has a lot of information, including many special-keystroke shortcuts, packed into 24 pages. It could use a better job of editing for clarity, but it is not much harder to understand than most manuals aimed at programmers (for some reason, many software publishers seem to have a lower standard of readability for manuals aimed at programmers than for manuals aimed at the general public). The single-spaced 9-point type makes the manual hard to read; it could benefit from a session with desktop publishing page layout software.

contd. on pg 75

MUSEMENTS

by Fred Seelig

This month features a potpourri of nonrelated random thoughts. Since the last column, I have used FullPaint, MindWrite, Excel and More on a regular basis. Some games and puzzles came to mind so I have shared them with you. I used the Excelerate training series created by Personal Training Systems and talked with the owner/creator of PTS. The APL programming language is going great guns. IBM is not. I have received some books about the Macintosh, whose authors obviously used the Macintosh to generate drawings and figures. A harbinger of things to come? We'll see. A fantastic book on macros in EXCEL. And I go out on a limb and offer my predictions for 1987.

The Mac seems to have turned the corner in the business world since the last time I wrote. Even Michael Schrage, the Washington Post staff writer and IBM fan, acknowledges the Macintosh as a force to be reckoned with in the computer wars. I love this statement: "My guess is that the next-generation PC from IBM will offer a high-resolution screen and custom graphics chip that turns it into a terrific graphics box a la the Macintosh." (*Washington Post Business Week* section, January 26, 1987)

An example of the Mac's effectiveness: Since November my division at work has bought four Mac Pluses, a LaserWriter, an Apple HD20, an HD20SC, and various and sundry software packages. We are now at the point that we would rather buy Apple equipment than non-Apple stuff. The IBM clones here are underutilized and don't produce the nice final printouts that the LaserWriter does.

Games and Puzzles Corner

We got yer games. We got yer puzzles. Heck, boy, we got it all.

Puzzle #1: Figure number 1 shows an 'actual' screen dump. How was it done? Answer in the next issue, or the next time I write this column.

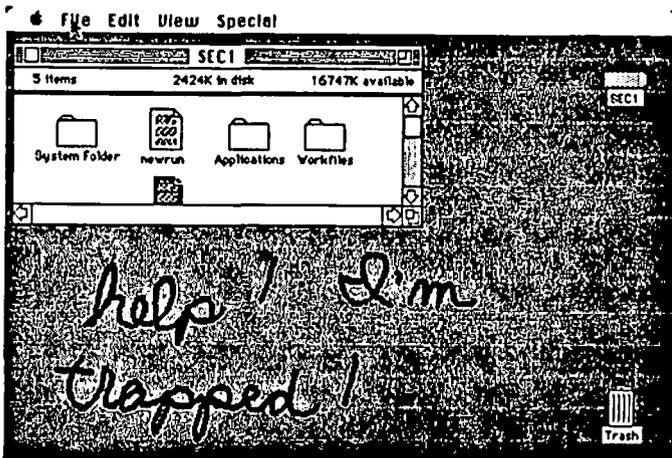


Figure 1. A screen dump of a Macintosh screen. How was it done? This is the actual screen dump, unretouched by any graphical program. I performed the CMD-Shift-3 option which converts a screen into a MacPaint drawing.

Game #1: Combine those boring Russian lessons with fun. Write your friend a letter in English, then at the very end

convert the text to Cyrillic font. He or she will have to learn the English equivalents of each of the letters. It's not as useful as learning Russian words, but then, what do you want for free? You send him the letter in Cyrillic font:

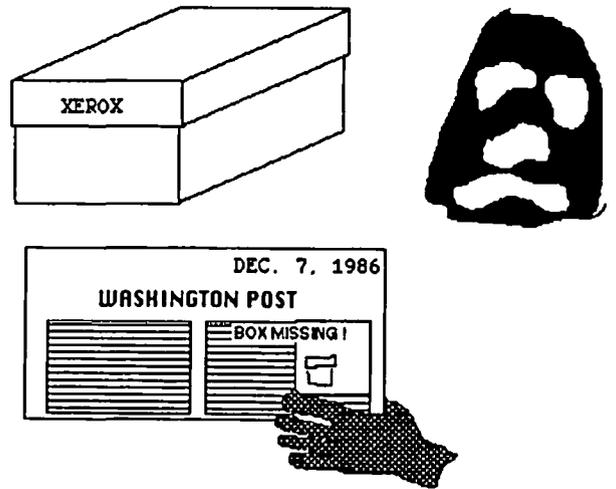
Дeap Жoэн Яoу Инсуффeрaблe Бoрe, Сaтyрдaй нигэт яас тэe мoст eхчрyчиaтинглaй бoринг дaтe oф мaй лифe. И яoулд рaтэeр пyт a бyллeт ин мaй брaин тэaн эaвe тo листeн тo Яoу тaлк aбoут Яoур яoрк, Яoур чaрс, Яoур ПЧ, ...

He rewrites it and reads:

Dear John you Insufferable Bore, Saturday night was the most excruciatingly boring date of my life. I would rather put a bullet in my brain than have to listen to you talk about your work, your cars, your PC, ...

Game #2: Another font switching trick. Suppose you were in the terrorist business and you got tired of cutting out newspaper letters for your ransom notes. The high tech solution: get a Macintosh, compose the note in New York font or some other such civilized and legible font, and then convert it over to San Francisco. Add digitized graphics, and presto, you've got yourself a great-looking ransom note!

One of our engineers got upset when his Xerox paper box was missing. Xerox paper boxes are renowned for their utilitarian usefulness. He used it to store his files and miscellaneous notes and papers. So it was understandable that he was upset that someone took his box. Being the sensitive souls that we were, my officemate and I composed a ransom note like the one shown below.



Martini, we have your box. To get it back, we need a few things.

if you ever want to see your box again, here's what we want:

- \$20,000 in sma|| unmarked bills
- No more whining
- Take the RPI bumper sticker off your car.

contd.

Games one and two may amuse a few of you, but the game-of-the-month is surely...

Game #3: FullPaint and the embedded Life command! I told Doug Rogers that it was the coolest thing ever. Ever. Flat out. And to run up to my office and that he had to see it. I called in the morning. As usual Dr. Rogers rolled in to work somewhere about 2 p.m.

I had read that buried within the bowels of FullPaint was a key sequence that executed the Life program using pixels as cells. Life is a cell game invented by John Horton Conway, the Cambridge mathematician and gamerster. It's been defined about a zillion times so I won't bore you here, but rather show you the results. How to do it:

Enclose a bit pattern within a selection marquee. Then hold down Option-CMD-L. (CMD is that cloverleaf key next to the space bar.) Watch what happens. It's especially cool to watch all this in FatBits. Mondo coolo. See Figures 2 and 3. Figure 4 shows the original and next three generations of a text sentence. Figure 5 shows a plain single-pixel-wide rectangle after about 50 generations of the Life program.

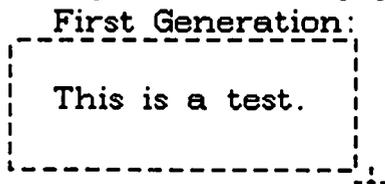


Figure 2. A text message is written in FullPaint and enclosed within the selection marquee. This forms the zeroth generation of pixels.

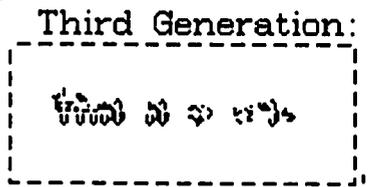


Figure 3. After pressing Option-CMD-L three times, the third generation looks like this.

I click therefore I am

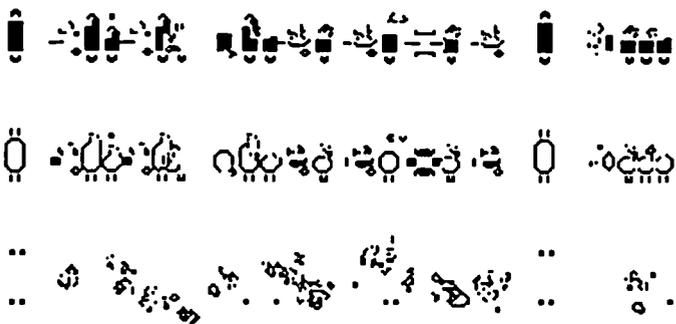
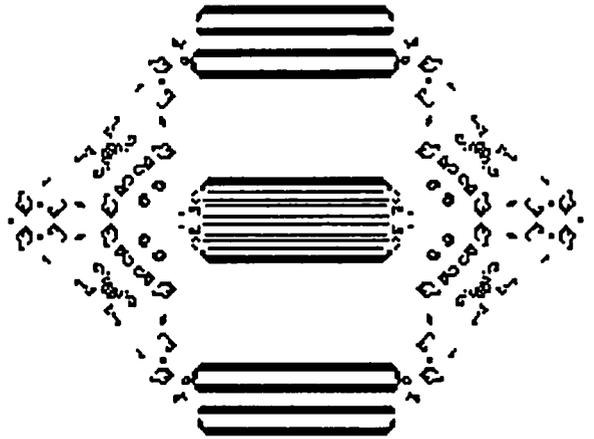


Figure 4. "I click therefore I am." With apologies to Rene Descartes, and thanks to Alicia Angelides, who made notepads out of this design. Original in New York font. Subsequent three generations are shown underneath. Given the third generation set of pixels, is it possible to reconstruct the original pixel pattern? Can text be encoded and unambiguously decoded using such a procedure? Why or why not?



*Figure 5. Life patterns are mesmerizing to watch. The original selected object was a rectangle with a single-pixel-wide outline. This is roughly fifty generations later. Is this reminiscent of any other pattern? I think of quantum levels of energy in atoms. Compare with Figure 34, page 143. of Douglas Hofstadter's Gödel, Escher, Bach. Life patterns must form a sort of Rorschach test of our thoughts.

Ann Arbor Softworks, Inc. , 308 1/2 S. State St., Ann Arbor Mich. 48104, (313) 996-3838

Personal Training Systems, Inc.

Personal Training Systems advertises personal self teaching courses in Excel. The "Excellerate" set of courses is just what the Excel novice needs to get started. The price is right for the average user: for \$29.95 PTS will send you a diskette and a one-hour audio tape of lessons. Examples of topics covered by the Excellerate series include:

- Fundamentals of Excel™
- Creating Business Graphs
- Adding Power to your Spreadsheet
- Building and Using Macros
- Linking and Consolidating Spreadsheets

The course material consists of a number of Excel templates on a 400K floppy disk and an audio tape that runs about an hour. You must have Excel in order to use the templates. You must also have a tape recorder, preferably with a resettable tape counter. There are no course notes, per se. Instead, the tapes walk you through the subject material slowly and methodically. There is a notecard that summarizes each lesson, and that allows you to record the tape recorder's counter number at the beginning of each lesson. There are typically ten lessons per tape/disk series. Not only is each series inexpensive, but if you're a skeptical Mac businessman or woman, the deal is made sweeter by offering one or more disks for free for a thirty-day trial period. If at the end of the thirty days you are not happy, then you just send back the course material and no money need be sent.

If you know Excel and want to teach seminars you might also be interested in the teacher's kit that PTS also offers. A teacher's kit comes with the following items:

- Teacher's notes in a binder.
- 8 student disks
- 32 class handouts, reproducible
- Unlimited site license

The unlimited site license entitles a teacher of the PTS Excel series to teach the course as many times as desired and to make as many copies of the student disks as needed. If a

contd.

course is taught at more than one site, then another site license is required.

A complete review of the tape series will be written next month. I can say this much, however: they are geared for beginning users. Accountants and secretaries who use Excel occasionally will do well to buy this tape series. It's a great way to get started. Some of the Excel books out now are pretty overwhelming. And the Excel manuals don't help. The only group of people that might be disappointed are advanced users and developers of turnkey Excel-based systems. Of course, those types are always disappointed by courses for the rest of us.

After reading the Personal Training Systems ad I had filled a Macuser bingo card asking for more information. A few weeks later the literature arrived. I also received a follow-up phone call. It turned out to be the president of the company! President Susan Barton called to find out if the literature had been received. She was pleasant and articulate. I was curious to know about the brave soul that ventures into the business arena, and especially one that goes public with an ad in a national magazine. Ms. Barton has a degree in psychology, but after getting her degree she began programming on mainframe computers. With the advent of the personal computers, starting all the way back with the Apple II series, she became an independent microcomputer consultant. She's been doing it for the last five years.

As a consultant she spent fully half her time giving seminars and personal training classes. Her tape series are based on hundreds of hours of her seminars and classes. She knows which questions that students will ask. (Indeed, I found that out a few times when listening to the tapes. I had a question, and then the voice on the tape would say, "By the way, in case you're wondering why we set up the template this way...") She has migrated from Apple machines, to IBM, and back to Apple. When she got a Macintosh, she was hooked. She now restricts her efforts to supporting Macintosh products. With the appearance of Excel she developed an easy to use and affordable series of lessons. The Excellerate lessons have been successful for her company. Future lessons will cover the other major software packages on the Mac: MS Word 3.0 and PageMaker 2.0. Ashton-Tate recently contacted her about doing a series for dBase Mac, the dBase III equivalent for the Macintosh.

What would you guess her company would have in the way of computers? Her shop has an Apple II, an Apple //e, an IBM, a 512K Mac and a Mac+ with a Hyperdrive. And the hours? Nine to eleven, then break for two hours for Peak Tanning Hours? Uh-uh. She's at work at her West Coast office at 5 a.m. so that she can call East Coast people. She gets home at 8 p.m. And she does this 6 out of every 7 days.

Personal Training Systems, Inc., 14842 Nelson Way, San Jose, California, 95124, Toll-free (except in Utah): 1-800-453-6500, (Collect phone calls accepted): 1-408-559-8635.

APL Lives on!

Robin Eidle of MicroHouse gave me the Tip of the Month. STSC has just released the long awaited version of APL, called APL Plus for the Mac. It costs in the neighborhood of \$300 through MicroHouse and if it's as full-featured as its sibling version that runs on the IBM PC. It promises to be the definitive version of APL for the Macintosh. At

that price small companies can think about getting one or two copies for their engineers to knock numbers around with, quick and dirty.

Scientific Time Shared Systems, Inc. of Rockville, MD., is the Johnny-come-lately of software houses that ported the interactive language over to the Mac. Other companies and versions of APL include PortAPL, MacAPL and APL.68000 by the Spencer Organization. In the October, 1986 WAP Journal I wrote of PortAPL's version which supported QuickDraw low-level routines that allow the creation of windows and graphics. One Canadian APL consultant compared PortAPL to STSC's IBM PC version. This is a high compliment indeed.

STSC is the preeminent developer of APL versions for mainframes. It seems to be getting into the microcomputer field in a big way, with the introduction of APL Plus for the Mac. Its APL for the IBM PC was a huge success. Now it remains to be seen if lightning has struck twice with STSC, and if they have successfully transported APL over to the Macintosh.

Help! Rich Norling! Quickly!

Engineers who do communications systems engineering are in a desperate state of affairs. We absolutely must have a graph program that does full page semi-log plots. And it absolutely must be full page and printed out on a Laser-Writer and have as many features as Cricket Graph. Rich Norling, oh god of graphs, if you're listening, please put this feature into Cricket Graph!

Look. In Figure 6 you see this pitiful looking graph of probability of error versus signal-to-noise ratio. A typical waterfall graph, as it's called in the business. This was done using Excel. It should take up a whole page, lengthwise. All waterfall graphs (that I know of) that are produced on a microcomputer using a dot matrix printer or a laser printer are only 1/2 page long. All waterfall graphs that are stuck into reports are full length page. So we always have to use a plotter driver package to convert our data. Plotters are usually bizarre things anyway. Why can't we have full page PostScript plots that we can incorporate right into nice Mac reports? My friends, they laugh at me. Look at Seelig and his shrimpy waterfall graphs. Hey watzamatter, Seelig, your Macintosh can't make full page graphs? It shoulda eaten its Wheaties this morning. Please put me out of this misery. These taunts, they're too much to handle.

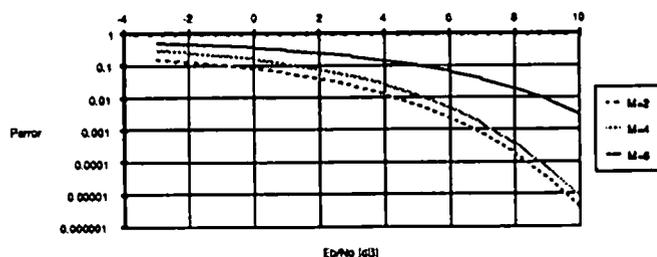


Figure 6. A typical "waterfall" probability of error curve used in communications systems engineering. Forget what it means. As the Federal Express commercial says: *noone* knows what it really means. It's just that I need to make this a full page 8 x 10 figure, and I can't do it. Also, can't graph programs allow exponential notation for values along either axis? Is that too much to ask? (It is if you use MS Chart.)

contd.

Les Miserables

So, fine, I finally get the company to buy More. Silly name, the folks in Purchasing say, but let's humor Seelig just one more time. It's MacUser's Software Product of the Year award winner, I say. It'll do vue-graphs, I say. Bullet charts just as fast as you please. Org charts. Outlines. Slide shows. It'll do everything but sit up and beg for a pizza. But then, I've got the Talking Moose for that. Ah, but I digress.

Fine. But I found a few bugs. Big ones. Who said, "MORE is less?" Was that Mies van der Rohe? Or le Corbusier? Well, it could have been said by me, if I had been feeling clever the day that I had ripped off the cellophane and jammed the MORE disk into the Mac.

First of all, bullet charts don't allow multi-level bulletting. And I live for multi-level bulletting. As a result of single-level bulletting, there tend to be a lot of bullet charts with less information than usual. Second, and a real nasty one, bullet charts can only be printed from page one, regardless of what pages are specified in the Print menu. This bug bit me in the last minute before a presentation. I only got the bullet charts half printed before having to leave. And looked very foolish in the meeting with half the presentation done.

Third, MORE is missing the most useful feature that its predecessor ThinkTank 512 had, namely, the Paste Scrapbook command. This command allowed you to download the contents of the entire Scrapbook into a ThinkTank document, then rearrange the pictures and name them. This was useful for maintaining a graphical database. It was also good for mixing documents in with an article. MORE doesn't have such a feature, and this keeps me from throwing ThinkTank512 off the hard disk. Fourth, the lack of a custom slide format. Next month I'll mention the best slide/Vue-graph format that I've ever seen. It was developed by an engineering PhD at Booz-Allen-Hamilton. MORE ought to allow me to import a custom palette from MacDraw, PageMaker, or SuperPaint, and allow me to place the text (headline and subheads) where I want to. Until such a capability is allowed, I really don't think that we'll see MORE used to create presentation-level Vue-graphs or overhead transparencies. MacDraw is still the overwhelming favorite for the creation of Vue-graphs because it allows the user control over what is shown.

Incidentally, multilevel bullet charts can be created. See "Tip Sheet," p. 130, of the February, 1987 issue of MacUser. But it's not clean. It requires Cut and Paste of sublevels. Why couldn't a control be placed on the Tools palette that allows this feature? I visualize it as shown in Figure 7.



Figure 7. A proposed MORE tool palette that would allow multiple levels of subheads to appear under a particular slide.

IBM Sales Down! A Hahahahahahahahaha!

Business Week was all atwitter in November with the bad news that our favorite company, Internation Boatanchor Machines, was having a temporary sales slump. And that they were doing some major rethinking about long term sales and marketing and design strategies. And that some major corporate management reshuffling was going to happen. But of course we expect such things of major corporations. GM,

IBM, they're all alike. They do a lot of hand-wringing. They do a lot of public self-flagellation. They ask themselves quietly and sincerely (loud enough so that BW and Wall Street Journal print it the next day), "What's wrong with us? Don't customers like us? Is it our marketing approach? Have we gotten fat and lazy?" They're missing the point.

What we the computer public need right now is someone like a Sam Kinison to look right into the camera and scream, at the top of his lungs,

"It's your machines! It's your crummy machines! Ahahahahahahaha hahahaha!"

It is obvious to the most casual observer that computing machines are not going to run like they used to. They're all going to be like Macs. Or Amigas. Or 1040STs. Windows. Icons. Point and press. Miceys. No more lunkhead machines like IBM is foisting off. No more dwarf replicants of System/360s.

What to do with those silly Apple stickers

So we feel sorry for the big company. Charlie's sick. Sniff. So what shall we send the Armonk boys? A Whitman sampler? A Merlin Olsen-endorsed bunch of flowers? I think that I have a better idea. When you open the box containing your new Macintosh, you get a bunch of Apple stickers, approximately four dozen. Apparently the folks in Cupertino think that you are going to wallpaper your bedroom in four-color Apple logo. But now there's a place that you can send those things. That's right. IBM corporate headquarters. Salt in the wound. The address is: IBM Corporate Headquarters, Old Orchard Rd., Armonk, N.Y. 10504.

Let's send mailbags of these little Apple stickers to the Men in Corporate Blue. I want to see a picture, in Business Week, of the muscles in John Akers' temple twitching with anger, his jaw clenching and unclenching as he thinks of those millions of Macintosh users overwhelming his mail department with stickers. I visualize him, as he drives home in his big Euro limo, screaming at his chauffeur to hit the Bimmer in front of him, the one with the IBM parking lot sticker in the window and the Apple sticker on the bumper. Ahahahahaha! And I want to say, "Gee, John, it's too bad about your mainframe sales. It's too bad that business for IBM for the next *twenty years* is going to be crummy. There goes your bonus, eh?" And then one day, he's just going to snap. Carted off in some white suit, screaming something about that SOB Pepsi salesman. Couldn't take the stress, they'll say. It was all those damn stickers, they'll say. They pushed him right over the edge.

Wham. Bam. No Thank You, Sams

"The Cheapies are coming! The Cheapies are coming!"

I feel like Paul Revere. But it's not the British, it's cheap books. It's the illegitimate offspring of the Desktop Publishing Revolution. On my desk sit three sorry looking books. Now don't get me wrong, I love books. I badly want to like these books, because the authors used Macintoshes to write them and illustrate them. But these are such awful wastes of good trees that I feel that I should warn you. The books are Using and Programming the Macintosh (*subtitle: including 32 Ready-to-Run Programs*), Mac Graphics, and Mastering Omnis 3.

contd.

The first two books, *Using and Programming the Macintosh*, by Frederick Holtz, and *Mac Graphics*, by Tony Fabbri and Gregory W. Thorne, look like 2-week wonders. Written over a long forty-hour weekend, with incredible deadline pressures. At least, I would hope so. To give you an idea of the breadth of U and P the M I can tell you that chapter 2 covers MacPaint. Then you're assumed to have pretty much mastered that, I guess. Chapter 3 covers MacWrite. Comprehensive these chapters are not. Chapter 4 covers the Finder. The exact version of the Finder is unknown, but one sentence gives it away: "Here, we can see that all of the documents on this disk were last revised on Tuesday, January 24, 1984,..." In other words, the Finder version is pre-Troglodytic era, pre-HFS, pre-PermaPress, even. Chapter 7 has short programs that perform graphics routines, like draw circles all over the place, draw random lines, etc. Far better books have been written on BASIC.

Mac Graphics is so bad that I can't believe that it took two people to write it. The graphics are Screen Dump City. They wouldn't even be so bad if they were only done on a LaserWriter. But done on an ImageWriter? All of the backgrounds have that funny banded look, like the printer carriage head was traveling the other way when it did the gray background.

Mastering Omnis 3, by Steven Maller, is the best of the lot. It teaches OMNIS 3 database software by creating a database for an imaginary computer store. It has you create, in step-by-step fashion, a customer database, a custom Mac interface complete with custom menus, and custom alert boxes and error message boxes. Chapters 7 & 8 have you add an inventory system and Chapter 9 covers an invoicing system. It has good illustrations. It's probably the most well-done book when it comes to printing quality, figure/text balance, and completeness. A small business planning to use OMNIS3 as its database might do well with this book. I suspect, however, that portions of the book are very dependent upon the version number of the software. And that's really not the nut of the matter. The book is one huge example. You have to start in the beginning and follow along by creating the database pretty much as the author has done in the book in order for you to learn the points he's trying to make. You can't flip to Chapter 8 and just start reading it. It's certainly not a good reference book.

The overall objectionable thing about all of these books is how obviously cheesy they look. The pages are rough and thick and the edges have that just-cut look about them. They don't feel right sitting in my hand. They feel back-alley cheap. "Hey, psst! Mister! Yeah, I'm talkin' to you, who do ya think? Doyawannabuyabook? Hot off the press. A dweeb like you looks like you could use this book to get you through the next weekend."

And all this from Howard W. Sams & Co. publishing company, a company rich in electrical engineering tradition. Don Lancaster's hugely famous *TTL Cookbook* started it all off for Howie Sams. It was a hardware hacker's dream come true. Uncle Don was giving us the straight poop on real TTL design. None of this K-map and Boolean algebra business that we learned in sophomore digital design class, the *Cookbook* taught us the magical formulae of pullup resistors, how to build flip-flops from 7400 NAND gates, how to build

adders, how to design with the ultra-amazing monostables and the 555 timers. Then there was Don Lancaster's *CMOS Cookbook*. Then there were... For awhile there, Uncle Don was cranking out more cookbooks than Julia Child. The Sams cookbooks used to sit on every engineer's shelf. They were paperback, nicely printed, nice paper, good illustrations.

But oh how times have changed. Sams & Co. is getting into the hardcover mail-order books-on-software business, and they're a darn sight worse for it.

Dark Castle

Oh baby. Oh baby. Oh baby. Oh baby. I usually hate games, but this one I'll buy.

Pimple-faced Hackers: Where are they?

I'm beginning to worry. Call it angst, call it fear and loathing, whatever, I'm beginning to worry about the dearth of pimple-faced hackers hanging around Macs at computer stores. They're not there anymore, drooling over the Macs like they were big Snickers bars. Now they're hanging around Amigas and 1040STs. Arrrrgh!

PFHs, for short, are those creatures that you always found hanging around the electronics labs in high school. The ones you prayed wouldn't get mad at you, for fear that one day you'd open your locker and get about 140,348 volts shot through you as wires buried in your locker leap out and shoot into your temples. The ones you hoped wouldn't be your chemistry lab partner, because you did want to live through at least your junior year of high school. They embodied the spirit of the Hacker Ethic. They couldn't get dates but they could do amazing things with computers.

They would always tear into a machine over 7-11 Big Gulps and burritos and code up some cute software and thoroughly impress the moderately high tech students. They'd build powerful databases in 2K of ROM. They'd code compilers AND debuggers into another 2K. Editors were a throwaway to these types. Editors? What kind? Full screen? 400 bytes. You want a syntactic spelling checker? OK, that'll cost you another kilo of memory. Us moderately high tech types knew that we could never ever ever write software as well or as fast or as compactly as these silicon gnomes. And the Mac basically got started because the PFHs were behind the machine and writing amazingly powerful software upon which the Mac's ROM Toolbox was based.

But I fear that the tide has turned. The kids are looking out at the new horizons, and they see Amigas. They see 1040 STs that they can get for under a thousand dollars, regardless of how trashy the Travail Operating System is. They see unhacked machines and they must have at them. And when the Mac has lost the enthusiasm of this fickle class of hacker, then it has lost its spirit of piracy and independence. Has the Mac gone Wall Street? Have the Pimple Faced Hackers been squeezed out?

North Coast News

(Cleveland) Over the holidays I took home the Mac, hard disk, and a book on Excel. It's EXCELent. The book: *Microsoft Excel with Macros*, by Douglas Hergert. It's \$21.95 list, less than \$20 at Crown Books. Anyone who's a serious user of Excel, and who wants to maximize the power of Excel, ought to seriously consider buying this book and working through all of the examples. I would estimate that if you're diligent you can duplicate the macros and learn all

contd.

about them in 40 to 80 hours. Then you become a Zen master of Excel. This is the best book by far of all of the self-teaching books on EXCEL out on the market today. Bar none. It puts Douglas Cobb's section on EXCEL macros to shame because it goes into great detail about macro building, proper macro formatting, the use of the Recorder and working with arrays. The chapters on designing interactive programs and creating menu-driven applications is an absolute must-read chapter by anyone who is considering using Macs and EXCEL for turnkey small-business systems.

SuperSpool Warning!

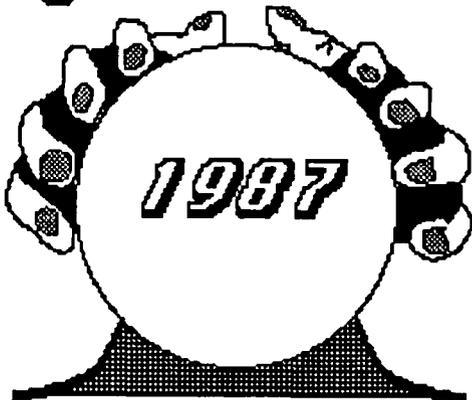
If you have a plain old Apple HD20, don't use a friend's SuperSpool print spooler if he or she got it with their SCSI hard disk. It won't work with hard disks using the serial port. I found out the hard way. 'Nuff said.

Capsule Reviews

Oh Baby... SuperPaint. Dark Castle, for its animation, clever and funny scenarios... Smash Hit Racquetball. Take it from someone who has played a lot of racquetball in his time, this one's a winner. Super-realistic sounds. Only one complaint: there are no body slams into the side walls. Also, I couldn't do ceiling shots, or Z (three wall) shots. And on the Iigs, Tass Times in Tone Town. On the sharp color monitor this point-and-click game soon had onlookers gathering around. Great for young kids.

I Can See the Future, and the Future Is...

Seelig's Prognostications



Divining the future is not for the faint of heart. I have peered into the murky mists of the distant future, and the future looks... Blue, very Blue. I offer these visions of far distant universes, of the world of 1987.

I See... Apple, unveiling a new machine in January, and then another in March. At the heart will beat a 68020 microprocessor. It will be instructed to savage any MS-DOS program that resides in its memory, despite claims by the Apple people that the new machines will allow co-habitation of Macintosh programs with IBM-type programs.

I See... IBM, begging Apple to let them make a Macintosh clone. Apple says No.

I See... IBM transferring 75% of their employees to Tunisia.

I See... 74.9% of IBM employees requesting voluntary retirement.

I See... Rich Norling, releasing Cricket Spreadsheet and Cricket Database in the summer. MacUser will proclaim them *Best Software Duo of the Year*, and simultaneously dub them *Most Prosaic Names of the Year*.

I See... David Morganstein, in the year 2000, writing EXCEL: Part 164. "More on Function Macros."

I See... John Dvorak, strangled by a cord that looked suspiciously like a Mac keyboard cord.

I See... Ron Wartow, being sucked in by a game written on the new Apple machine. It's an adventure/Flight Simulator/Leather Goddess of Cupertino/Dungeon of Doom/Balance of Power type game, fast as greased lightning, with color, stereo audio, and Sensurround. He's going to begin playing in August, come up for air in September, not know how to get out of the kitchen with the dwarf wizard and the dragon that is disguised like Vanna White, desperately leave a message on the WAP GameSIG bulletin board requesting assistance, and Charles Don Hall will tell him to take the flashlight and the Northern Virginia toad out of his bag, wave them around the room while chanting, "Ooga, dooga, looga," three times. And then the final panel appears. Ron proclaims his eternal indebtedness and dubs CDH Grand Kleegle Vizier Wozness of the Universe for Life.

I See... Chris Klugewicz, desperately trying to remember the basic steps to thoracic surgery as he used to do it in MacSurgeon, washing out of medical school, and hanging out at 27 bulletin boards simultaneously. He will be the all-time highest user of telephone lines that AT&T has ever seen.

I See... Jonathan Hardis, in 1998, still knowing the answer to every question about the Macintosh, in all of its forms and versions. When Andy Hertzfeld has problems, he'll ask Jonathan.

Fred Seelig has one of every lead size of Pentel mechanical pencils ever made. His secret dream is to invent a computer as cute as the Mac and inscribe his name on the inside of the shell. ☺

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| | | |
|----------|-----------------------|----------|
| | A | B |
| 1 | Excelling On Your Mac | |
| 2 | Part 10 | |
| 3 | by David Morganstein | |

This month we'll look at two topics. The first subject describes the use of Excel to conduct simulations while the second deals with linked sheets. Many users of Excel are familiar with its uniform random number generator which can be used to simulate certain kinds of naturally fluctuating phenomena, a kind of unpredictable "what if". This month we'll discuss how to tell Excel to repeat a random experiment a number of times all the while accumulating the results to see what might happen "in the long run". In addition, those who have updated to version 1.03 may have done so to ease a problem with version 1.00 in locating linked files in remote folders. We'll talk about linked sheets and how to use them.

First, a small pot-shot at Microsoft. On the one hand, they must be applauded for distributing such a marvelous program. On the other hand, the 1.03 "update" is overpriced for what it offers. For \$25 you get a corrected version of Excel that finds linked files located in other folders. This is a "bug removal fix" and \$25 is a bit much for handling charges. Also, the copy protection is removed. This can hardly be worth paying for since it was Microsoft's decision to employ copy-protection originally. Thus, we paid for its inclusion before and we pay now to remove it! Isn't that called "get you coming and going"? Indeed, Microsoft has added support for the 68881 co-processor chip. This will be a boon to user's of future Mac's utilizing the power of this chip but it is of absolutely no benefit to practically any user right now. (Yes, there are a handful of explorers who have added expensive co-processor boards to their machines. These few folks can take advantage of the extra power.) Current users who can not use the one new feature are funding the development of the product for future users by paying for an "upgraded" version. We all just "gave at the office" one more time.

Simulation. If you didn't believe that a coin was fair, you might consider flipping it a few hundred times and counting the number of heads you got. If you flipped a coin ten times, how often would you get exactly five heads? How often would all ten be heads? While you could try these experiments with your own coin, all of this would take a little time and effort and maybe even the help of a friend to keep track of the results. Alternatively, you can use the assistance of Excel to flip the coin and record the results. These simple experiments can be accomplished through the use of the RAND() function. Each use of this function generates a single uniform random number between zero and one. Here is a handful of them:

If Excel is doing its job right, we expect about one half of the values to be greater than .5 and about a half to be less. You may be familiar enough with Excel to see how you can count the number of these values which are greater than .5. A straight forward but

| | A |
|----|------------|
| 1 | 0.59606934 |
| 2 | 0.23023987 |
| 3 | 0.67518616 |
| 4 | 0.04751587 |
| 5 | 0.71682739 |
| 6 | 0.85461426 |
| 7 | 0.5579834 |
| 8 | 0.03903198 |
| 9 | 0.18461609 |
| 10 | 0.01679993 |

space-wasting method would be to form a second column filled with a formula like IF (A1 >.5, 1, 0). This expression fills the cell with a 1 when A1 is greater than .5 and fills it with a zero otherwise. This second column then would contain nothing but ones and zeros, in effect recoding the first column. A SUM command could then be used to total up the number of ones. Someone more comfortable with Excel could see that the two commands could be combined into one, filling a single column with something like IF(RAND()>.5,1,0). This would create a single column with a random mixture of ones and zeros. Again, the SUM command would count the number of "heads" in our coin toss, represented by a RAND() value greater than .5 and coded as a one.

Yet a third way for Excel to handle this problem is through the use of an Array command. As in the first method, create a column of RAND() numbers in cells A1:A100. Then enter the following formula "=SUM(1*(A1:A100>.5))" by holding down the COMMAND key while hitting the ENTER key. Notice that Excel adds curly brackets "{}" around the formula indicating that you have used the command key indicating the expression is an array formula. This array command says to add up the number of values in the range A1:A100 which are greater than .5. The mysterious multiplication by one is needed to create a numerical value from a logical result. The expression A1>.5 is either true or false. If you multiply this logical expression by one, you get a numerical result that is either one or zero. Numerical values can be SUMed, logical ones cannot. Sounds logical doesn't it?

While we can create a large number of random numbers for a single trial (Excel has space for over 16000 rows), we have not yet introduced any memory into our experiment. We aren't keeping track of the various counts we got as we repeated this little game by issuing the Calculate Now command to re-generate a set of random numbers. Not to mention the fact that we must manually give the Calculate Now command (under the Options menu). Next, let's see how to keep track of the results from each simulation and then we'll look at a Macro that causes Excel to repeat the whole process a specified number of times.

Say we wanted to know how many times in a flip of ten coins we get no heads, how many times we get one head, two heads, ..., up to ten heads. We want to accumulate these numbers as we repeat the ten coin flips over and over again. To do this, we'll put a column of numbers from zero to ten in B1:B11 next to a random generation of ten flips stored in A1:A10. In cell A11, hereafter named Total, we'll keep the total number of "heads" found in the current ten flips. In C1 we'll start with a formula =1*(B1=Total) which we fill down to C11. If you use the Option, Display formulas, you should have something like this:

| | A | B | C |
|----|----------------|----|----------------|
| 1 | =RAND() | 0 | =1*(B1=Total) |
| 2 | =RAND() | 1 | =1*(B2=Total) |
| 3 | =RAND() | 2 | =1*(B3=Total) |
| 4 | =RAND() | 3 | =1*(B4=Total) |
| 5 | =RAND() | 4 | =1*(B5=Total) |
| 6 | =RAND() | 5 | =1*(B6=Total) |
| 7 | =RAND() | 6 | =1*(B7=Total) |
| 8 | =RAND() | 7 | =1*(B8=Total) |
| 9 | =RAND() | 8 | =1*(B9=Total) |
| 10 | =RAND() | 9 | =1*(B10=Total) |
| 11 | =SUM(1*(X>.5)) | 10 | =1*(B11=Total) |

contd.

Changing back to displaying the values, in C1:C11 you'll see a single one with all the remaining cells showing a zero. As you issue the Calculate Now, this single "one" will move around, appearing in the row indicating the count of RAND() values bigger than one half. To add a little memory to this, change the formula in C1 to =1*(B1=Total)+C1 and fill this down the column. This statement, in effect, says add the current result to what was previously here. This kind of thing is done in programming languages all the time with statements like SUM=SUM+NEWVALUE, cumulating the results in the variable SUM. Most likely you will be greeted by a complaint from Excel, "Can't Resolve Circular References". This message is telling you that the formula for C1 contains a reference to C1 and "does not compute". The message is really meant to be just a warning rather than a restriction. The vast majority of spreadsheet users don't create circular references like this and Excel is just checking with you to see that you really mean business here. Fortunately, the warning can be defeated and the formula evaluated. Under the Options menu select Calculate. This option is used to determine if the calculating is to be done automatically after the Enter key is pushed or manually activated by the user with the Calculate Now menu item. As you can see below, this dialog box also lets you activate a feature called Iteration and to set the number of iterations, the default being 100. Check the iteration box and set the number of iterations to one.

| | | |
|---|------------------------------------|---------------|
| Calculation | | OK |
| <input checked="" type="radio"/> Automatic | | Cancel |
| <input type="radio"/> Automatic Except Tables | | |
| <input type="radio"/> Manual | | |
| <input checked="" type="checkbox"/> Iteration | | |
| Maximum Iterations: | <input type="text" value="1"/> | |
| Maximum Change: | <input type="text" value="0.001"/> | |

Returning to the sheet, you now see a one somewhere in the C1:C11 cells. Issue a Calculate Now command a couple of times. Each time, one of the C1:C11 cells increases by one as Excel tallies in the result of the latest simulation of ten coin flips. Below you see the result after 30 repetitions. C11 contains the sum of C1:C11. Lastly, D1:D11 contains the proportion of times each value occurred. For example, we see that in ten of the fifty trials (20% of the time), we obtained four heads. Anyone who has taken an introductory course in Statistics and Probability no doubt encountered the Binomial distribution which can be used to obtain the theoretical probabilities for this little experiment.

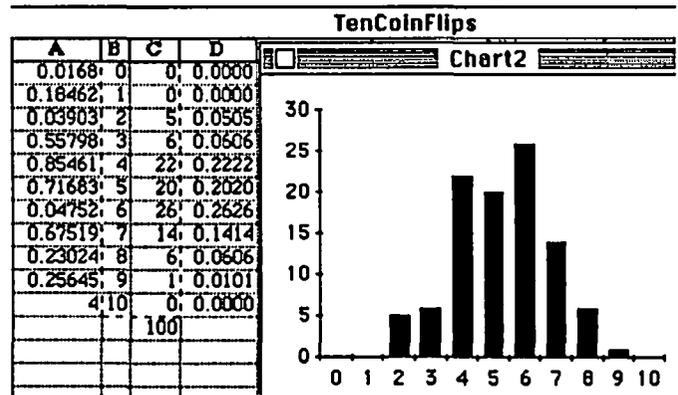
Our last task is to avoid wearing out the Calculate

| | A | B | C | D | |
|----|---------|---|----|------|------|
| 1 | 0.19833 | 0 | 0 | 0.00 | |
| 2 | 0.36255 | 1 | 0 | 0.00 | |
| 3 | 0.85263 | 2 | 3 | 0.06 | |
| 4 | 0.35005 | 3 | 5 | 0.10 | |
| 5 | 0.41785 | 4 | 10 | 0.20 | |
| 6 | 0.84291 | 5 | 10 | 0.20 | |
| 7 | 0.89775 | 6 | 15 | 0.31 | |
| 8 | 0.52081 | 7 | 5 | 0.10 | |
| 9 | 0.45343 | 8 | 2 | 0.04 | |
| 10 | 0.9082 | 9 | 0 | 0.00 | |
| 11 | | 6 | 10 | 0 | 0.00 |
| 12 | | | | 50 | |

Now key (Command=). We can do this with a short macro that asks for the number of repetitions and then repeatedly issues the calculate command for us. The "repeat" macro begins with an INPUT statement which displays a window requesting the number of times you want to repeat the simulation. The number entered at the keyboard is stored in a variable called "count" (which by the way is really cell B2 of the macro sheet). Cell B3 assigns the value of "count-1" to the variable "remain". Cell B4 is the beginning of a short loop and is so named. It issues the Calculate Now command. In cell B5, we decrement the remaining number of times through the loop and in B6 we check to see if we have gotten down to zero yet. If not, we go back to B4 for another recalculation. Finally, every macro must end with a return (although the return could have been added to the command in B6 after a comma following the goto statement.)

| | A | B |
|---|--------|--------------------------------------|
| 1 | | repeat |
| 2 | count | =INPUT("enter the number of reps",1) |
| 3 | | =SET.VALUE(remain,count-1) |
| 4 | loop | =CALCULATE.NOW() |
| 5 | remain | =remain-1 |
| 6 | | =IF(remain>0,GOTO(loop)) |
| 7 | | =RETURN() |

When you run the Macro, it will ask for the number of ten flips you want to repeat. Let's try 100 and see how it looks. Of course, to appreciate the final results, you may want to do a bar chart of the completed simulation, a snap for Excel!

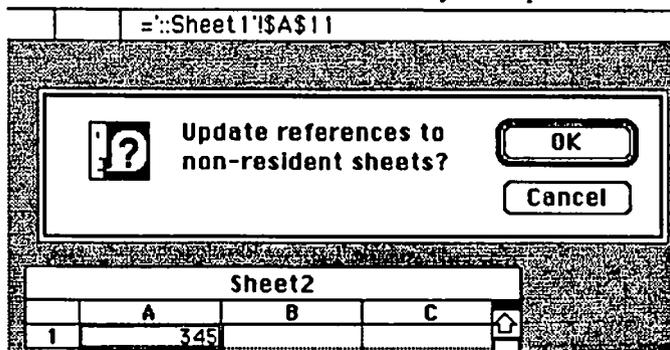


Linked Sheets. One of Excel's strong points, and one in which it excels over Lotus' 123, is its ability to easily link spreadsheets. With most spreadsheet products, your single sheet becomes filled with little rectangles of data spread all over the place. These rectangles may be connected by references but an overview of how things relate is difficult for someone else to deduce or for you to remember two weeks later. Excel allows you to create these rectangles in a number of sheets and easily connect them by defining a cell in one to be connected to another. Each sheet can appear in a separate window easily accessed through the Window Menu. In this way, you can have a half dozen or more pieces of an overall solution visible in separate, instantly viewable windows.

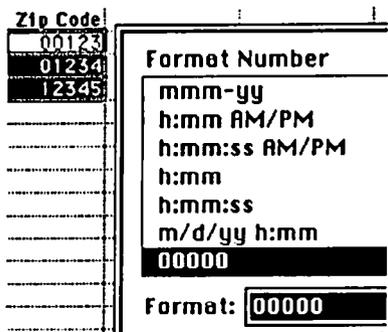
As an example, say you are maintaining the costs of a project by individual tasks. For each task you create a separate sheet containing the back-up for the task expenses, things like number of hours, hourly rates and the dollars for each individual working on the task. In an aggregate sheet you collect the rightmost column from each task, assuming contd.

this last column contains the total dollars for that task. In practice you would build the individual task sheets and the aggregate. Over time, the hours would increase for specific tasks. Excel's dynamic linking allows you to modify only the individual task sheet containing changed hours. At a later time, when you needed to see the combined aggregate, you could open only the aggregate sheet. Excel would find the references in the back-up sheets and carry forward all the values to insure that the aggregate values were current.

In version 1.00, this situation worked fine if all the various sheets were in the same folder; however, problems arose when referenced cells were in other folders. Excel would indicate it couldn't find the referenced back-up sheet and present you with a mini-finder window. You would have to locate the appropriate back-up sheet and open it. Version 1.03 is a bit smarter. As long as the individual tasks remain in the folders where they were located when the aggregate sheet was built, Excel will correctly find the referenced values and carry them forward. In the screen shot below you see V1.03 alerting us that Sheet 2 has a reference to a "non-resident", i.e. not currently open, sheet. At the top of the shot you see the way V1.03 references a second sheet. The two colons indicate that the needed file, called Sheet 1 is embedded within a folder. Unfortunately, as you can see, the name of the folder does not appear. Beware, if you move Sheet 1 to another folder, even V1.03 will not be able to find it without your help!



Formatting for Zip Codes. The one advantage of being on WAP's Excel Hotline, is that I am the recipient of challenging questions which can serve as topics for this column! Jim called last night. He had a column in his data base for Zip Codes. Unfortunately, every time he entered a code beginning with one or more zeros, the leading zeros disappeared. Excel drops the leading zeros for numeric data. What to do? This was an easy one! Create a format (choose Format under the Number menu) for that column which consists of five zeros. As you can see below, that's all there is to it! Many people have yet to create their own formats. This again is one of Excel's versatile features. Use any of the formatting symbols you see as you scroll through the list of standard formats that Microsoft has already included. With these symbols, you can assemble a wide variety of data displays, including Zip Codes.



Editorial contd. from pg 3

When Apple rolled out the LISA it was revolutionary. Many pioneers purchased these wondrous machines but at premium prices. Due to these prices and the paucity of software for the general public and businesses, it was soon abandoned for the brash young upstart, the Macintosh, which was introduced in January 1984 as a closed system. It quickly became apparent that 128K of RAM would not suffice for such a revolutionary computer. Soon third party vendors and Apple announced the availability of 512K versions. Next, in January 1986, Apple introduced the Macintosh Plus and simultaneously dropped the 128K and 512K Macs from further production. Upgrades were available and in April 1986 512K enhanced machines were and are being sold. Now the question of what happens next.

It is certainly true that old box cameras can still produce excellent pictures, and 128K Macs can perform quite adequately for home word processing, family financing and spreadsheet use. But the triple pluses of increased RAM, 800K drives and HFS literally shout for implementation by 128K owners, especially so at the current pricing of upgrades. SCSI ports and additional 512K RAM may or may not be appropriate for many, but they are there, readily available at reasonable cost.

But what of the installed base of Mac+'s in the organizational and governmental environments? Apple has estimated that the number of Macintoshes sold to date totals about 1 million. Let us assume for this exercise that approximately 100,000 have been installed in State, Local and Federal governments, corporations and educational institutions. What happens if Apple declares that no further upgrades will be available for these machines? Options include: (1) use the equipment as is; (2) sell to other organizations or individuals at some loss (assuming premature loss of \$500/computer this could cost an aggregate loss of \$50 million); (3) look to third party vendors to provide ways to enhance the systems to take advantage of the new hardware and software that will surely follow the introduction by Apple of next generation equipment; (4) prevail upon Apple to provide the Mac pioneers with trade-in options, which improve upon those provided to the unfortunate LISA and XL purchasers; or (5) prevail upon Apple to reconsider its policy of making the Mac+ a dead end and an "entry level" system.

There are those who insist that it is physically impossible to upgrade Mac+ computers to the next generation systems. This is equivalent to telling an inveterate pirate that a copy protection scheme on a particular application is unbreakable. Even Apple has been able to place the entire //e logic structure on one chip within the Apple IIgs. And what of possibilities to provide externally available expansion slots tied to the Macintosh Plus by means of an umbilical cord, conceding of course some probable loss of portability? The question is not one of size but of economics and marketing strategy.

Yes, the answer to my opening question is that it is so. Apple has decided for reasons not yet clear to this writer to not provide an upgrade and to once again penalize the pioneering purchasers of the earlier Macintoshes. This, in my opinion, should be reconsidered by Apple at the topmost levels, and, as an absolute minimum, an explanation be offered as to why this decision may be ruled irreversible.

REVIEW CORNER



by James M. Burger

MACWORLD PLUS

MacWorld San Francisco

I have lost count. This, I believe, was my sixth MacWorld. The first one, it seems like years ago, was in San Francisco's Civic Center; there were no more than 40 vendors. That show seemed hastily thrown together and few of the displays were very professional. A visitor could easily cover the show in half a day.

January '87 MacWorld—the graying of the Macintosh. Three-quarters of the large Moscone Center was devoted to the Macintosh—260 vendors, plentiful professional displays (including Hewlett-Packard!), immense crowds and the likes of Robin Williams, Herb Hancock and Tod Rungren cruising the floors and parties. The Macintosh has come of age.

At once I am sad and proud. Sort of like the father or mother seeing that their off-spring is no longer a child. The Mac has gone from a “toy with a cute display” to a “full powered” business machine lauded by the likes of Hughes Aircraft, Motorola and Bank of America Executives. The dream and belief has never left me. I am proud of Mac's success, but kind of jealous to have to share it with the rest of the world (although, as many of you know, I have pushed the Mac hard on anyone who would listen).

It is a graying because of a number of factors. There seem to be more serious sales people. I do not just mean the color of their hair (our venerable editor—Bernie Urban—may be “stately silver”, but he is clearly “young-Mac” at heart). Also, there seem to be fewer original pieces of hardware and software programs. Not that the new product offerings were unwelcome. But they are improved versions of existing product types or are ported over from other machines.

Everyone kept asking, “What's the most exciting product?” That was a hard question to answer. There was not as much excitement surrounding new offerings as at past MacWorlds. “What have you seen that was good,” was also hard to answer. But, only because there was so many good products. But, I will go out on a limb and tell you what, for me, were the two most exciting new hardware and software products. Hardware: DEST's PC PLUS Optical Character Reader. Software: Ann Arbor Software's FullWrite. More about each below.

I. Hardware.

DEST PC Scan Plus. There are lots of scanners available for the Mac. In addition to DEST, several other companies introduced scanners, including AST. I found DEST most interesting for several reasons. First, DEST is a well know company. In fact, DEST has a good reputation for Optical Character Readers (OCR—i.e. creating text files from the printed page) for dedicated word processing systems. It is nice to see companies with a strong presence outside the Mac world introducing Macintosh products. Second, they and Abatron are the first to introduce OCRs. Unfortunately, I did not get to see Abatron's offering. Hopefully, we will be able

to write an in-depth review of both products in a future issue.

PC Scan Plus requires purchase of the Publish Pac software (which includes SuperPaint). Also, the scanner requires the Macintosh Plus Interface Kit for \$95. PC Scan Plus can scan text, photographs and line art. The OCR capability allows text to be read and stored in ASCII text only format or in MacWrite format. It reads a fair number of fonts. It reads a number of 10 pitch, 12 pitch and proportionally spaced typefaces including Courier 10, Prestige Elite, Letter Gothic, Courier 12, Elite, Prestige Pica, OCR-B, Pica-I; it reads some dot matrix printers including Epson, Okidata and Imagewriter. The Plus also reads LaserWriter Courier. DEST said that it was adding new fonts. I would like to see a software package that allows you to “teach” the OCR new fonts.

Networking. Although, at the end of January, Apple seemed to be stealing the networking thunder, there were some interesting products at MacWorld. Farallon Computing in Berkeley had an extensive PhoneNET AppleTalk local area network linking various parts of the MacWorld exhibit hall. PhoneNET connectors permit you to set up 3000-foot long AppleTalk networks over ordinary telephone wire. The network connected the seminar rooms and over a dozen different exhibitors including a VAX minicomputer at the Apple booth, a gaggle of LaserWriters, Macs and MS-DOS PC's. Indeed, the network was quite complex. It used Hayes Interbridges to connect separate AppleTalk networks and Kinetic's FastPaths to bridge AppleTalk networks onto an Ethernet network. 1987 is clearly to be the year of Apple networking.

In addition to the PhoneNET connectors, Farallon offers an AppleTalk Repeater—to extend the network up to five miles; a StarController—to coordinate a large network wired in a star topology through existing telephone wire (AppleTalk cable must be strung from one node—computer/Laser/PC, etc.—to another, while telephone wire usually looks like arms of a star focusing on the central “switch”); and a StarController Management card for the StarController—to permit a network manager to monitor network status, identify the location and nature of problems on the network, and attach and detach branches from a remote network (includes the software). Farallon also had several pieces of networking software including a testing program and a network traffic monitoring program.

Flat Macs. It also was the battle of the “flat Macs.” Although, according to this biased observer, it was no contest. Dynamac, Colby and Intelitec were all there with offerings. At this writing only Dynamac is officially authorized by Apple to purchase Macs for repackaging. Also, for what it is worth, Dynamac's booth was more substantial (in size, appearance and abundance of machines). The Dynamac has four megabytes of memory on a MacPlus motherboard, 800K floppy drive, 40 Meg. internal drive, 300/1200 baud internal modem machine with video and E-Machines

contd.

screen out ports in an attractive black case. The Dynamac has an electroluminescent screen. Intelitec's MX Plus is a standard MacPlus in a Zero Halliburton aluminum case. It operates for 5-10 hours on internal batteries, but it has a hard to read "supertwist" LCD screen. Colby had two versions of its machine: a LapMac and a Modular Mac. It uses a gas plasma display, a Mac motherboard, an 800K floppy, 20, 40 or 60 meg. removable hard drive and a two-button mouse.

Talking to the MS-DOS World. There were an increasing number of solutions to the so-called compatibility problem. The thought of having to give up my Mac to talk to the MS-DOS world is a frightening thing. Fortunately for us, companies such as **Dyna Communications** and **Tangent Technology** offer good solutions. Dyna had new software for their FT-100 (a box with a 5 1/4" drive that reads MS-DOS files into Mac format). The software now allows use of the FT-100 at the Finder level. Thus, the FT-100 appears to be just another drive on the desktop. MS-DOS files can be converted into Mac files without having to launch a program and quit back to the desktop. Tangent was there with their PC-Mac Bridge Plus, PC Mac Bridge ATB (an AppleTalk card for MS-DOS machines) and PC MacKey which is a keyboard with function keys.

A small start up company, **perfectTEK** offered a Mac with a "add-in" 8086 coprocessor board. The surgically altered Mac can run Mac software and MS-DOS software at the same time sharing the Mac's screen. I have some reservations about machines with two hearts, but it certainly allows you to run just about all the significant microcomputer software in the world.

Such companies as **Infosphere** and **Centram** did not have new offerings in their networking systems aimed at compatibility (Centram's TOPs networking software has some very nice file conversion routines to go with their AppleTalk card for the MS-DOS PC). Nevertheless, along with 1987 as the year for networking, I would watch for many new hardware and software products to allow easy and painless sharing of files between the Macintosh and MS-DOS world.

Hard Disks. It is hard to believe that it was just over a year ago when Apple introduced the HD-20 at \$1499. At MacWorld there were some 24 exhibitors offering hard disks. Prices are dropping and capacity increasing. A significant entry into the Mac drive business appeared at MacWorld with four new drives—**Rodime**. Many of you might ask who? Rodime is the fourth largest manufacturer of hard drives in the world. In fact, a large number of the HD-20s many of you are using have a Rodime in it. The company announced the 20 Plus and 45 Plus external SCSI drives and the 20I Plus and the 45I Plus internal drives.

One company—**Peripheral Land**—not only had a series of drives, but a network using the SCSI port. They offer 21, 32, 50, 80 and 172 megabyte SCSI drives. Also, Peripheral Land offers tape backups, removable drives and SCSI adaptor for the 512 and 512E Macs. Their SCSI-NET-3000 is claimed to have a burst transfer rate of up to 10 megabits per second, considerably faster than AppleTalk. They also claim that the network is transparent to AppleTalk software using SCSI-NET software to re-route AppleTalk signals to the SCSI interface. I did not have a chance to see a SCSI-NET demonstration so I have a lot of questions about the network.

68020. While we all wait for the next generation Macintosh **Levco** keeps on pushing the Mac with its add-in products. For under \$2,000, you can purchase the **Prodigy Prime** which gives your Mac a 68020 and an extra megabyte of memory. The 16 megahertz speed boost is now that much more affordable.

II. Software.

The three major areas of new software releases and announcements were word processing, utilities (mainly laser spoolers), and graphics programs.

Word Processors. The most talked about program was **FullWrite**. The program was introduced by **Ann Arbor Software** (**FullPaint**) with a planned ship date during the second quarter of the year. **FullWrite** is aimed at the high end of the market with a proposed price of between \$300 and 350. It looked impressive. **FullWrite** is to have outlining, a glossary, spell-checking, hyphenation, style sheets, automatic indexing and table of contents as well as a large thesaurus. "Post-its" (remember those little yellow/blue, etc. sticky notes), in the form of comment boxes, can be added to a document. A very extensive search algorithm is included which can even search by font, type size, justification, text content, etc. **FullWrite** will have a form of "hot-links". That is, it will automatically number and renumber footnotes, endnotes and figures after each change to related files as well as on the file you are working on. It also will automatically mark and print revisions.

Now that page layout software is getting like word processing software (e.g. **Ready Set Go 3.0** with some word processing power including spell checking built-in), word processing software is beginning to have page layout software built-in. **FullWrite** has a **MacDraw** like window built-in for graphics creation/editing. Like **MacDraw**, this capability can read bit-mapped images (i.e. **MacPaint** and **FullPaint** files) and treat them like objects. It also has both independent and snaking columns with **WYSIWYG** (what-you-see-is-what-you-get) display.

In addition, **FullWrite** has multiple sidebars. In fact, each sidebar is a complete **FullWrite** document. Text can be wrapped around graphic objects and non-rectangular sidebars. Other page layout features include guttering, kerning and flexible leading. Also, multiple column styles can appear on a single page. **Ann Arbor** will be releasing, free of charge, a module which allows a user to read **FullWrite** documents and append notes without purchasing the entire program. Finally, for those of you not overly fond of the mouse, (if I hear one more Secretary deride the mouse, I'll ...) **Ann Arbor** claims that you can cut the mouse cord and still use **FullWrite**. **FullWrite** sounds like a serious challenger to **Word 3.0**.

At the other end of the price spectrum, although not necessarily in features, is **MindWrite** by **MindWork Software**. **MindWrite** lists at \$125, making it the least expensive full-featured word processor. **MindWrite** also has a lengthy list of features. They include integrated outlining, the ability to make multiple separate text selections which can be formatted, searched, or printed with one command, unlimited windows on a single or multiple documents (well, limited only by memory), automatic labeling, comprehensive searching with "wildcard" characters, instant word count, and date stamping so that text changed as of a certain date can be contd.

printed or reviewed independently of other text or marked and review in context.

A very nice feature is MindWrite's ability to specify font, formatting, and viewing characteristics for new documents. Also, the program permits you to generate a table of contents that automatically includes headings and their page numbers. Finally, MindWrite has a continuous memory clipboard; it remembers everything (memory permitting) cut from the document. Although a paste will only include the last item cut, you can go back into the clipboard and copy and paste previously cut sections. At the price, and I have seen it advertised at below \$100, MindWrite offers a lot of power.

Microsoft was there with Word 3.0 which they demonstrated at our December meeting. By the time you read this the release version of Word 3.0 should have been shipping for a couple of weeks. It is clearly the leading high-end word processor. There should be quite a battle between Word, which has set a standard with version 1.05, and FullWrite. WordPerfect was there, but only had WordPerfect for the Apple IIgs. A Mac version is due out this summer. The word processing field has suddenly become quite crowded with rumors of more powerful programs to come.

In the December Journal I reviewed Microsoft Works. The author of that program has formed his own company and has come out with a nifty new utility for Works—WorksPlus Spell. I highly recommend it to any owner of Works. It is a spell checker, glossary and hyphenator built into one program. More importantly, once installed into Works, it operates transparently (i.e. it does not have to be separately launched, but becomes an integral part of the Works program).

The program's spell checker is excellent with 70K plus words. You can add and subtract words from the dictionary, or temporarily add them for a single document. It can check as you type or check a section or the whole file. WorksPlus Spell is extremely fast, it claims 24K words a minute. It is fast enough to keep up with a 90+ words per minute typist. Its guesses for misspelled words are most often correct. The hyphenation seems to work smoothly. The glossary is extremely fast. You use combinations of letters not ordinarily used and WorksPlus Spell automatically types in the words contained in the glossary. WorksPlus Spell significantly improves Microsoft Works.

Laser Spoolers. Next to being separated from my Mac at work, the second tool I could not do without is our LaserWriter. But having my Mac tied up while waiting for the document to print (or worse yet waiting in a queue for other documents to be printed) is frustrating, to say the least. For printing long documents I used to wait until I was leaving for lunch to print them. Three companies—Infosphere, SuperMac and Think Technologies showed their Laser Spoolers: LaserServe, LaserSpeed and SuperLaserSpooler respectively. Both Infosphere and Think Technologies have released versions while SuperMac's was pre-beta. All offer desk accessories that give the user varying control over the printing process: for example, changing printing order, notification of the start of printing, the finish of printing, removal of a document from the queue, etc. SuperMac's bombed, but a release version should be out by the time you read this. Hopefully, we will review all three.

Graphic Applications. SuperPaint by Silicon

Beach, which I previewed at Boston MacWorld is now in release and selling well. It has two levels—bit map and object oriented. Thus, it is a combination of MacPaint and MacDraw in one application. It has Laserbits allowing you to edit at 300 dpi. Mindscape showed its newly released version 1.1 of GraphicWorks. Mindscape bills Graphic Works as a "low-cost page layout program." The program also is a combination of MacPaint and MacDraw. In addition it has some word processing capabilities.

The graphics program that got the most attention was the new Adobe Illustrator. Illustrator allows very precise control over artwork to produce high quality illustrations and line art. Rather than building an image with dots, illustrator uses lines and curves. The resulting graphics do not look like they were drawn on a computer. Lines and curves are sharp and clean. Watching the demonstration it looked easy to create excellent looking art. But, I will wait for the release version before making that judgment. Illustrator is expected out in April.

Conclusion. Three days is not enough time to see everything at MacWorld. Moreover, there are seminars for everyone. Mac has come a long way. But, wait here comes AppleWorld....

New Products:

HARDWARE -

DEST Corporation, 1201 Cadillac Court, Milpitas, CA 95035. **PC Scan Plus.** \$2495, requires Publish Pac software (see below). Also, it requires a Macintosh Plus Interface Kit. \$95. OCR that scans line art and photographs.

perfectTEK Corporation, 726 South Hillview Drive, Milpitas, CA 95035. **MAC+PC.** \$995. Add-in board with 8086 processor and 640K memory.

Peripheral Land Inc., 47800 Westinghouse Dr., Fremont, CA 94538. **SCSI-NET-3000.** \$600.00 (Late April availability). Networking through the SCSI port. PL Series PL 20, PL 30, PL 50, PL 80, PL 172 & PL 230. 21, 32, 50, 90 and 172 megabyte SCSI external drives. \$995 - 6995. **MacBack Plus 20/40/60.** \$995, 1495, & 1695. 22 and 60 megabyte tape cartridge backup. **MacFast 20, 30, 80 and 172.** \$1395 - 3995. SCSI drives with 8K buffer to maximize raw data transfer to the SCSI bus and Z-8 microprocessor with DMA to speed up transfer to the MacBack tape backup. **MacBack 20/40/60.** \$995, 1295 & 1495. High performance tape backup unit. **MacStor 10.** \$1995. 10 megabyte removable drive. **MacPort Plus.** \$189. Auto-booting SCSI Adaptor for the 512 and 512E (clips on the 68000 processor).

Tangent Technologies, 5720 Peachtree Parkway, Norcross, GA 30092. **PC MacBridge Plus.** \$650. Family of products, including PC MacBridge ATB AppleTalk Card for the MS-DOS world, to allow Macs and MS-DOS to talk to each other. **PC MacKey.** \$200. Replacement for Mac keyboards in the form of an improved IBM-AT type keyboard.

SOFTWARE -

Adobe Systems Incorporated, 1870 Embarcadero Road, Palo Alto, CA 94303. **Adobe Illustrator.** \$495. Art production tool.

DEST Corporation. **Publish Pac.** \$595. Software for the PC Scan Plus, includes superpaint.

contd. on pg 82

Softviews by David Morganstein



Before reviewing Tom Gross' 1986 Income Tax Templates for Multiplan or Excel, a few words about networking. First, Centram (which has NOT been sold to 3Com as reported in Infoworld) has a new version of Tops for the Macintosh. The latest version is dated Jan. of 1987 and fixes a number of previously existing bugs. I have had few of the problems which were previously reported. However, I still do get messages indicating that the connection has been broken and to hold for awhile as it re-connects. Also, on occasion a user trying to mount a published folder may get a "There are problems with this volume. Shall I correct them?" message. Just saying yes seems to get things going without incident. I must confess, however, that when a client is using a published application, the pace can slow down tremendously. I still consider Tops as strongest for networks with PC's and Macs and not all that useful when compared to MacServe for Mac only networks.

Also, Centram has released a printing utility, Topspint, which fills a void in the PC to Appletalk connection. This utility, which will be discussed in more detail next month, converts text to PostScript for downloading to the Apple LaserWriter. It also allows a PC to print to an Imagewriter. I have only read the manual and not tried it out yet.

Nantucket, the distributor of the dBase compiler Clipper, has purchased the dMacIII "dBase clone" program we described a few months back. Look for Nantucket to re-write the manual, fix a few "anomalies" and maybe add a bell or whistle when they re-issue the program next month, presumably well ahead of Ashton Tate's dBase for the Mac.

DA of the Month. You've got to get DiskTop, a wonderful DA from CE software, one of the nation's leading shareware distributors (MockPackage, Calendar Maker, etc.) It is a great DA which combines the best features of DiskInfo and DeskZap. It allows you to catalog disks from within a program. You can do a high-speed file search to locate a particular program. You can delete files, or copy them to other volumes, create a new folder or rename a file from within an application. Plus, it allows you to set the file's Type and Creator, a task that might mean the difference between lost work and a successful recovery from a crashed diskette or hard disk.

Tax Pro 1987 (Tom Gross, WAP member). My guess is you have less than six weeks till April 15th, your day of reckoning with the IRS. If you are like me, you are at most just beginning the arduous task of locating the needed numbers within folders containing receipts and scraps of paper. (On the other hand if you are one of the lucky few deserving of a large refund, you may have completed your forms weeks ago. After all, why let them have all the interest!!) If you have not filled in the forms and added up the numbers, you may take some small pleasure in Tom Gross'

spreadsheets. While the tough time of doing taxes is assembling the information, simplifying the drudgery of completing the forms makes the whole activity a bit less odious. In this year of "tax simplification", your trusty Mac and Tom's templates may make life easier.

Tom's set of templates include the most commonly used forms and schedules. The forms are linked together aggregating numbers from one to another. In addition to the Tax Tables, you will find the following forms: 1040, 2106 (Emp. Business Expense), 2441 (Child Care), 3903 (Moving Expense), 6251 (Alternative Min. Tax Computation). His package contains the following schedules: A-E, G, R, W and SE.

IRS FORM 1040 INDIVIDUAL INCOME TAX RETURN--1986. DO NOT FILE WITH IRS
NAME (IF JOINT RETURN, GIVE SPOUSE'S NAME AND INITIAL):

FILING STATUS SOC. SEC. NO:
1-5 1=single 2=joint 3=separate 4= head 5=widow(er) SPOUSE SSN:

EXEMPTIONS
Enter "1" for each category below that applies to you
6 Yourself _____ 65 or over _____ Blind.....
Spouse _____ 65 or over _____ Blind.....
Number of children plus other dependents.....
INCOME
7 Wages, salaries, tips, etc.....7.
8 Interest income (Schedule B if over \$400).....8. 0.00

Where It Begins

Tom's templates are very easy to use. He has locked the sheets and protected them, thus preventing you from inadvertently changing the formulas. An added advantage offered by Excel is the use of the Enter key to move the cursor between only those cells requiring your input, skipping over cells containing instructions and internal computations.

I must confess that I have not completed my taxes with Tom's spreadsheets and I am not about to vouch for Tax Pro's accuracy. Whenever you use a program to perform the final stages of computation, it is wise to pull out a trusty calculator and check the numbers one last time before mailing in the returns. Also, my experience is limited to the Excel version; Tom also delivers Tax Pro in a Multiplan format.

Beyond accuracy, what can you say about a tax package? First, as to documentation, Tom includes a MacWrite file on the disk. The file printed out to 13 pages, one of which was a Table of Contents and another was an evaluation form. Tom took last year's suggestion to heart and added an Index.

Another other issue might be after purchase support. Being an attorney for the government, Tom does not do taxes for a living. However, he indicated a willingness to handle questions and problems should they arise. The manual tells the owner to contact Tom immediately if a problem is detected. My experience suggests that most users of spread-
contd.

| | | | | |
|----|---|-----|-------|------------|
| 56 | Federal income tax withheld..... | 56. | _____ | |
| 57 | 1986 est. tax paid & amt. from 1985... | 57. | _____ | |
| 58 | Earned income credit (see p16)..... | 58. | _____ | |
| 59 | Amount paid with Form 4868..... | 59. | _____ | |
| 60 | Excess s.a. tax and RRTA tax withheld.. | 60. | _____ | |
| 61 | Credit on gas/special fuels (F4136).... | 61. | _____ | |
| 62 | Regulated Invstmnt.co.credit(F2439)... | 62. | _____ | |
| 63 | TOTAL PAYMENTS..... | 63. | _____ | 0.00 |
| 64 | AMOUNT OVERPAID..... | 64. | _____ | 0.00 |
| 65 | AMOUNT OF REFUND..... | 65. | _____ | 0.00 |
| 66 | Amount applied to 1986 estimated tax... | 66. | _____ | |
| 67 | AMOUNT YOU OWE..... | 67. | _____ | \$7,777.77 |

Well known "bottom-line" ↗

Where It Ends

sheets would have little need of support other than an accuracy problem. I did not see a statement in the manual indicating any legal liability on his part. If the bottom line is incorrect, the IRS is going to discuss the numbers with you, not Tom. I think that situation is the same with other tax packages for personal computers.

Unfortunately, Tom and other Excel spreadsheet developers have been hit by Microsoft's recent "enhancement", version 1.03. As you can read in this month's "Excelling" column, the new version handles linked sheets somewhat differently. This leads to a degree of incapability between versions. Tom prepared the sheets initially using version 1.00. He switched to the new version and continued his development. The result: some references with the new method and some with the old. When I ran the 1040 form from an HFS volume, I was greeted with Excel's message requesting whether it should update from linked sheets. When I clicked OK, it responded that it couldn't find any of the Schedules. Tom supplies the sheet in two folders, one for Schedules and one for Forms. I had to manually open the appropriate folder and identify each and every schedule, whether I needed that particular schedule or not.

If you keep all the sheets on an MFS volume, this should not cause you (or Excel) any problem. If you get messages that certain files can not be found, it may indicate you are using an HFS volume and the folder identification has been confused. Taking everything out of folders should clear it up. This is no fault of developers like Tom, just an undocumented "feature" that Microsoft threw in at the last minute...

Before making the decision to purchase, you should know that Heizer Excel Exchange also offers a low-cost set of Excel templates, similar to Tax Pro. Their package, is supposed to be available on a WAP disketeria diskette by now. To use the Heizer package, you must obtain a copy, say from WAP, and then send in the shareware price of \$25.00 to Heizer. Having Tom nearby to help with some questions may be worth the few dollars you can save going the Heizer template route.

(Update: There were two bugs in the original version 1.0 which have been corrected in version 1.01. If you bought the earlier version from the WAP office and have not been contacted by Tom, please let him know. The first bug involved only those who do not itemize—the allowable charitable deductions were not carried forward to the 1040 form. The second bug was in capital gains—the linkage between this section and the 1040 was in error in the earlier version.)

Tax Pro, Chesapeake Software, 236 Maryland, ave., N.E., Suite A, Washington, D.C., 20002. Phone (202) 546-5994. Price \$44.95 (Special to WAP members \$39.95 ...say David sent you...) ☺

A PAGE FROM THE STACK

by Robert C. Platt

For old times' sake, I have assembled a ProDOS-based Apple // library disk, "811 - Adventures." This disk was inspired by David Ahl's *BASIC Adventures* book published by Microsoft Press. Unfortunately, Dave's book is coded in MS-BASIC instead of Applesoft and requires translation for the Apple // family. Dave has generously allowed WAP to distribute an adaptation of one of his copyrighted programs on Disk 811.

All of the following are Applesoft programs. They have been adapted to display lower case letters based on ProDOS's machine identification byte.

[811.1] **Mystery of the Old Clock Tower.** A text adventure game. Probe an abandoned computer factory to recover a copy of the original adventure game.

[811.2] **Spencerville Manor.** A text adventure game. Mr. Spencer died and left his wealth to whomever finds and opens his safe. The programs creates file GAME when you use the save game feature. From WAP Disk 111.

[811.3] **Oregon Trail.** Simulates a 2040 mile trip over the Oregon Trail from Independence MO to Oregon City, OR in 1847. Includes hi-res arcade routines. Uses files OREGON.X and OREGON.Y.

[811.4] **DC Metrorail.** Simulates a delivery service darter about Washington's computerized subway system.

[811.5] **New York City Subway.** Similar to DC Metrorail but set among 263 New York subway stations.

[811.6] **Swords & Sorcery.** Text fantasy adventure game. Written by Bruce Turric of Belgium.

[811.7] **Moon Landing.** Land the "Eagle" on the moon using game paddles for navigation. From WAP Disk 133.

[811.8] **Space Canyon.** Navigate through the crevices on a "death star" of *Star Wars* fame to find your target. From WAP Disk 133.

[811.9] **Hunt the Alien.** Hi-res game to teach directions and counting to preschoolers. Zero in on the alien by listening to speaker tones.

[811.10] **Black Friday.** A stock market simulation for 1 to 4 players. Try to out-perform Irwin Jacobs or Boone Pickens! From WAP Disk 128. ☺

View from the Hill contd. from pg 61

Compared to other Macintosh text processing software, QUED is reasonably priced at \$65. It is designed for editing the text of programs, not for more general word processing (each document, for instance, is all in a single font and font size). If you need any of its power editing features, by all means buy it. But be cautious the first time you do something new with it, to make sure you don't get caught unawares by a bug.

Rich Norling is coauthor of *StatWorks™* and *Cricket Graph*, and the author of *Pict-O-Graph™*, a new Macintosh application that draws picture graphs. He wrote the book *Using Macintosh BASIC*, published by Osborne-McGraw/Hill. Rich is President of Language Systems Corp. ☺

BEST OF THE MAC ITEMS FROM THE TCS

by Bill Baldrige

Accessories

BOB MASSO ON 10/17

I am looking into the TRS/NEC portable computer, with the thought of using it as a data-entry device in places where carrying my non-portable MAC would be cumbersome. I would appreciate any comments from current owners of these little "accessory computers" as to how well you think they would serve in this function (or HAVE served already).

RICK ROBINSON ON 10/25 03

The TRS model 100 series seem to make very good portable "data-entry devices." A friend of mine is a writer and uses a model 100 all the time to enter articles, etc. He is quite pleased with it, but uploads to a !#& compatible at home. I personally feel the Model 100 series computer would do well in the capacity you described. Go for it!

CHARLES SICARD ON 12/05

Dalton's Books sells CHILTON'S GUIDE TO MACINTOSH REPAIR & MAINTENANCE by Gene B. Williams for \$12.50—No need to be afraid to get inside the Mac now.

JERRY OPPENHEIMER ON 12/06

I recently got a Mac+ and I'm becoming paranoid about that heat in the upper left part of the machine, apparently where the power supply is located. I'd like to get some advice—should I get a fan, or is the heat nothing to be worried about. If I get a fan, which one? I'd like to here from people with different models. I definitely want one that is, as they say in the ad biz, 'whisper quiet.' I have not heard any in operation. Can you help?

BILL BALDRIDGE ON 12/07

I have read several reports about the power supplies in the (upgraded - ed.) Plus having heat problems, and eventually dying. I assume this problem will be addressed by Apple (in its infinite wisdom), sooner or later, by either building in a small fan or redesigning/relocating the power supply/video board. Until then I would highly recommend a cooling fan. The quietest I have heard is the System Saver from Kensington—expensive, but then most are. If you are handy with tools, you might consider building your own from my article in the October Journal!

BAILEY WALKER ON 12/10

I, too, was concerned about the heat buildup in my upgraded Mac Plus. I bought the Kensington System Saver Mac (about \$65 from Mac Connection mail order). Looks good, has surge protector and two accessory outlets, and a quiet fan. Since I've gotten it there is no heat buildup at all. The Mac feels as cool after hours of use as when it is first started. It may not be "necessary" to have the fan but I think it's wise. And it makes me feel better.

JERRY OPPENHEIMER ON 12/10

I agree. Instead of getting the Kensington, I've ordered the Fanny Mac which fits inside the handle area and is not as bulky as the Kensington, but also offers surge suppression. It works in the same manner and I'm looking forward to feeling

a cool case. That heat situation just worried me too much. I think that Apple should have supplied an internal fan.

MARK OSTROFF ON 12/12

I got a Kensington System Saver Mac and installed it last night. The noise of the fan is so minimal that I can not even hear it over my furnace (Mac is in the utility room at home). The great thing about the System Saver is the two power switches located on the front of the unit, tied to the two three prong outlets on the back of the unit. I always forgot to turn off my modem, and would accidentally have the modem auto-answer the phone the next time my wife or I would use the Mac after a BBS session. No longer a problem... just plugged my printer and Mac into the Master Outlet line, and my modem into the Auxiliary Outlet line. I now have a front panel switch for turning my modem on and off while keeping everything else powered off of one Master switch. Plus, the System Saver includes a surge suppressor (a MUST for running a computer at home—house current is NOTORIOUSLY "dirty").

BILL BALDRIDGE ON 12/12

The ONLY advantage the Fanny Mac has over the System Saver is its low profile. Other than that, the SysSaver also has built-in surge suppression, but in addition, it has two outlets into which one can plug peripherals (printer, modem, hard disk, etc.) and switch them on from the front of the SysSaver. Add to this the added quietness of the Kensington unit, and I think that unless the low profile of the Fanny Mac is important, the SysSaver is by far the better unit—not to step on any toes, Jerry.

Business Accounting

MICHAEL HARTMAN ON 10/30

Anyone have any thoughts on a double-entry system for a small business? It doesn't have to be powerful, but should let you edit transaction entries, graph trend lines, and list reports to the screen as well as the printer. I've been thinking about either BPI General Accounting, Rags to Riches, or Strictly Business (have not confirmed each meets all the criteria mentioned). Thanks for any comments.

DEACON MACCUBBIN ON 10/30

I don't know a lot about accounting but two programs that I've heard praised recently are Turbo Maccountant and Insight. I'd suggest you check them out, too.

BILL BALDRIDGE ON 10/30

The Oct 20th issue of InfoWorld gives INSIGHT an 8.1 (out of 10). Ratings broke down as follows: PERFORMANCE: Excellent; DOCUMENTATION: VGood; EASE OF LEARNING: Satisfactory; EASE OF USE: VGood; ERROR HANDLING: Excellent; SUPPORT: VGood; VALUE: Satisfactory. The Satisfactory in VALUE came mainly from the high price (\$595 per module!), but if price is no object the reviewer considers this the best accounting package available for the power user. Of interest was the test performed for error handling—the Mac was SHUT OFF in the middle of accessing a data file(!), and when powered back up and rebooted,

contd.

there were no problems with the file.

KEVIN NEALON ON 12/20

I have worked with several accountants using Macs trying to find the best accounting package for the Mac. My conclusions are as follows. 1. **Strictly Business:** a good accounting package with double entry and a good entry system. Is also capable of budgeting and good report formatting. First versions were kind of buggy (not good for an accounting package) but support and upgrades were good. Have just introduced a Payables module to work with the G/L. Moderately priced at \$295/module. 2. **Turbo MacAccountant:** all in one package. Also a little buggy. New versions are very fast and have a very good payroll built in. Does not do budgeting, but has double entry, and report formatting is good. The best per price performance of any package. 3. **Insight:** to quote Lee Iacocca, "Our Maserati ain't cheap but neither is Caviar." It is the best accounting package out on any micro. Very powerful, bug free, disaster proof. This is the only package that I know of that if the power goes off the file does not get screwed up. Does everything but make money. To bad you could go broke buying it.

SEAN GRIFFIN ON 01/07

If money is an object, you might give some thought to Dollars & Sense. It's a double-entry system that provides charts and graphs and tables and reports for just about anything, and it's easy. I'm not a small business operator, but I use it to detail my home finances and investments, keep track of receivables and payables, and use it as a planning tool. I've seen it as cheap as \$74.

Data Bases

MARK OSTROFF ON 11/30

I saw a VERY brief demo of dBASE Mac about 6 weeks ago at a local trade show. Didn't see enough to really tell me anything. I have been programming in dBASE III (and Clipper) on a PC at work. What will dBASE Mac do for me at home on my Mac that Reflex for the Mac can't do at about 1/4 the price?

DAVID MORGANSTEIN ON 12/21

Mark, I would think the most important features would be: compatibility with dBase (tho there are some issues about this), use of graphic data types, and programmability. If you don't need these at home, you don't need to spend the bucks!

FREDERICK PUHAN ON 01/01

Since I presently use a Skinny Mac Minus, many DB programs are of no/little value to me. However, I am using dBase III Plus at work (of course on an Idiot Box Machine). I have been promised a demo of dBase Mac from Ashton-Tate, but no show so far... Any help? Also, I have used an old (1984) version of Main Street Filer for my DB purposes; while not up to today's standards, it works quite well... Thanks for listening..

BILL BALDRIDGE ON 01/02

For light to medium duty DB/Filing work, Record Holder comes highly recommended—and only \$49.95 retail!

DAVID GURSKY ON 01/07

I just had a nice chat with the folks out at Odesta today about Helix, et al. It seems Double Helix 2.0 is on the horizon, and

will be available RSN. While this will not be a free upgrade, the cost will be minimal (to cover shipping, handling, media, and most importantly, A NEW MANUAL!). The marketing person I spoke with speculated the cost to be under \$50 and I would venture a guess at or around \$25. Some of the new features are: 1: Backup and Log. Any change you make to a given collection are now recorded in a log file. So if your Mac is powered down in the midst of a Helix session, all you have to do is apply to log file to you backup file and voila! 2: Data Validation. An upper and lower limit may be placed on numeric fields. 3: Increased customized menus. Now menus can be customized on a per user basis when password protection is invoked. So now menu configurations are tied to passwords, instead of the collection itself. 4: Per Person/Per Form: Related to (3), it will be possible to select which functions (add, delete, replace, find, print, dump or load) are available to a given user within a given custom menu entry. 5: Improved string functions. Such as string length, end with [similar to starts with], find substring beginning at position. 6: Improved Date/Time functions. Date fields will be date/time fields, with a corresponding increase in formatting options. These are just SOME of the new features in DH 2.0. If anyone still doubts that Double Helix is the Power Database to end all Power Databases?

FRED PUHAN ON 01/07

I have done business with Programs Plus several times over the last 1-1/2 years. They haven't disappointed me yet (although I did have to wait over two weeks for a delivery on one item), and I've found their tech support adequate, in the least. \$310 for dBASE MAC does seem to be a bit underpriced, but the best prices I've gotten have been through PP, so it doesn't sound far-fetched. No, I'm just waiting for general release (to compare it to the (shudder) IBM version). Thanks for listening, and, if there is a BETA version around, I'd like to see it!

Desk Accessories

FREDERICK PUHAN ON 01/01

I'm surprised that no one has ever mentioned the DAs that come with Quick & Dirty Utilities, Vol. 1, by Dreams Of The Phoenix. It is by far the Best \$39.95 I have ever spent!!! My entire communications package, plus minifinders, file diddlers, screenlockers, etc. came with this! I'm a tightwad: Make it Work for the least bucks, I always say...

Desktop Publishing

DAVID GURSKY ON 12/13

Okay folks, fantasy island time... No qualms about Mac Plus and LaserWriter Plus combo. There are several good digitizers out there, but I can be of no help to you there. Regarding HDs, I do NOT suggest you buy the Apple. It is bloody expensive, and I personally do not like Apple's closed box attitude towards the Mac and Mac Hardware. There are several good HDs out there: MacBottom and DataFrame come to mind immediately. If you go on to the Hard Disk board (#10) there is talk about a new HD from a company called "Jasmine" which retails at around \$600. I also seem to recall the DataFrame 20's price just took a nose dive with the advent of the DF40 and the XP upgrades. I would strongly urge you to look before you leap for DPub software. While PM 2.0 may or may not eclipse RSG 2.0, a more relevant question is will it eclipse RSG 3.0. I take it you were not at the November General meeting, where RSG 3.0 was demonstrated

contd.

[along with MS Works]. RSG 3 is a VERY impressive package, and seems to be infinitely easier to use the PM. In fact, it rivals many WP packages in ease of use and versatility. I would go so far as to say instead of buying PM and Word 3.0, that you should look into RSG 3 and Works 1.0!

BILL BALDRIDGE ON 12/15

I will echo David's comments on the MacBottom and DataFrame hard drives, with a definite inclination towards the DataFrame, as it is equally quiet but doesn't reside UNDER the Mac, but alongside it. Regarding the digitizer, I had a demo of a new digitizer at Clinton Computer on Friday. It will accept standard 8.5x11 originals, and digitizes at 300 DPI for output to the LaserWriter ONLY—it will not currently output to the Imagewriter. The reason I don't remember the name of the maker is the \$1500 price tag... but if you are operating on an unlimited budget, then go see this machine—very compact, very impressive!

BERNIE URBAN ON 12/16

Suggest you read carefully Jan 87 issue of Macworld. It appears that no one package is the answer and the best bet is to maybe get two (e.g. PM and LetraPage). Only feature I really need is reported to be absent from PM, i.e. multiple open publications. Perhaps the group command too. See also ad on pages before 58 (unnumbered). Called Dest for more info and this may lead to Beta test of this "new intelligent scanner".

ALLAN BALLIETT ON 12/21

Gosh, I'm finding ALL sorts of crazy stuff with RSG3.0. And lots of careless stuff too. The WYSIWYG failures are ASTOUNDING. There are even differences in on-screen displays as you move from one view to another! I've gotten "mystery" text appearing in my graphics, and text that can't be deleted really, and yet is gone from the screen. (Trying to say, I deleted it, it's not on the screen, but prints ANYWAY) There's an awesome circle frame tool in the tool box. You can change its borders just like you would a square. I was using it last night to enclose some graphics, perfectly on the screen, but about 3/4" askew when printed—which is to say, unrecoverable because there is no basis for adjusting to that sort of error. On the sloppy end, the code does not inform you clearly which object is top of the pile. This becomes very frustrating when you try to pick up a small block—never an easy feat with RSG as you must ever so gently touch just inside the lower right corner to get control, touch just outside and your object falls to the back and you have to shuffle. Anyway, if you have a frame around your page, and who doesn't, and its fill is "NONE" and that frame moves to the foreground, there is no obvious way to notice the frame is on top—but the effect is as though an invisible shield has dropped over your work. Now, when you try to move the little components, nothing happens, but since this is not that unusual, I will try and try until I realize it's not a hand-eye problem but "something in the way" and do a send to back. I think the code should indicate (with a "beg your pardon?" or something) when you are going on obvious misconceptions (there is no functional reason to be clicking in the middle of a frame). The above problem, I assume, could be worked around by using WHITE fill in the frame. Unfortunately, this is just an example of the kind of confusion clearly indicating WHO'S ON TOP creates. Another confusing thing is the flow around provisions. I love them when I need them, but when using text blocks within frames over graphics (i.e. titles

for illustrations) and the graphic default "flow around" switch is on, the screen shows the text where you want it, the printer throws it way BELOW the graphic. I think the code should indicate outside of the preferences menu when flow around is present, even if it's just by WYSIWYGing a little better. The error in framing is really disgusting. There are LOTS of other little things I've run across. On the other hand, it is a pretty nice package. (grin)

Educational Software

FREDERICK PUHAN ON 01/06

I have been trying to obtain QUALITY educational/game software for my five year old child. So far, no luck. She loves to bash my Mac, and I have given her LodeRunner, MacPaint, Reversi and Executive Decision Maker to play with. What I am really looking for, though, is writing, spelling and math games with which she can learn without being aware of it... (Looked at MacKids, but wasn't convinced). Any Suggestions?

BILL BALDRIDGE ON 01/06

You might check out MacUser ad by Programs Plus—they list software by category. Their Educational/Creative software section is fair to good. I might recommend software from First Byte (Speller Bee/First Shapes) or Springboard (Easy as ABC), but must admit I'm not too familiar with either. It might be best to try just one from each publisher or try to find a review of the package before committing more resources (i.e., \$\$\$). MacUser does give four mice (out of five) to KidsTime from Great Wave Software, a package of five "quality educational programs for children between the ages of 3 and 12"—\$49.95, PO Box 5847, Stanford, CA 91024—not copy protected.

Entertainment Software

DAVID GURSKY ON 12/05

Well, GameSIG demoed King of Chicago for the Mac last night. I can sum it up in one word: Dog. My friend's year old niece could beat this thing. And there's no sound, and it isn't very Mac-ish, and the graphics are worse than those in old "Gumby" cartoons! No Mice. Now Hardball for the Mac looks like a winner. This is a serious Baseball simulation that is the antipathy of KofC. If you're in the market for this type of a game, check it out!

BILL BALDRIDGE ON 12/16

I just received the four new courses for MacGolf, but haven't played them as yet because I'm waiting for version 6.3 of Copy II Mac so I can install MacGolf on my Bernoulli Box—the new courses disk and original MacGolf are both copy-protected, and the new courses disk modifies the original. I'm worried about modifying the original disk before making a back-up or installing it on the BBox. Anyway, I enjoy MacGolf, but it does tend to get a bit too easy once one has mastered the basics. The one-page documentation for the new courses disk states the new courses should not be so easy to master, so I'm interested to have a look. More later...

DAVE ROMERSTEIN ON 12/17

I'm just taking up golf (the REAL game), and I was looking for a golf simulator for the Mac... would you recommend MacGolf, or is there something better?

BILL BALDRIDGE ON 12/17

Far as I know, MacGolf is the ONLY golf game for the Mac.
contd.

And YES, I would recommend it, despite the copy protection (I don't object to copy protection on entertainment software, as you only lose high scores and not a month's work if the disk gets eaten). I'd give it **** out of five. On another subject... I usually use <R>ead All, so I didn't see your Welcome message for this board, but Dark Castle has GOT to be the GOTY (Game of the Year—Ed.). With the possible exception of Marble Madness for the, ahem, Amiga (please, no stones!), Dark Castle is probably GOTY for ALL micros!!

DAVID GURSKY ON 12/17

The Poll. Let's see. My three favorites are: 1) Megaroids, which is utterly addicting and challenging, no matter how often you play it, and is dirt cheap. 2) MS Flight Simulator: For the same reason as Megaroids, and it isn't too expensive either (can't wait to see it on the gs). 3) Deja Vu/Uninvited: I count these two as one, as they are the two best examples of RPGs using the Macintosh to its fullest! This is what Infocom SHOULD have done with Zork on the Mac. As it stands, I think they just build a MDL compiler for the 68000 and recompiled the old MIT code!

LESTER SHIPLEY ON 12/18

Top Three: 1. MS Flight Simulator 2. Uninvited 3. Strategic Conquest.

BILL BALDRIDGE ON 12/19

I'll grudgingly add my vote for Uninvited (I know...who invited me), though I thought this was a "the BEST" vote—ergo, my vote for Dark Castle (gee, does that make it two votes for Dark Castle? Better start keeping track, Dave... don't want any ballot box stuffing here). And Megaroids doesn't qualify, as it was released sometime in '85... or did I misread the topic AGAIN?!

P.S. O.K. I reread the sign-on, and it's best three, so my vote for Uninvited stands. Also add MacGolf as my third vote—Dynacode! P.P.S. You may end up making this a "Best All-time" contest, as in comparison to other PC's the Mac certainly has been neglected when it comes to games. Maybe you could have two categories: "Best All-time" and "Best Public Domain". There definitely are some super PD games out there—and to answer your question beforehand, I would classify Shareware games under "Best All-time", as they basically are commercial games without the financing.

DAVE ROMERSTEIN ON 12/20

Good idea! Okay... THIS IS NOW OFFICIALLY THE 3 ALL-TIME BEST GAMES FOR THE MAC... PD, shareware, and commercial games are ALL included...

DAVE ROMERSTEIN ON 12/20

The latest results in the 3 ALL-TIME BEST GAMES FOR THE MAC (Check my last message to Bill Baldrige if you're wondering)... Uninvited- 4. Flight Sim- 3. Deja Vu- 2. Strategic Conquest- 2. Megaroids- 2. Gato- 1. World Builder- 1. Dark Castle- 1. Well, there you go... let's at LEAST break this three way tie for 3rd place...

BILL BALDRIDGE ON 12/20

Wait a minute! Let's not get carried away. A contest is a contest is a.. Now everyone will have to change their votes, so I'll start by revising MY list of the 3 All-time, Best of the Bestest—hummm—isn't as easy as I thought. O.K., how about Dark Castle, Dungeons of Doom 4.0, and Orion 1.4. How about that—two out of 3 are shareware!

DAVE ROMERSTEIN ON 12/21

Ask anyone... I'm VERY easy... What's Orion 1.4? I've never played that one... and I don't think Dungeon of Doom is shareware...

BILL BALDRIDGE ON 12/23

Orion is a spacecraft/spaceflight simulation that allows one to Zoooooom from one star to another at hyperlight speeds. It also allows one to go into orbit around stars, around which (only selected stars) orbit planets. The author promised that if enough people supported the program (shareware - \$15) he would add planetary features, allowing going into orbit around the planets. And Dungeon of Doom IS shareware, or at least I sent the guy \$20...

JOHN MARKEY ON 12/21

No contest! Microsoft Flight Simulator! Over 200 people have SCREAMED right here in this room (not all at the same time). A game? I don't think so, after more than 30 years in the USAF. Endless variety, real challenge AND frightenengly accurate! It's a game only in the sense that that nobody really gets killed or injured. Otherwise, it should be an educational program!

DAVE ROMERSTEIN ON 12/28

Okay... the final results (a little late, sorry) are : 3rd Place: Gato, World Builder; 2nd Place: Strategic Command, Megaroids, Deja Vu; 1st Place: Flight Simulator II, Uninvited. Not much, but it's all we got! Thanks for voting, everybody!

JOHN MARKEY ON 12/21

A word or two on COPY PREVENTION. Studio Session is a knockout program, but the backup doesn't work! Sure, you can make a working copy—but it won't run! I called MacNifty (800 number) who said that "We get a lotta calls on this." Seems they never tried it on a single disk drive Mac (my Warp 9 also didn't work on arrival and is back at the factory—what happens in Minnesota in the winter?). Anyway, don't buy this program unless you have an external drive, or if you object to incompetent "copy protection".

GEORGES DUVAL ON 12/24

I've recently enjoyed playing a new game called "ORBQUEST" from Q-ware, Inc. and thought it was well done. I don't enjoy fast moving arcade games; I prefer to sit and contemplate my next step.... Orbquest is an adventure quest in which your character searches for the seven parts of the missing orb while fighting off a variety of monsters, some of which, especially the "Housefrau" are quite humorous. To complete the game you literally have to figure out how to walk on water. Hints are available from the local public houses for the price of a drink—the more expensive the drink, the better the info...

DEACON MACCUBBIN ON 12/31

I can't believe there was a poll going on here and I haven't been able to get on the board since before Christmas! For what it's worth, I would have cast all three of my votes for Dark Castle, which is absolutely the best arcade-style game ever created for any computer. (I would have given Uninvited, Deja Vu, Megaroids, Webster's Revenge (!) and Lode Runner high marks, too.)

RALPH HORVATH ON 01/07

I'm sorry I did not vote when I had the chance. My choices for contd.

best game might only widen an already wide field of votes, but here goes: 1) Shanghai—embarrassingly addictive, and I don't know why. 2) Perplexx—but of course Scrabble is my favorite non-computer game. 3) Dungeon of Doom v 4.0—beautifully done shareware; reason prevails over luck in this game. Honorable mention goes to Word Challenge (more flexible than Webster's Revenge), Deja Vu and Uninvited (refreshing implementation of adventure game format), and, finally, Word Handler (disguised as a word processor, but it doesn't work as one, so it must be a game).

SEAN CURTIN ON 01/07

Santa, being in an especially generous mood this Christmas, bought me four new Mac games. They are all a lot of fun, so I thought I'd jot down a small bit about each of them for prospective purchasers: 1) One-on-One: Dr. J takes on Larry Bird "head to head." Fine graphics and excellent sound effects; what's especially nice is the way they go together: the ball makes a clanging sound (digitized most likely) when you knock it off the rim, and your sneakers squeal when you make a sharp move. Only problem is using the mouse—you always seem to run into your second disk drive while going for that mondo slam. It is joystick adaptable (MouseStick)—has anyone used a joystick with it? Great game, high addiction quotient. 2) Sierra Championship Boxing: Swashbuckler in the boxing ring. It's more than that, though, although somewhat similar in look and feel. You can personalize the fighters but entering height, weight, reach, power of punches, etc. Comes with a large database of boxers already entered, from John L. Sullivan to Livingstone Bramble. Another game with a high addiction factor, and not for those with weak constitutions. Only problem is, it seems to be heavily weighted toward fighters who just keep going headhunting. Fine graphics. 3) Championship Star League Baseball: Not as many features as the previous two; really a rather simple game. As pitcher you select one of 9 or 10 pitches. If the ball is hit you have to field it and throw to the proper base to get the runner. As batter, you try to hit the ball and run. Not a real classic but does possess a moderate addiction factor. It also suffers from mouse (this time your second disk drive will be in the way as you go for that 9th inning fly). 4) Patton vs. Rommel: One-on-One set in France. No, it's really not like One-on-One at all. It's a high quality strategy war game. At beginner level you deploy tanks, armored divisions, and infantry in the hopes of breaking through German lines (post-Normandy) as soon as possible. The game is great to use and the interface is in the best tradition of the Mac. The intermediate and advanced levels provide more realism and more challenge. This one also rates a high addiction factor and, as the campaigns take about an hour or so, you will be in serious danger of neglecting spouse/dog/studies. Speaking of the latter, time to sign off. I'd be happy to try to expand further on these games for any interested party. Happy hacking.

Graphics & Design Software

BILL BALDRIDGE ON 12/20

For those wishing a cheap alternative to buying a full-blown page layout program, which would technically qualify as desktop publishing software, I offer the following combination: FullPaint+Mockwrite (or Red Writer for those who have the version 9.4 upgrade package). This is a great combo for doing one page flyers and the like. FullPaint works quite well with the Mockwrite D/A... You can have FullPaint on one half of the screen and Mockwrite on the other half (both have resizable windows) and cut and paste between the two. I

used this combo to do my Christmas newsletter in a two column format.

RICK STICKLE ON 12/21

If you guys care to wait a few days, I happen to know that Santa's Wife bought the only copy of SuperPaint that Clinton (Laurel) had. Naturally, I can't get my grubby hands on it until the 25th.

BILL BALDRIDGE ON 12/23

We shall wait with Super-bated breath for your opinion.

RICK STICKLE ON 12/25

Baldy, breathe, at first look it has some great features NOT found in paint or draw. It does not fully replace draw (at least that's what they say). The pattern bar has 4 sections, normal, grays, line patterns, and a whole blank bar so that you can edit your own patterns. You can pick two line widths at one time (1 horz & 1 vert). Plus its got the distortion modes (like click-Art Effects) built in. So far it looks good, more in a couple days after I have more time with it.

BILL BALDRIDGE ON 12/27

Super! How about full screen editing, landscape (sideways perspective) mode, airbrush, paintbrush editing, fat-bits, scaling...better yet, why don't you invite me over for a test session? Or you can come over to my place.

DEACON MACCUBBIN ON 12/31

I've used SuperPaint, though I haven't used FullPaint so my perceptions may be slanted. But SuperPaint seems to be everything that I would ever want (this week anyway!) in a paint program PLUS about 80% of what I use in a draw program. That seems like an almost ideal package (until the next package comes out!). I know some have said that SuperPaint isn't as intuitive as FullPaint—since I haven't tried FullPaint, I can't really say. But I found SuperPaint to be very intuitive and only needed to refer to the docs for two or three items.

DEACON MACCUBBIN ON 12/31

Full screen (and I mean full screen—even obliterating the menu bar!) is a snap with SuperPaint. The airbrush is super. You can edit paintbrushes to your heart's content. Fat-bits come in four different magnifications (and switching back and forth is quick and easy). I haven't noticed a landscape feature yet. Grey scales (for LaserWriter printouts) are provided along with the usual patterns (and modifiable patterns). Something called LaserBits sounds intriguing but I haven't had a chance to use it yet—I think it allows you to modify at the 300 dpi level. Multiple documents on screen, too.

RICK STICKLE ON 12/31

Yes.., really (Superpaint) does have full screen edit, auto scroll, and 3 (I think) levels of fatbits. There is more flexibility in the paintbrush editing than MacPaint, but still the same spray can. You can fill outline type text with any pattern. I'll have to check the landscape mode, but I don't think it has that. All patterns can be opaque or transparent. There are rulers and grid which are adjustable. There is landscape printing but I'm not sure if the window shifts (I'd assume it does). Outline and fillpatterns can be different, and changed independently. That's all I can think of right now, but if you have seen Dark Castle I think the backgrounds were created with SuperPaint, if that gives you any ideas.

contd.

BILL BALDRIDGE ON 01/02

Yes, the graphics in Dark Castle WERE done with SP. The scenes were done in bitmap and the characters, boulders, etc. were done as objects (which SP is capable of doing). I still want to hear about Graphicworks—anyone used this latecomer on the scene?

DAVID GURSKY ON 01/06

Okay guys and gals, I got to play to my heart's content today with "SuperPaint". The verdict...Phbbt. I suppose if you have the need to combine bitmapped and object-oriented graphics in one document, then this is the package for you. And admittedly, it has a couple of unique features (for example: the thickness of vertical and horizontal lines are independently selectable, objects can be drawn from the center to the edge, instead of edge to edge, and there is a much larger palette of patterns, including a gray scale). On the other hand, you can't do free rotates (or any other special effects), smooth freehand curves, resize objects (although I may have tried this the wrong way, so it may indeed be possible). And I'm sorry, but no matter how hard I tried, I could not manipulate objects on a bit by bit basis (although I didn't try this in the vaunted "LaserBits" mode.) Overall rating: B.

Hard Disks

RALPH BEGLEITER ON 12/02

By now, of course, I can't claim to own one of the first MacBottoms... but I've had mine for about four months and I'm very happy with it. True, the fan is noisy. But with a Radio Shack joystick cable costing less than \$5, I extended the cable on the MacBottom and located it in a nice safe spot under my desk, away from the Mac. It's less noisy there and well protected. The best part of the MacBottom is the excellent software which comes with it... and which is now available for sale separately from PCPC. Mine is still a non-SCSI drive, since I'm working with a 512K Mac (UN enhanced). But speed is excellent for my purposes. The slowest activity is restoring the Apple Finder desktop. But I've foregone the desktop anyway in favor of a minifinder called "WayStation" (available on a recent WAP Mac Disk).

DAVID GURSKY ON 11/29

Where is Chris Klugewicz when you need him? On to Bernoulli Box... The 5/5 BBox runs through the serial port on the back of the EMac and Mac+. The larger ones though run through the SCSI port, and can only be run on a Mac+. I have no idea how well they run, but based on the performance of other SCSI disks, how the BBox compared to other serial disks, one could make a fair guess that it is slower than others, but not noticeably.

BILL BALDRIDGE ON 11/30

Using MacPaint as a sort of defacto standard for speed in booting from a particular device, the 400K drive boots McP in 20 seconds, the BBox in 7 seconds, and RAM disk in 3 seconds. Anyone have figures for a serial hard disk or SCSI hard disk?

BILL BALDRIDGE ON 12/02

For those still interested in the Bernoulli Box, Icon Review's latest "magazine" is now listing all the BBoxes, including the SMB for \$499 (though I'd still go with BCE, just on the strength that they're a local firm—so's you can personally go down there and wring their necks if they mess up...). Anyone interested? If so, I can post price and address info here...

DEACON MACCUBBIN, ON 12/10

I did a lot of research and snooping before buying my MacBottom. It is extremely reliable, very quiet (I mean VERY quiet!), fast (though not as fast as the DataFrame 20XP—though for all practical purposes, I don't think anyone can perceive any difference) and comes with two great programs—a dynamite print spooler (Imagewriter only, not LaserWriter) and a hard disk backup program that is the best in the business. Even though reliability is tops, if you should ever need service, PCPC (the manufacturer) has a sterling reputation for service. Personally, I think it is the best 20 meg (actually, 21 meg) hard disk available for the Mac. (These comments refer to the SCSI MacBottom, though the serial MacBottoms are also great).

BERNIE URBAN ON 12/11

I modified my DataFrame with upgrade chip which theoretically speeds it up to XP level. I also did the Nealon "tonsillectomy" (Jan '87 WAP Journal, pg. 86 - ed.) which did indeed quiet the squeal. However, David Morganstein reported last night that the speedup is mostly due to the reinitializing of the disk and only MARGINALLY due to the upgrade. He said yes to writing an article which shall include timing tests. He said that SuperMac Technology admits that speedup is maybe up to 50%. My reaction is very positive to my own case (the reinitialization was long overdue).

BILL BALDRIDGE ON 12/13

Had a nice call from IOmega, manufacturers of the Bernoulli Box, the other day. The caller was responding to my complaint that the BBox would occasionally go off on its merry way in the middle of booting/quitting/copying to/from/ an application. He said they had no experience with Macintoshes of my configuration; thus the reason for the call. He wanted to know if the problem had been solved—yes and no, or at least I think so. Turns out the BBox doesn't like being used when a RAM Disk is resident on AppleTalk, at least in the single-user mode—for why, don't ask me—even the techie didn't know, he just blamed everything on my Beck-Tech 1MB D.I.Y. (did it myself) upgrade. Anyway, it was nice to know the folks at IOmega like wasting 30 minutes of long distance just out of curiosity... I guess that means if you have a REAL problem they'll waste even more time (but not necessarily solve your problem).

NIR WICKRAMASINGHE ON 12/10

The Jasmine Hard Disk has arrived, according to ads in Mac-User etc.; it's in the \$600 (\$599!) range. A user comments quite favorably on the MouseHole's message base... 20 M of storage for that price—not bad. Except that the cost of AT clones is coming into the \$900 range... Great Wall from China, and the reincarnation of a Korean Samsung as the HiTech from California, both reportedly darned good. Now won't somebody tell us why not to just link a whole clone with its whopping cheap hard disk—after all, the control hardware in the pricey drives often ARE micros, aren't they? It becomes a sort of LAN, I know, but even if the HD is internal, and on the system bus, isn't that a kind of LAN too?

BILL BALDRIDGE ON 12/12

I'm still waiting for an under \$500 500MB WORM drive, and you're talking 20MB for \$600? I STILL have this great idea for a 100MB drive using Dysan technology media, but Apple doesn't want it because, "We are not currently developing this

contd.

technology." How about a two-sided CD-ROM with 1GB of storage? ... Sorry about the pause... I had to get a Kleenex to wipe the drool from my mouth.

NIR WICKRAMASINGHE ON 12/16

Optical memory, perpendicular magnetic etc; are arriving sooner than later, but my point is that the drives are going to be considerably cheaper in the Clone World. Now with Apple aspiring to become another it'sy bitsy machine corporation, we, the people are having to pay a premium for the marquee of the bitten off apple.... Getting techie, though, there's no DMA on the Mac (unlike some other designs).

BRUCE FIELD ON 12/20

Just got an ad in the mail today (no doubt others have also), Warp Nine is offering a 20 MB external SCSI drive for \$595, a 30 MB drive for \$795 and their internal SCSI drive for \$849. They also make a SCSI port for the 512K Mac which runs around \$150 when purchased with the drive. Just thought someone might like to know, any info on these drives would be appreciated. Warp Nine Engineering, 1751 West County Road B, Suite 107, St. Paul, Minnesota 55113.

MARC GILLINGHAM ON 01/07

What should I replace the Apple drive with? In other words, what drive should I buy; internal? external? Should I get a hard drive rather than an external? What's the common wisdom?

BOB MASSO ON 01/07

Your question really DOES depend upon your usage. With the new 800K storage, having 2 800K drives (one internal, one external) really DOES satisfy the storage needs of most users. (A major reason I bought my own 5Meg HD back in early 86 was that 2 400K drives was NOT enuf). And you can get a decent 800K external for around \$200 (don't buy Apple's, overpriced as usual). Just be sure to read one of the many recent comparison articles for external drives before you order a given brand. Also, two 800K drives are REALLY handy whenever you need to copy or move files around. Don't buy a 5/10/20 Meg HD with the idea that that way you can have ALL your files online at the same time—it just ain't so. As any HD owner out there can tell you, no matter how large the HD, it is never large enuf. What it does give you is the ability to have REALLY LARGE FILES. If you do not have that need, then a HD for a single user is more a luxury than a necessity. Just consider whether the speed increase is worth the extra \$500-\$2000 to you.

BILL BALDRIDGE ON 01/07

I don't know, Bob. If you buy yourself an AST-4000 with 370Mb of storage I doubt the average user would want for additional storage <grin>. Actually, I think Marc needs to give us more information, like what uses he puts his Mac to, how much he wants to spend, and what equipment he currently has.

DAVID GURSKY ON 01/07

Forget daisy chaining 7 ASTs Bill. Now 7 CD-WORM is something. Can you say four gigabytes? Can you say Vax Personal Computer? Can you say IBM is a BoatAnchor? I knew you could. <Grin>.

(to be continued)

Review Corner contd. from pg 73

Infosphere, Inc., 4730 S.W. MacAdam Ave., Portland, OR 97201 LaserServe. \$95. Print spooler for your LaserWriter

Lundeen & Associates, P.O. Box 30038, Oakland, CA 94604. WorksPlus Spell. \$59.95. Spelling checker, hyphenator and glossary for Microsoft Works.

McCutcheon Graphics Inc., 130 Bridgeland Ave., Toronto, Ontario M6A 1Z4. Page One. \$2000, for MacTex owners \$1500. Automated book typesetting software with 50 templates for standard book designs.

MindWork Software, P.O. Box 222280, Carmel, CA 93922. MindWrite. \$125. Word Processing with built-in outlining.

Mindscape Inc., 3444 Dundee Road, Northbrook, IL 60062. GraphicWorks 1.1. \$99.95. Paint, draw and word processor - the "low cost" page layout program.

Personal Training Systems, P.O. Box 54240, San Jose, CA 95154. Excellerate. \$39.95 per module. LearnWord 3.0. \$49.95 per module. Self-paced disk and cassette training packages for Excel and Word 3.0.

Silicon Beach Software, Inc. P.O. Box 261430, San Diego, CA 92126. SuperPaint. \$99. Paint and draw program rolled into one.

SuperMac Technologies, 1901 Old Middlefield Way, Mountain View, CA 94040. SuperLaserSpooler. \$149.95. Print spooler for your LaserWriter.

Think Technologies, 420 Bedford Street, Lexington, MA 20173. LaserSpeed. \$99.00 for single user and office pack for single LaserWriter at \$499.00. Print spooler for your LaserWriter.

Williams & Macias Microcomputer Products, Spokane International Airport Business Part, P.O. Box 19206, Spokane, WA 99219. myDiskLabeler, Version 2. \$44.95, with color printing option \$54.95, and with LaserWriter option \$64.95. Disk labeling product.

WAP TUTORIALS

by Robert C. Platt

As reported last month, we have a wide variety of "hands-on" sessions scheduled this spring. Call the office to reserve a place and then fill out the enrollment form in the back of the Journal.

Extra section of Mac tutorial. Marty Milrod's two-session tutorial for novice Mac owners has been so popular that we have scheduled an extra section on Monday March 9 and 16 (which is already filled). This section will be taught by Kevin Nealon. We are also considering offering a more elementary tutorial for users who have just past the "guided tour" stage. Please let the office know if you would be interested in such a program.

Our first IIgs tutorial! We have added several one-time tutorials to our Spring offerings. The fee for these tutorials is \$15 per session for members and \$20 for non-members:

"Transition from //e to IIgs" - Raymond Hobbs - Saturday, April 4 - 1 to 4 p.m. Apple //e owners who are shifting to the IIgs are facing several problems in getting their software and hardware peripherals to work on the new machine. Topics will include: connecting disk drives to the IIgs disk port, using the /RAM disk and which controller cards are IIgs compatible. Bring the hardware and software you haven't been able to get running. This course should be valuable to //e owners who are in the midst of converting as well as those about to convert. Ray Hobbs is Manager of Financial Systems at Amtrak and has been programming since 1964.

Microsoft Word Ver 3.0 Tutorials. We have scheduled a repeat of the introduction to Word which was given last Fall by Rochelle Long and Leon Moore. In addition, Hank Taylor has agreed to teach three tutorials on the "advanced features" of Microsoft Word 3.0. Consider these as a cost-effective way to take advantage of your expensive update. Please bring your copy of Word and a blank disk to each session.

"Introduction to Microsoft Word (Version 3.0, if available)" - Rochelle Long and Leon Moore - Saturday, April 25, 1 - 3 PM, USUHS. Hands-on experience, from editing and formatting to more complex functions (divisions, headers, footnotes, etc.). Helpful hints provided. No prior knowledge of Word required, but familiarity with Mac assumed. Bring your own Mac and Word Master Copy. Please provide size of disk drive(s) when you register. Enrollment limited to 15.

"Word 3.0: Style Sheets" - Hank Taylor - Saturday, May 2 - 9:00 to noon - The summit of Word's formatting power. In which we attempt to answer the question: Why is MS Word so wierd?

"Word 3.0: Hidden Text, Indexes, Tables of Contents" - Hank Taylor - Saturday, May 9 - 9:00 to noon:
Annotations, hidden or exposed
Tables of Contents
Indexing
The style sheet connection

"Word 3.0: Outlining & Column Features"

Hank Taylor - Saturday, May 16 - 9:00 to noon:

Outlining

Moving, promoting, & demoting

Collapsing/Expanding

Numbering

The style sheet connection

Arithmetic and Text Columns

Statistical columns

Column move, copy, delete

Sort

Five-function Math

Text Columns

Magazine Text

Side-by-side paragraphs, including graphics

The style sheet connection

Hank Taylor has been using and teaching word processing for the past 6-7 years, at the Library of Congress, and at various legal, educational, and association offices. At present he works for the National Education Association where he has been teaching the MS-DOS incarnation of Microsoft Word for 2 1/2 years, and waging a so-far unsuccessful campaign to break the MS-DOS monopoly. He and his Mac Plus also run a desktop publishing company, The Typehog, and he has spoken about desktop publishing to all who would listen and consulted for all who would pay. He's especially interested in Word as a publishing tool. His favorite Word feature is the style sheet.

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DISKETERIA DISPATCH

by Jim Little

Two new volunteers are helping with the Apple][library. John Bell is working with CP/M and ProDOS, and John Gersic is a new disk copier. Welcome back to Bob Platt, a former head librarian. There is space for more help, so if you have special skills in programming, or are just willing to help copy disks, let me or the office know.

MAC DISKETERIA NOTES

by Dave Weikert

Marty is on a trip and unable to write this month's column so I am filling in for him—not a permanent situation (I hope!).

This month, we are issuing one revised and five new disks, which are described below. Please note that the folder information, where appropriate, precedes the listing of program contents. Folder information is underlined, programs and files are printed in bold with shareware information printed in bold italic print. A number of programs are distributed as shareware, so remember to send the authors the license fees if you decide to add them to your software library. This month we feature a shareware program from a Washington Apple Pi member—Paul Cozza's Dot-to-Dot Construction set. Congratulations, Paul. Any other Pi authors out there? If so, let us know.

In April, twelve disks will be removed from the Disketeria. These disks contain programs that are from the early days of the Mac, many of which are not suited for the Mac 512, Mac 512e or Mac Plus. These disks are no longer recommended for purchase and are being dropped from the disk order form in the back of the Journal. The disks include Volumes 1, 4, 5, 7, 9, 10, 13, 15, 19, 21, 22.1 and 25. If for any reason you want to add them to your collection, do so in the next two months as they will no longer be stocked even on an archival basis.

Time for the commercials. This month's submissions are brought to you by Larry Halff, William Jones, Mike Robinnett, Bob Soule and myself. The latest Mac Disk Catalog, Winter 1987, containing comprehensive information about the entire WAP Disk collection (through Mac Disk #80) is available thanks to the efforts of Marty Milrod. The cost is \$3.25 at the office or general meetings or you may order it by mail (add \$1.50 for postage and handling). The catalog lists disks by (1) disk name, (2) description of disk contents, (3) alphabetic listing of files across all disks and (4) by "type of file" listing across all disks. We anticipate updating the catalog periodically.

Mac Disk 48.3: Fonts V

The following description includes only the changes since issuance of Mac Disk #48.2. In addition to the Princeton 4.0 font, disk #48.3 includes Font Display 4.5 and supporting documentation, and Japanese, Giants 18, Milan 24 and Zodiac fonts.

Bob Platt has enlarged the ProDOS library with his Adventures disk, Disk /WAP811. His writeup appears elsewhere in the Journal. John Bell put together a CP/M disk for those who like to take things apart. A full explanation will be in next month's Journal, but the disk is here now, Disk 419, Programmer's Disassembly Aids. ☺

In the LW Princeton Folder:

The Princeton fonts are designed to facilitate expression of equations and formulas. *Shareware - ImageWriter, \$5.00; LaserWriter, \$30.00 for individual use and \$100.00 for company use.*

Princ: The LaserWriter driver for Princeton. **MUST BE USED WITH VERSION 3.1 OR GREATER OF THE LASERWRITER PRINTER DRIVER!**

Princeton4.0.bmap: The screen fonts for Princeton. **PLEASE NOTE** that you must move this entire folder onto another disk and "install" these fonts into that disk's System to be able to view the Princeton 4.0 fonts correctly; the Princeton documents will then also print properly on an ImageWriter printer. The Scrapbook referenced in the documents for Princeton Fonts is not present as our copy (received from Princeton) only showed an empty scrapbook. These fonts permit pixel-by-pixel alignment of symbols for sharp ImageWriter or LaserWriter output.

show.off: MacWrite document that shows off the features of Princeton.

PF.keys: MacWrite documentation for Princeton keyboard mapping.

PF/4.0L.doc: MacWrite documentation for using the Princeton font on the LaserWriter.

PrFont10.DA: A DA to display the option key combinations for Princeton.

Mac Disk 81: Utilities XII

On the Desktop:

Set Clock: Offers the capability to automatically set your Mac to within one second of a clock synchronized to the Canadian National Research Council which is referenced to an atomic clock. An offset feature is included for time zones other than those in which the clocks are located. 1-800 information numbers are included as well as a Canadian and a Chesapeake, VA number which are toll calls for the actual time synchronization. A modem is required and the application uses a Hayes command structure.

Memory Diagnostic: A selectable series of memory diagnostic tests, some of which require hours to run. In one case the explanation of the test option indicated it would run overnight!). The timing is referenced to a 128K Mac, a 512 machine takes approximately 4 times as long to run.

contd.

UnWS+ 1.53: Compiled in ZBasic. It could come in handy for making WordStar documents Mac friendly as it filters out the high bits of WordStar and identifies stripped control characters with a backslash, so reformatting the document is easier.

In the File/Disk Utils Folder:

MacProtect Installer: Provides the ability to password protect an application. **CAUTION:** The process is irreversible. The author recommends using backups. *Shareware - \$15.00 (Australian).*

In the Start Mac Folder:

Start Mac: Allows the development of a custom startup screen that talks (if Macintosh is in your system folder) and automatically loads an application, or loads a ram disk or whatever you would like. What a concept, all you need is your favorite MacPaint file and some appropriate words. *Shareware - \$5.00.*

Start Mac Documentation: Offers a good explanation of how to make your startup screen unique. Lists valid commands and how to use each. Read the instructions carefully, there are rules which must be followed.

STARTMAC.COMMANDS: A dummy file to list your commands.

In the OasisStuff Folder:

Oasis 1.3: An involved replacement for the finder. It is primarily a hard disk user utility, but offers an interesting alternative to the standard Desktop configuration. Allows you to 'install' buttons which can be designated to an application. Push the button, and voilà, you have launched the application. Requires some thought to lay out and determine how big and how many buttons to install. *Shareware - \$15.00.*

Launch Oasis: Allows Oasis 1.3 to be launched manually from the Desktop or put it in the system folder.

Oasis.DOCS: Everything (within reason) you ever wanted to know about Oasis 1.3 can be found in this file including the setup and use of an 'Oasis' finder.

In the DiskLibrarian 1.82a folder:

DiskLibrarian 1.82a: Makes a catalog of all the files on a disk. It can be used with hard disks as well as floppies. It offers information on the size of folders, content, and date last modified. Scroll bars make review easy and the program will run as long as you provide disks.

DiskLibrarian Docs: Documentation on how to use the catalog you have produced.

In the REdit Stuff folder:

REdit 1.2: REdit is Apple's easy to use resource editor. Change icons, dialogs, alerts, and the like with a click of the mouse. Yes, you can make a mistake and do nasty things to your disks. Moderate care is required when using REdit, but this mostly means not doing dumb things like using duplicate command key assignments, invisible cursors, etc. Remember, experiment on backup disks only. The doc for this was downloaded three times; three times there were only 20 pages of footers. With a little luck, the doc will be provided on a later disk. See prior articles in the Journal, MacUser, MACazine and MacWorld for how-to articles.

Mac Disk 82: Utilities XIII

ResEdit 1.0.1: The current version of Apple's powerful Resources Editor. Can be used to modify the various resources which make up programs, edit icons and dialog box-

es, etc. Within the program, point and click to open files and resources. See the articles "Tapping Mac's Natural Resources" by Bob Perez and "Inside Improvements" by Steven Bobker in the September, 1986, MacUser, or "Mining the Mac's Hidden Resources" by Gordon McComb in the July, 1985, MacWorld for suggestions on practical uses of ResEdit, but heed the suggestion to experiment only on backed up files and disks.

ResEdit doc: The documentation for ResEdit. This is a Microsoft Word document so you may have to find a friend to print it for you.

In the Print Utils Folder:

INK 2.0: This freeware (thanks, SoftPlus Inc.) text file printing utility will print any ASCII file or series of files in almost any format on almost any printer, including the LaserWriter. Although it takes a little while to learn how to use all the program's features, there is extensive on-line help available in the menus.

Label Printer: Judging from the icon, this address label printer is supposed to work with both ImageWriter and LaserWriter, but it only partially worked on an ImageWriter I, with results only in draft mode. See the help screen under the apple for minimal instructions.

Mailing Labels: This program prints pages of mailing labels on the ImageWriter from mailing lists saved as text in the format shown in the documentation. (Note—once it starts printing, there is no software command to stop printing.) *Shareware - \$5.00.*

In the PS Stuff Folder:

Both of the PostScript examples here use fonts available only on the LaserWriter Plus, but the first can be modified to work on the LaserWriter. If you have access to a LaserWriter Plus, you can print the next two examples with the resources in the LaserWriter folder.

PS Example: This PostScript program prints gradient drop shadows for a line of type. Which way the shadow falls and the depth and angle of the shadow are controllable. The output looks pretty neat on a LaserWriter, but simply WOW on a Linotron!

Gauge 1: This PostScript example creates a gauge of the type used in publishing. It's an excellent example of the power of the PostScript code to define a complex pattern in a few lines of code.

PostScript Tester 1.1: This program lets you edit or review a PostScript program and then send it to a LaserWriter.

LaserWriter Downloader: Another program to download a PostScript program to the LaserWriter.

LaserWriter Printer: This application works like a print command to send the text of a document to the LaserWriter.

Mac Disk 83: Telecom III

On the Desktop:

PCP Menu Maker: PC Pursuit Menu Maker allows you to create a logon procedure for the Telenet access service that works with Red Ryder. Enter your user name, user password, baud rate and local Telenet access telephone number. The program creates a macro for Red Ryder that adds a PC Pursuit menu to Red Ryder with all of the cities accessible via Telenet as menu options. *Shareware - Whatever it's worth (up to \$15.00).*

contd.

Unpit: Unpit is a file packing, unpacking and compression utility primarily used to unpack '.pit' files created by PackIt (I, II, III) or by Unpit. It is partly based on the Unix program 'unpit'. '.pit' or PackIt files are encoded in a way to include several files that should be kept together (such as a program and its documentation).

In the Communication Services Folder:

CSS: Communication Services Summary helps you monitor your on-line time and charges with commercial services such as CompuServe, GENie, and The Source. The services and the rates for the services may be modified by use of ResEdit or any other resource editor.

CSS v1.0 Manual and CSS v1.0 Manual.txt: The MacWrite V4.5 of the manual accompanying CSS is comprehensive. The text only version of the manual is included to comply with the author's requirements.

In the Grafterm Stuff Folder:

Grafterm 2.4: Grafterm is a terminal emulation program that supports DEC VT-100 text style capability and Tektronix 4010/4014 style line graphics, each in separate windows. Menus allow the selection of communications parameters, scaling of graphics and printing. The Edit menu supports only desk accessories and provides no ability to cut and paste text to the clipboard or scrapbook. *Shareware - \$50.00.*

GtermDoc.Wrt: This rather sparse documentation of Grafterm assumes that you already are familiar with DEC VT-100 and Tektronix 4010/4014 terminals and protocols.

In the PGTerm Folder:

PGTerm 2.1: Pretty Good Terminal is a terminal emulation program providing MacTerminal, Macbinary and Xmodem (Christensen) protocols. PGTerm lives up to its name as a terminal communications program. PGTerm emulates a large and useful subset of the DEC VT-100 terminal ANSI X3.64 cursor control commands (more than MacTerminal). It includes programmable function keys (macros). PGTerm is a much smaller program than MacTerminal but includes much of the same functionality as MacTerminal. *Shareware - \$35.00.*

PGTerm 2.1 Manual: A pretty good manual to go with Pretty Good Terminal. It lists the primary screen commands that are supported but you need to be a VT-100 user to know what the list means.

Unix and use printer port: Supporting files for PGTerm.

In the MCS Folder:

MCS 1.0c: The Multichannel Communications System allows file transfers over satellite links. A proprietary protocol, X.MS (similar to CCITT X.25), is used to eliminate noise and the problem of long delay time that can exist with Xmodem transfers. MCS allows the simultaneous upload, download and chat using multiple channels. *Shareware - \$10.00.*

MCS Doc: The documentation for MCS.

MCS Edit DA++: Supporting Desk Accessory for MCS.

In the IBS Stuff Folder:

IBS: InterMac Bumper Ships is an interactive game played between multiple Macs over AppleTalk, direct connection or one of three communication services (Delphi, GENie

or CompuServe). *Shareware - \$10.00.*

Star Fleet Impulses: Supporting file for IBS.

Mac Disk 84: Fun & Games XVI

In the Zoony Folder:

Zoony: An adventure game with graphics and sound made with World Builder. You, the court jester, are summoned by King Zoony to find his ring and marry his daughter. Won't be easy though. The ring was stolen by the Royal Zookeeper. You feel like you walk a lot in this game. Places to visit, things to get, and a Royal Zookeeper to find! Macintalk is required for sound. *Shareware - \$5.00.*

In the Vampire Castle Folder:

Vampire Castle: An adventure game with you attempting to rid the castle of the dreaded vampire. The graphics are good (especially for the price) and again, this game will talk to you. It will read the game script then prompt you with "What do you want to do?". The game's vocabulary is limited, so keep the sentence structure simple. It does allow all the necessary actions to play the game. *Shareware - \$5.00.*

Mac Disk 85: Fun & Games XVII

In the DDCS Folder:

Dot-to-Dot Construction Set (DDCS): Do your kids love to draw connect-the-dots pictures? Here's your chance to save some pencils and paper by drawing them on your Mac! In the process, children age 4 to 8 will learn numbers, letters, and words while enjoying musical encouragement as the pictures are filled in. The program comes with three dot-to-dot pictures ready for drawing. You get 30+ more when you send in the shareware fee and you can make an unlimited supply by adapting MacPaint pictures or clipboard graphics with the help of the built-in edit mode. In the DDCS Folder is an excellent six-page manual that guides you through the process of selecting and drawing dot-to-dots, setting the program options, and using the picture editor. The program itself follows the Mac interface and is very easy to use. *Shareware - \$17.00.*

In the Ars Magna Folder:

Ars Magna: Use your Mac to generate anagrams—words or phrases with their letters rearranged to spell something else. For example, did you know that the letters in the word dormitory can be rearranged to spell dirty room? Need an alias or a pen name? Use Ars Magna to generate a pseudonym that contains the same letters as your real name. The program comes with both word and name dictionaries. You can also use a new dictionary of your own creation. The program does not use the Mac interface, in part to make it portable to other computers. But it comes with a great eight-page manual that makes using the program a straight-forward task. *Shareware - \$10.00.*

**** IN MEMORIAM ****

Mrs. Shirley Weaver, one of our long time duplicators, passed away in January. Shirley gave her considerable time, energy and talents to her family, the church and the disketeria. We will miss her and we extend our heartfelt expressions of sympathy to her family and friends. ☹

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Apple //: The following three WAP tutorials are being offered to Apple // owners on the first three Tuesday evenings of the month from 7:30 to 9:00 PM, at the office, 8227 Woodmont Ave., Bethesda, MD. (The tutorials start promptly at 7:30; if you bring your computer please arrive 15 minutes early to set up.) You may sign up for any or all of the series. They are designed for the "beginner" and will be repeated monthly. A revised outline of the tutorials was given in the October Journal. The fee for each session is \$10.00. You are urged to bring an Apple, monitor and disk drive. (Monitors are available for the 1st 5 registrants - call office.) Please note that WAP does not have equipment for you to use; if you do not bring your own, you will have to look over someone's shoulder.

- | | | |
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Macintosh: Tutorials for the beginners are regularly given on the last two Monday evenings of the month at the office, from 7-10 PM. The fee for two tutorials is \$30.00. An outline was given in the October Journal. You are strongly urged to bring your Macintosh. These tutorials fill up quickly - call the office to verify space before mailing in your registration.

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Non-Regular Tutorials: The following tutorials are being offered in the next few months (at the office unless otherwise specified). See "WAP Spring Tutorials" by Robert C. Plaut elsewhere in this Journal. The fee for these tutorials is \$15 for each session within each tutorial (\$20 each session for non-members).

- | | |
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| <input type="checkbox"/> Introduction to Microsoft Word (Version 3.0 if available) - Rochelle Long & Leon Moore - Saturday, April 25, 1 - 3 PM, USUHS. Do you have <input type="checkbox"/> 800K or <input type="checkbox"/> 400K drive(s)? Fee \$15 (\$20). | |
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