

Washington Apple Pi ^{\$2}



The Journal of Washington Apple Pi, Ltd.

Volume 7

October 1985

Number 10

Highlights

Apple Listens
WAP Q & A Index
Custom Characters in Imagewriter
MacAdvantage: Using Units

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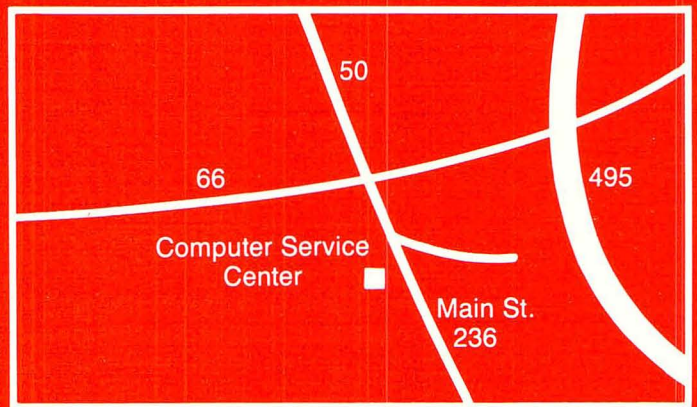
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Clinton Computer Offers Special Pricing to Pi Members on New Apple Products

New Products Announced By Apple

Apple™ Computer, Inc. has just announced several major new peripheral products for both the Apple // and Macintosh™ product families.

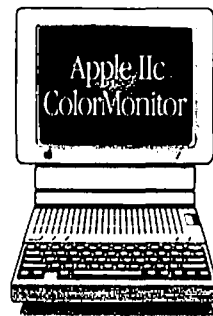
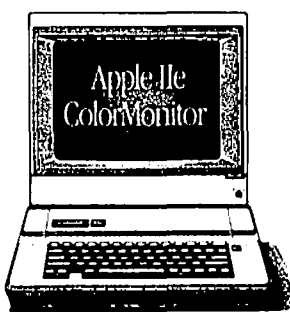
The product line is impressive! It includes composite color monitors for the Apple //e and //c which also display clear 80-column text in a monochromatic mode. The new UniDisk 3.5 is a high-capacity floppy disk for the //e and //c that greatly increases storage capacity and speed. The ImageWriter II, a worthy successor to the ImageWriter, features inexpensive color printing, near-letter-quality text, an optional sheet feeder, and a slot for expansion cards. Apple has also added a 20 megabyte hard disk to the Macintosh product line as well as a new modem and software for both Macintosh and Apple //.

Special Pricing for Pi Members

Clinton Computer is pleased to announce that Washington Apple Pi members will receive a **25% DISCOUNT** off the list price on all Apple brand hardware and software and on AppleCare. This discount extends to the new line of Apple peripherals, though quantities may be limited for a short period of time depending on Apple's allocation of product to our stores. To take advantage of this discount, just bring in your Washington Apple Pi Membership Card to our store.

In addition, Clinton Computer guarantees that our price is the lowest in-stock price for Apple products of any authorized dealer in the Washington Metro area.

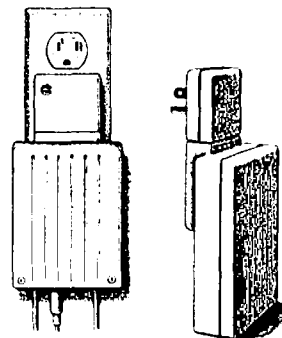
If you would like further details, please call either of our stores -- (301)856-2500 in Clinton, MD or (703)838-9700 in Old Town Alexandria, VA.



Color Monitor //e and
Color Monitor //c

List \$399.00

Price to Pi Members \$299.25



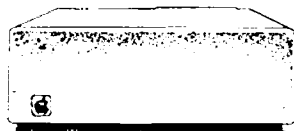
Apple
Personal Modem*
300-1200 Baud
List \$399.00
Pi Price \$299.25



UniDisk 3.5
for //e and //c
List \$499.00

Pi Price \$374.25

(Unidisk to //e Kit, Pi Price \$51.75)



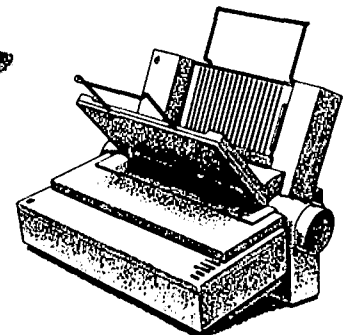
Hard Disk 20
for Macintosh 512K
List \$1499.00

Pi Price \$1124.25



ImageWriter II*
List \$595.00

Pi Price \$446.25



Sheet Feeder for
ImageWriter II
List \$225.00

Pi Price \$168.75

*Requires P8 Cable, Pi Price \$22.50

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EDITORIAL

Thank you's are in order. Thank you, Jim Graham, for substituting last month during the weeks we were away. Without your help, we could never have finished the September issue in time. We squeaked in under the wire! Thank you, also, to the many who helped run the WAP booth in Boston at the MacWorld Expo. I hope you had as much fun as I did. Please note Tom Warrick's article in the Mac Section of this newsletter. He has a surprise for each of you.

Personally, I was gratified by the turnout at the "Future of the Pi" meeting on September 21. Details of the meeting will be provided subsequently, but I can say that many constructive suggestions were made, and one or two may lead to far-reaching improvements in the Pi. We thank you one and all for taking four hours off on a Saturday, infinitely better suited for beaching or biking, to discuss the future of our group. ☞

PRESIDENT'S CORNER

by Tom Warrick

(The 1985 Apple User Group Conference at Apple Computer's offices in Cupertino is reported elsewhere in this issue.)

The fourth-Saturday Washington Apple Pi meetings may be run out of a suitcase for the next few months. The Uniformed Services University of the Health Sciences (USUHS), which has been kind enough in the past to let us make use of their fine facility, will be using their auditorium on the fourth Saturdays of October and November. As a result, the place of the main WAP meetings during those months has been changed.

The October 26 meeting will be held at Northwood High School, 919 University Blvd., West Silver Spring. (See map elsewhere in this issue.) The meeting on November 23 will be held at Walt Whitman High School, 7100 Whittier Blvd., Bethesda (just off River Road).

Important notice about the October 26 meeting: One of the most-frequently mentioned items many members have suggested that WAP buy is a good, color video projector that would work with both the Apple II and the Mac. The Executive Board will be voting at its October 9 meeting (7:30 p.m. at the office) whether to recommend to the membership that we buy a video projector in the \$16,000 to \$20,000 range. Everyone is welcome to attend and participate, as usual, whether you were ever formally "elected" or not. Under WAP bylaws, however, an expenditure this large must be approved by the membership at the general, i.e., fourth-Saturday meeting. The next general meeting will be on October 26. The program will be on telecommunications and should be of interest to everyone, Mac and Apple II owners alike. Please come to the meeting and cast your vote on this very important item.

The main December meeting will be on the third Saturday, December 21, at USUHS. Everyone, regardless of what type of computer you own, should come to this one, because in keeping with Apple Pi tradition, it will be a "garage sale." Everyone is invited to bring items that you no longer want (including money), but you don't have to sell (or buy) anything to have a good time. Many of us have managed to do all of our holiday shopping at this event. These meetings are usually a lot of fun, especially the "distress auction" at the end of the sale. Please note that USUHS regulations require that sales at the garage sale be by individuals only, not by businesses.

Although the main meeting will be living out of a suitcase for the next few months, the Mac meetings will only be changing rooms. In October (featuring hard disks and the Mac office) and December (to be announced; we may have a demonstration of Microsoft's Excel) the meetings will be in LA-4 in the Georgetown University Medical School's Preclinical Sciences Building, which is the building where the last few meetings have been held but in an adjacent room. There will also be activities at the tables in the hallway. In November (decision support systems), SigMac will meet in GA-2 and GA-4 (one floor above LA-4) in the Preclinical

Sciences Building.

WAP was well-represented (in both the quantitative and qualitative senses of the term) at the MacWorld Expo in Boston August 21-23. See the related article on this subject elsewhere in this issue.

One of the most-utilized services WAP has to offer is the hotline for members with questions. All of us have been stumped on occasion, and have found the answer from someone on the hotline. Periodically, however, we must remember that all of the hotline volunteers are just that--volunteers. Please respect the privacy of these invaluable people by calling only during the hours listed.

WAP's new Bulletin Board Operator, Lee Raesly, is in the process of changing over all of WAP's BBS's to the UBBS program. UBBS will support separate message bases called "boards" in UBBS jargon; each computer on which UBBS runs is called a "system." This process will take some time, and because of the nature of the new program--which, although not perfect, is a substantial improvement over the old one, I can say--it will be necessary for everyone to register for a new password by calling via modem the WAP main board at 986-8085. Think of this as the computer equivalent of renovating the Cabin John Bridge: traffic may move more slowly for a while, but the end product will be well worth it.

On a related subject, there has been some discussion on the BBS's about when SYSOPs should delete messages because of their content. As a majority of our members have joined since the Executive Board last considered the issue three years ago, it may be worthwhile to re-state current WAP policy on the subject. With regard to public messages, the SYSOPs have the authority to delete a message that is illegal, vulgar, abusive, or commercial. A message is "commercial" if it offers to sell or solicits offers to buy property; casual sales of personal property, however, are not "commercial." WAP has other channels for getting commercial messages to members, such as advertising in the Journal or in the commercial section of the Classifieds BBS. With regard to private messages, SYSOPs do not make a point of scrutinizing other people's mail. If they notice or happen to come across a message that is illegal or commercial, however, they have the authority to delete it. In all cases, discretion must be left to the SYSOPs of the various boards or systems. In those rare cases--and they are very rare indeed--where a message has to be deleted, the person who posted it should feel free to raise the matter in turn with the WAP Bulletin Board Operator and the Executive Board.

Like most WAP policies, of course, this one is not burned in ROM. Accordingly, I have asked the BBS Committee, which meets at 7:30 p.m. at the WAP office on the first Tuesday of each month, to consider whether these guidelines should be (a) changed or (b) formalized in the WAP by-laws. Everyone is invited to attend the next meetings, currently scheduled for October 1 and November 5. Contact the Bulletin Board Operator, Lee Raesly, if you are interested in participating in these discussions. ☞

CLASSIFIEDS

For Sale: Visidex, filing program by Personal Software, original program disk and manual, \$25/offer. Legend Industries 128K RAM disk emulator, and emulator program, never used, was \$300, \$175/offer. Call David, (W) 454-4085 or (H) 422-8926.

For Sale: Odesta Helix w/version 1.13 update, \$200; Microsoft Word w/version 1.05 update, \$90; MacDraw (unopened), \$75; MacProject (opened, never booted), \$75; Hayden Speller, \$30. Games: Run for the Money, Cyborg, Hitchhiker's Guide, Suspect, Cutthroats, Mac Attack, Through the Looking Glass, Legacy, Entrepreneur, Word Challenge, Sargon III, Ground Zero, The Witness, Deadline, Planetfall, Enchanter - \$25 each. Call Bruce, evenings only (703) 922-6898.

For Sale: Attn. Insurance Agents! The Quasar HK2608UE computer with adaptor, full warranty, basic program chip, cover (\$240). DB MASTER for the Apple //-[+ *not used* \$80. Call Shaji at (301) 231-6393 days.

For Sale: Apple compatible computer including monitor, 2 disk drives, Z-80 card, Mountain multi-function card, graphic printer card, detachable keyboard and a full line of software. A great value at \$650 or best offer. Call Mike (301) 933-4168.

For Sale: Apple II software 50 - 90% off list. WP (Apple Writer), education, business, investment, spreadsheets, accounting, games, graphics, utilities and more. New in packaging (picked up at a going-out-of-business auction). Call Jessica at (301) 439-1131.

For Sale: Apple IIe, dual disk drive, monitor, System SaverIII, 80-column card, Super Serial card, Okidata 92 printer w/Grapppler parallel card. Microcom modem, and Titan accelerator, numeric key pad, and some software. Also Apple IIc, flat screen, IIc monitor and stand, external drive, carrying case. Reasonable prices. Call Royal at 585-3900.

For Sale: Apple 300 Modem, Apple Super Serial, Apple Term II, Access II. \$175. Call Bill, evenings at 250-6441. ☞

COMMERCIAL CLASSIFIEDS

Custom programming in Pascal for the Apple II, Macintosh and Lisa. Experience in scientific, low-level I/O and other application areas. Also Macintosh Office hardware and software selection, setup, and support; Omnis 3 database programming for the Macintosh. Contact Michael Hartman, Open Cluster Software. (301) 445-1583. ☞

JOB MART

Position Wanted

Apple Macintosh computer instruction in the general Frederick, MD area. Instruction on the Macintosh and assorted software. Help with pre-buy decisions. Personalized service and reasonable rates. Call Lynn R. Trusal, (301) 845-2651, evenings with no calls after 10:00 PM. ☞

EVENT QUEUE

Washington Apple Pi meets on the 4th Saturday (usually) of each month. Library transactions, Journal pickup, memberships, etc. are from 8:45 - 10:00 AM. From 9:00 to 10:00 AM there is an informal "Help" session in the auditorium. The main meeting starts promptly at 10:00, at which time all sales and services close so that volunteers can attend the meeting.

A sign interpreter and reserved seating can be provided for the hearing impaired, but we need 3 or 4 business days notice. Call the office.

PLEASE NOTE: The October and November meetings will not be at USUHS. The October meeting will be at Northwood High School, 919 University Blvd., West Silver Spring. The November meeting will be at Walt Whitman High School, 7100 Whittier Blvd., Bethesda.

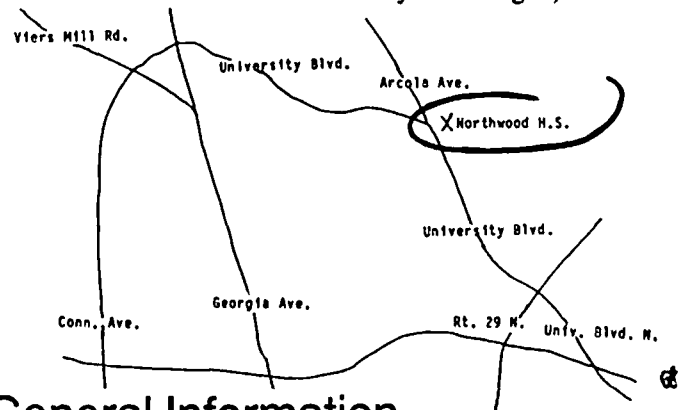
Following are dates and topics for upcoming months:

- October 26 - Telecom SIG and Vendor Show
- November 23 - Aspects of Music
- December 21 - Garage Sale

Dates for SigMac (held at Georgetown University) are:

- October 5 - Hard Disks and the Mac Office
- November 2 - Decisions Support Systems
- December 7 - TBA

The Executive Board of Washington Apple Pi meets on the second Wednesday of each month at 7:30 PM at the office. All members are welcome to attend. (Sometimes an alternate date is selected. Call the office for any late 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 \$27.00 for the first year and \$20.00 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.

Current office hours are:

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

* October 1985 *

SIGNEWS

WAP

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1 Apple// Beginning Tutorial #1 7:30-9:00PM Office	2	3 SigMac 7:30PM-Lady of Lourdes; GAMESIG 7:30-Off.->	<-Thursday 3rd contd. DisabledSIG 7PM-CCCC	5 SigMac 9AM-Geotown Univ.PreCl- Bld. Rm LA4 Mac/XL SIG
6	7 Apple /// Pascal Tutor.-Off; Dealine for Journal Art	8 Apple// Beginning Tutorial #2 7:30-9:00PM Office	9 Executive Board 7:30 PM Office	10STOCKSIG 8PM Office; Apple /// 7:30PM-Conv Center Inn	11 dBaseII SIG org. meet. Alex. Call 836-1696	12
13	14	15 Apple// Beginning Tutorial #3 7:30-9:00PM Office	16	17 Pascal SIG 8:00 PM Office	18	19
20	21 PI-SIG 8:00PM-Off; Mac Begin. Tutorial #1 7-10PM Off.	22	23	24 EDSIG 7:30 PM Office	25	26 WAP Mtg 9AM-North- wood H.S. TelecomSIG& Vendor Show
27	28 Mac Begin. Tutorial #2 7-10 PM Office	29	30	31		

Apple /// SIG meets on the second Thursday of the month at 7:30 PM in the Convention Center Inn, corner of 12th & K NW. The next meeting will be on October 10. See their news elsewhere in this issue.

Apple //c meets each month after the regular WAP meeting.

Appleseeds is the special interest group for our younger members, age 9 and up. They meet during the regular WAP meeting.

DisabledSIG meets on the first Thursday of each month at the Chevy Chase Community Center, 7:00 PM. See their news elsewhere in this issue.

EdSIG - the education special interest group - meets on the 4th Thursday of the month at the office, 7:30 PM.

ForthSIG meets on the third Saturday of the month at the office, 10:00 AM.

GameSIG meets on the first Thursday of each month at the office, 7:30 PM. See their news elsewhere in this issue.

LISA/MacXL SIG meets after the SigMac meeting on the first Saturday of the month.

PIG, the Pascal Interest Group, meets on the third Thursday of each month at the office, 8:00 PM.

PI-SIG meets on the third Monday of each month at the office, 8:00 PM.

SigMac meets on the 1st Thursday of each month (programmer's meeting) at Our Lady of Lourdes School, 7500 Pearl Street, Bethesda, MD; and on the first Saturday (general meeting) at Georgetown University, Preclinical Sciences Building, at 9:00 AM.

StockSIG meetings are on the second Thursday of each month at the office, 8:00 PM.

Telecom SIG meets after the regular WAP meeting on the fourth Saturday.

~~~~~

**LET'S GET ORGANIZED!!!**

I am interested in starting a dBase II SIG for the Pi, but non-machine-specific. The first "organizational meeting" will be in Alexandria on Friday October 11 at 8:30 PM. Call Nick Veloz at 836-1696, evenings, or leave message on the WAP ABBS. (We will also have a special dBase Bulletin Board within the Pi Board.) Directions will be given on the phone - they are simple.

Let's get organized and have fun. ☺

\* November 1985 \*

WAP

| SUNDAY | MONDAY                                                               | TUESDAY                                                         | WEDNESDAY                                     | THURSDAY                                                          | FRIDAY                                             | SATURDAY                                                           |
|--------|----------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------|
|        |                                                                      |                                                                 |                                               |                                                                   | 1                                                  | 2 SigMac<br>9AM-Geotown<br>Univ-PreCln<br>Bldg.GA2&4<br>LISA/MacXL |
| 3      | 4<br>Deadline<br>for Journal<br>Articles                             | 5 Apple//<br>Beginning<br>Tutorial #1<br>7:30-9:00PM<br>Office  | 6                                             | 7 SigMac<br>7:30PM-Lady<br>of Lourdes;<br>DisabledSIG<br>7PM-CCCC | -<Thursday<br>7th contd.<br>GAMESIG<br>7:30-Off.-> | 9                                                                  |
| 10     | 11                                                                   | 12 Apple//<br>Beginning<br>Tutorial #2<br>7:30-9:00PM<br>Office | 13<br>Executive<br>Board<br>7:30 PM<br>Office | 14<br>STOCKSIG<br>8PM-Office                                      | 15                                                 | 16                                                                 |
| 17     | 18 PI-SIG<br>8:00PM-Off;<br>Mac Begin.<br>Tutorial #1<br>7-10PM Off. | 19 Apple//<br>Beginning<br>Tutorial #3<br>7:30-9:00PM<br>Office | 20                                            | 21<br>Pascal SIG<br>8:00 PM<br>Office                             | 22                                                 | 23 WAP Mtg<br>9AM-Walt<br>Whitman HS<br>Aspects of<br>Music        |
| 24     | 25<br>Mac Begin.<br>Tutorial #2<br>7-10PM<br>Office                  | 26                                                              | 27                                            | 28<br>Have a good<br>Thanks-<br>giving                            | 29                                                 | 30                                                                 |



# MINUTES

## Summary of July Executive Board Meeting

The Executive Board of Washington Apple Pi met at 7:30 PM on July 10 at the office with Tom Warrick presiding.

The President reported that Siew Youell had been selected as an additional staff member. A vendor show was discussed. Financial statements were distributed and explained by the Treasurer - a summary is to be included in the Journal. A competition to find the oldest Apple owned by a Pi member was approved. A motion was carried that demo disks from commercial sources would not be carried in the WAP Disketeria. A special monitor for the Mac tutorials was discussed. A decision was made that Bernie Urban should determine when special commercial mailings would be made, and the price to be charged (these mailings are done by the Pi, not the commercial mailer). Office space after January 31 (when our current lease expires) was discussed. The Glen Echo Park site was reported on.

## Summary of August Executive Board Meeting

The Executive Board of Washington Apple Pi, Ltd. met on August 14 at 7:30 PM in the office with Tom Warrick presiding.

USUHS is not available for the September, October and November meetings on the fourth Saturday. The September meeting will be at Masur Auditorium, NIH. September 21 is the "Future of the Pi" meeting. A projector for the MacSig meeting was discussed. Group Purchase reported that Clinton Computer is offering a 25% discount on any Apple product to WAP members. The Treasurer distributed financial statements - capital in hand was about \$85,000, of which the Treasurer recommended that \$40-45,000 be held for emergencies. The President led a discussion on possible capital expenditures. &

# APPLE TEAS

The following members offered to host a 'tea' as a result of volunteering at the August meeting. Tea Time is here again with fall yearnings and cozy evenings by the hearth. 'Warm up' your hosts and hostesses, and call for your place in an intimate Apple gathering. Much can be learned by working through problems together. 'Experts' may be available to discuss computer intricacies but are scarce. Consider, these opportunities are also likely ties of friendship. Go for it, members.

|                 |          |                                |
|-----------------|----------|--------------------------------|
| Alice Allen     | 890-8992 | Silver Spring                  |
| Art ?           |          | "Come in" Art                  |
| Amy Billingsley | 585-5357 | Silver Spring - "Apple Writer" |
| A. Data         | 384-8729 | Silver Spring                  |
| Mark Pankin     | 524-0937 | Arlington                      |
| Karen Rall      | 992-9378 | Columbia                       |
| Sue Roth        | 356-9025 | McLean                         |

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# WAP HOTLINE For Use by WAP Members Only

Have a problem? The following club members have agreed to help other members. PLEASE, keep in mind that the people listed are VOLUNTEERS. Respect all telephone restrictions, where listed, and no calls after 10:00 PM except where indicated. Users of the Hotline are reminded that calls regarding commercial software packages should be limited to those you have purchased. Please do not call about copied software for which you have no documentation. Telephone numbers are home phones unless otherwise specified. When requests are made to return calls, long distance will be collect.

|                                                    |                                    |                                                                |                                   |
|----------------------------------------------------|------------------------------------|----------------------------------------------------------------|-----------------------------------|
| <b>General</b>                                     | John Day (301) 672-1721            | <b>Hard Disks</b>                                              | Tom Vier (ABBS) (301) 986-8085    |
|                                                    | Dave Harvey (703) 527-2704         | Corvus & Omninet                                               | Jaxon Brown (301) 350-3283        |
|                                                    | Robert Martin (301) 498-6074       | Sider                                                          | Barry Fox (703) 820-5206          |
| <b>Accounting Packages</b>                         |                                    | <b>Languages (A=Applesoft, I=Integer, P=Pascal, M=Machine)</b> |                                   |
| Accountant(Dec.Sup.)                               | Mark Pankin (703) 524-0937         | A                                                              | Peter Combes (301) 251-6369       |
| BPI Programs                                       | Jaxon Brown (301) 350-3283         | A,I                                                            | Jeff Dillon (301) 422-6458        |
| Home Accountant                                    | Leon Raesly * (301) 460-0754       | A                                                              | Richard Langston (301) 869-7466   |
| Howardsoft (Tax)                                   | Leon Raesly * (301) 460-0754       | A                                                              | Mark Pankin (703) 524-0937        |
| APPLE SSC                                          | Bernie Benson (301) 951-5294       | A,I,M                                                          | Richard Untied (609) 596-8816     |
| Apple TechNotes                                    | Lance Bell (703) 550-9064          | A,I,M                                                          | John Love (703) 569-2294          |
| AppleWorks                                         | Carl Eisen (703) 354-4837          | M                                                              | Raymond Hobbs (301) 490-7484      |
|                                                    | Jay Jones (Balt.) (301) 969-1990   | P                                                              | Donn Hoffman * (412) 578-8905     |
|                                                    | Barry Fox (703) 820-5206           | Forth                                                          | Bruce Field (301) 340-7038        |
| <b>Communications Packages and Modems-Telecom.</b> | George Kinal (7-10) (202) 546-7270 | LISP                                                           | Fred Naef (703) 471-1479          |
| Anchor Mark 12                                     | Jeremy Parker (301) 229-2578       | MS Basic                                                       | Raymond Hobbs (301) 490-7484      |
| Apple Modems                                       | John Day (301) 672-1721            | Math/OR Applns.                                                | Mark Pankin (703) 524-0937        |
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|                                                    | Marv Redd (301) 944-2150           | Operating Systems                                              |                                   |
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| General                                            | Tom Nebiker (216) 867-7463         | CP/M                                                           | Richard Untied (609) 596-8816     |
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| MDM                                                | Joe England (7-10) (301) 953-1949  | ProDOS                                                         | Richard Langston (301) 869-7466   |
| Smartcom I                                         | Harmon Pritchard (301) 972-4667    |                                                                | John Love (703) 569-2294          |
| VisiTerm                                           | Steve Wildstrom (301) 564-0039     |                                                                | Barry Fox (703) 820-5206          |
| XTALK CP/M Comm.                                   | Bernie Benson (301) 951-5294       | <b>Printers</b>                                                |                                   |
| Computers, Specific                                |                                    | General                                                        | Walt Francis (202) 966-5742       |
| Apple //c                                          | John Day (301) 672-1721            |                                                                | Leon Raesly * (301) 460-0754      |
| LISA/Mac XL                                        | Scott Rullman (301) 779-5714       | AJ 831 series                                                  | Joe England (7-10) (301) 953-1949 |
|                                                    | John Day (301) 672-1721            | Apple Color Plotter                                            | John Day (301) 672-1721           |
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| <b>Macintosh:</b>                                  |                                    | Apple Dot Matrix                                               | Joan B. Dunham * (301) 585-0989   |
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|                                                    | Scott Rullman (301) 779-5714       | IDS 460                                                        | Henry Greene (202) 363-1797       |
|                                                    | Donald Schmitt (717) 334-3265      | Imagewriter                                                    | Jeff Stetekluh (703) 521-4882     |
|                                                    | Rob Clark (804) 850-2016           | MX-80                                                          | John Day (301) 672-1721           |
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| Comm. & Modems                                     | Skip Horvath (703) 536-4091        | Scribe                                                         | Michael Proffitt (301) 874-2270   |
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| File Vision                                        | David Jamison(day) (301) 589-8841  | Lotus 1-2-3                                                    | Bruce Field (301) 340-7038        |
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| Helix                                              | Harvey Levine (301) 299-9380       | VisiCalc                                                       | Walt Francis (202) 966-5742       |
| Inside Mac                                         | Jon Hardis (301) 330-1422          | Spreadsheet 2.0 (MagiCalc)                                     | Raymond Hobbs (301) 490-7484      |
|                                                    | Don Landing (703) 690-1010         | SuperCalc Ver. 2.0                                             | Terry Prudden (301) 933-3065      |
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| MacLion (DBMS)                                     | Mark Miani (202) 362-8123          | Stock Market                                                   | Leon Raesly * (301) 460-0754      |
| MacProject                                         | Jay Lucas (703) 751-3332           | Time-Sharing                                                   | Leon Raesly * (301) 460-0754      |
| MacTerminal                                        | Jon Hardis (301) 330-1422          | Word Processors                                                | Leon Raesly * (301) 460-0754      |
| Multiplan                                          | John Boblitz (301) 356-9384        | Apple Writer II                                                |                                   |
|                                                    | Don Landing (703) 690-1010         | Format II                                                      | Dianne Lorenz (301) 530-7881      |
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|                                                    | John Staples (703) 759-3461        | Word Handler                                                   | Peter Combes (301) 251-6369       |
| dBase II & III                                     | Raymond Hobbs (301) 490-7484       | Word Juggler //e                                               | E. E. Carter (202) 363-2342       |
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| <b>DB Master</b>                                   | Dave Einhorn (301) 593-8420        |                                                                | Carl Eisen (703) 354-4837         |
| Data Perfect                                       | Leon Raesly * (301) 460-0754       |                                                                | Barry Fox (703) 820-5206          |
| Data Factory                                       | Bob Schmidt (301) 736-4698         |                                                                | Joe England (7-10) (301) 953-1949 |
| General Manager                                    | Normand Bernache (301) 935-5617    |                                                                | Dana Reil (301) 350-3283          |
|                                                    | Leon Raesly * (301) 460-0754       |                                                                |                                   |
| <b>List Handler</b>                                | Jon Vaupel (301) 977-3054          |                                                                |                                   |
| PFS                                                | Bill Etue (703) 620-2103           |                                                                |                                   |
|                                                    | Ginny Spevak (202) 362-3887        |                                                                |                                   |
| <b>Profile</b>                                     | Barry Fox (703) 820-5206           |                                                                |                                   |
| QuickFile II                                       | J.J. Finkelstein (301) 652-9375    |                                                                |                                   |
| VisiPlot                                           | Lee Raesly * (301) 460-0754        |                                                                |                                   |
| <b>Games - Apple //</b>                            | Charles Hall (301) 330-4052        |                                                                |                                   |
| <b>Games - Mac</b>                                 | Ron Wartow (301) 654-4439          |                                                                |                                   |

\* Calls up until midnight are ok.

# DISABLEDSIG NEWS

by Jay M. Thal



## APPLE FINALLY DOES IT

For several years now we've made efforts to get Apple to establish an office within the corporation focusing on the needs of the disabled. We've done that through letters as well as in a direct discussion with the legendary Woz. Now they've done it, or at least taken an initial step, and we're glad.

Apple has created an Office of Special Education Programs to work with educational institutions, and service and advocacy groups. Heading the Office is Dr. Alan Brightman who previously worked with the Apple Education Foundation and the Apple University Consortium. He can be reached at Apple, 202 Mariani Ave., Cupertino, CA 95014, or telephoned at (408) 996-1010.

We hope that Apple will go further. It's in their best interest to do so. There are, literally, millions of disabled citizens out here in the real world, but they're largely invisible and rarely thought of, except when one notices a wheelchair ramp or braille at the elevator buttons. And, the spectrum of disabling conditions are broader than those mentioned.

And, through the wonders of modern medicine, the numbers of the disabled are growing daily. That's not a dig at the medical profession but an acknowledgement of their ability to increase survivability from stroke and trauma, and illnesses of all sorts. What remains are individuals, sometimes isolated, trying to regain some quality of life and seeking the tools to do so. The computer is just such a tool - an ability enhancer, a basic communications tool, and an environmental controller.

We feel that Apple would gain much, where it counts on the bottom line, if it established a network with its dealers so that they will know of product availability (software and hardware) that will aid the disabled. It would increase the market place and could serve as a resource for inquiries if someone in need wheeled in off the street.

The Grey Panthers like to remind us that we'll all be old some day so now's the time to think about issues of being elderly. It's not an escapism philosophy. Well, the likelihood is that someday, too, to some degree, you'll be disabled. It's an issue for us all.

## MACDEAF

We don't know much about it, but MacDeaf has arrived. We do not know, in fact, anything more than an ad that appeared in the National Association for the Deaf's Broadcaster announcing a MacDeaf Newsletter; network directory; shopping service; etc. We hope they will contact us, and the SigMac. No, we do not want to take them over but we'd like to share resources. MacDeaf is headed by Mitchell D. Travers, 333 Tea Garden Circle, Apt. 403, Silver Spring, MD 20904.

## 146,000 STRONG

Did you know that the Federal Government employs more than 146,000 disabled workers? (No, I do not mean the morally handicapped that often grace the columns of Jack

Anderson.) And, like their able-bodied counterparts they are the ones that keep the very fabric of government services stitched together.

Well, the government has established an Interagency Committee for Computer Support for the Handicapped. What! Not another committee #@&>%! No! This one is headed by Leonard J. Suchanek, a blind federal judge, and is charged with assuring that the benefits of computer technology are available to currently disabled employees, and to make federal employment attractive to future workers. On October 31, at the Washington, D.C. Convention Center (part of the 1985 Federal Office Automation Conference) the Interagency Committee will sponsor an all-day seminar. To register, or for more information, call (800) 343-6944.

As Judge Suchanek has said: "Computer technology is the great equalizer for disabled people. It is enabling them to be educated, do their own research, be employed and be as productive as non-disabled people."

## AFFORDABLE KEYBOARD SHIELDS

Keyboard shields have been available for some time (at prices ranging from \$50-\$1100) to prevent persons lacking fine motor control from inadvertently striking an unwanted key. The shields are now being offered by Adaptive Technology, Inc., 5334 72nd Circle North, Brooklyn Center, MN 55429, for only \$15. Available now for the Apple line, and soon for the IBM PC and PC Jr., they can be ordered fully configured or with only specific keys open for particular software needs. They are attached by means of velcro, and keylocks are available for an additional \$1.00 each. ☞

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# APPLE /// SIG NEWS

by Charlene Ryan

As promised, here is a capsule version of survey results that have been coming in over the summer. I mailed out 82 surveys. From those, I received 43 responses. If any of you are ever involved in surveys, this is a very good response percentage. Two respondents no longer have machines, but wish to remain on mailing lists. To those of you who have not responded, it's not too late. None of the surveys bounced back due to unknown addressees. This survey is also an attempt to see if you are still interested. I will no longer include you in our monthly meeting notices, or give your name to other sources for Apple /// information - unless I hear from you. If you did not get a survey blank, you are not on my list, or were removed inadvertently. Please help in correcting errors or bringing my records up-to-date.

Among the 43 who responded, we have a total of 57 machines - 10 of us have more than 1 machine. 20 good souls agreed to be included in a HOTLINE list (next month's project). Most of those who will be on the HOTLINE use their machine for business, not hobby, which I thought was interesting. 24 members use Apple /// for business, 8 for hobbies, and 4 for other. Because I designed the form poorly and didn't leave more space to explain "other," that was all I got.

Seven of us have ///+'s, three of us have 512K, five of us have 128K, one of us doesn't know. The majority, of course, have straight Apple ///'s with 256K memory, Monitor ///'s, and Apple Floppy Drives. Only four of us mention having color monitors, only one plotter, HP 2 pen. The exact type and location of equipment each has will be compiled on a new roster for all to share.

The question, "Do you do your own programming for business or hobby?", had some humorous results. Fifteen of us chose not to answer that question at all. (You knew I was secretly combining this information with the other trick question, "Do you have software you created you can share?"). Nine said "yes", seven said "a little", five said "some", one said "not much", and one said "used to". Why aren't you at the tutorials?

Another confusing question on the survey was about communication. I got answers from Catalyst to Access /// to modems. I'll get it straight. Nearly all of us have Business Basic and Pascal Packages. I called them compilers and I think that confused some people. I got little response about accounting software because there wasn't any space reserved for it, and some of you were kind enough to fill me in under "other."

The survey revealed that there is an interest in graphics. Numerous mentions of graphics tutorials or meeting topics, looking to buy graphics software, or wanting to do special things with graphics. Now that we know what you want, we'll see what we can do about it.

Three Easy Pieces is used by 14 of us from the survey. More than half of those who use this software, interestingly, don't use much else. I've heard it said that if Haba had come

out with this little bundle a bit sooner, it would have beat LOTUS and the IBM PC and would have won over the market.

And for the person who wants information on how to convert Apple /// files to IBM PC files - call IBM. Joking aside, you also noted that you didn't have a modem. The easy way is through a modem from your Apple /// into another modem attached to your IBM PC. You also need communication software for each computer to work with the modems. PC Talk works fine with the IBM. For the person who asked for recommendations of modem and communication software, many of us have excellent luck with the Hayes product line and Access /// communication software. Hayes 300 baud modems were on sale in Sears for \$99. Dave Ottalini is now modernized after that lucky find.

SIG election time is coming up. We will hold an election next month with Bill Rosenmund agreeing to co-chair for one more year. Jerry Chandler will bow out after several years of active participation with the group. He was co-chair for at least 2 years. Thank you from all of us, Jerry. Dave Ottalini came forward to offer his services as co-chair with Bill. Thank you, Dave. Anyone wishing to be considered for this or any other position, please be present at the October meeting to offer your services and/or to vote. I will remain in the role of secretary, unless someone comes up with a better idea.

Dave, by the way, has been very busy working on an index of all written Apple /// articles which will be available on diskette. He also sent a survey to all known Apple /// groups around the country to get a feel about how well they are doing. Al Lambert continues to beg for software contributions for our own product line. Remember - "EVEN IF THERE ARE A FEW BUGS" - we don't mind. I know we have closet hackers out there. We have some software, but it looks shabby compared to other types of computer software available in the Disketeria.

We are also trying to solve the problem of having no Apple /// machine at the Apple Pi Office. Bill Rosenmund is working on a source to donate one machine to the office. That way, it will be there for testing and copying diskettes. There are several Apple /// books at the Apple Pi Office Library. One, I'm sure, is the \$75 service manual for Apple ///. Other informative data such as the Apple /// Resource Guide is also in the library.

I've suggested that we change the meeting night from the second Thursday of every month to the first Thursday. This will give me more of a break to get news of the meeting to the press without the editors waiting for me to get my column to them with the press deadline long past. It's well appreciated, but shouldn't be the usual way. I was unable to do all the coordination necessary to make this change by next month. So, the meeting will be the second Thursday as before, October 10. Keep an eye on the meeting date. If I should be successful in changing it, it will go to the first Thursday, November 4.

contd. on pg 13

# Recipe for Success

Our House Special

## Minute Manuals Menu

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# APPLE /// NEWSLETTERS AND MAGAZINES

## BY DAVID OTTALINI

OK, Apple /// fans, Listen up! In past articles in the WAP Journal, I've mentioned a couple of ///-specific magazines that are still in some state of publication. But, as has been quite rightly pointed out to me at our SIG meetings, there are other publications that deserve mention and which may very well be worth your attention and subscriptions.

At the top of the list is the /// Newsletter published by Frank Moore. Up until the end of August, the /// Newsletter was a weekly publication sent to each subscriber's door by the Postal Service's ECOM system. By the time you read this, however, the /// Newsletter will have become the /// Magazine with articles, advertising, etc. Subscription price is \$35.00 per year. For his Newsletter subscribers, that included copies of all back issues. Publisher Moore says that policy will continue for all new subscribers, at least for the next year or so. When I talked to Moore, in early September, he indicated the publication date would be the 16th of the month, with September being the first month of the new format. He says that by switching to a magazine, he'll be able to offer readers a greater variety of articles and other services he could not do while publishing only a two page newsletter. Initial plans call for each issue to deal with one major subject, such as communications, disk drives, etc.

Moore knows his stuff and is tuned in to what's going on in the current /// world. He's also working on a "Unification Project" to try to bring the entire /// community closer together. Moore's doing this in addition to holding down a real job, so you know he cares just a little bit about the /// (of course he's also making some bucks, which doesn't hurt either!). As of early September, his is the only /// publication (not published by a specific /// user's group) coming out on a regular basis and is well worth the money.

Moore offers both commercial and public domain software for sale, by the way. See the July, 1985 WAP Journal for more details on what's available.

At this point, I was all ready to tell you about the Open Apple Gazette. Billed as the "Oldest /// Publication," it has not been published for quite some time. The publisher, Don Norris, told me in mid-August that the nine back issues of the magazine could still be obtained for \$30.00. However, his most recent San Francisco phone number has been disconnected and I have been unable to reach him at the forwarding address in Missouri. During a phone conversation, Norris, the former President of the Business Apple Group (which was affiliated I'm told at one time with the defunct Original Apple ///er's group) told me he was planning to begin publishing a new magazine in "two to three months." He said at the time it would cost \$45.00 per year (published quarterly). Norris also had his own consulting firm, called the /// Support Service which offered help to Apple /// users on a fee basis.

At this point, I cannot recommend that you send Norris any money for either the back issues or a subscription until more information is forthcoming about his address and plans.

I have decided not to print the "current" information because it can not be confirmed (OK...OK...it's either Box 813, San Francisco, CA 94101 or 512 South Hanley, Suite 220, Clayton, MO 63105). I will publish an updated address and phone number once it becomes available.

I also recently spoke on the phone with Marlys Christensen, who with her husband Mike is the co-owner of Donovan's Reef. They have taken over publication of the only Apple /// magazine offered on disk. It's called "/// Cheers." So far, only two editions have come out. The magazine was originally published in the summer of 1984 by the Apple Pugetsound Program Library Exchange. Donovan's Reef has since taken it over and re-released the first edition. A second has also come out. A.P.P.L.E. still is acting as the distributor but has provided little actual support. Ms. Christensen says the biggest problem so far has been getting material to put into the magazine. Like others, the Christensens are doing this project on the side, with little time or money for advertising, etc. She says there are only about 85 subscribers so far. Authors are paid on a royalty basis. It costs \$40.00 per year, published quarterly. I've gotten the first two editions and find the graphics, articles, etc. all to be excellent. For the price you get three disks: a boot disk, a /Cheers disk and an articles disk. The magazine also sports accessories that include a calculator and other goodies. It holds great promise if it can really get off the ground.

Most /// users know about On Three. It's published by Bob Consorti out of Ventura, California. Current cost is \$40.00 per year for a subscription, but has not been published for some time. However, in its latest mailing, there are indications some changes are on the way. For one thing, the company has moved to larger quarters. And there are assurances to On Three subscribers that a new edition will be out shortly. A call by me to On Three in early September provided additional assurance that the magazine would again be published at the \$40.00 per 12 issue price. Early October is the current target date for a new edition. See the listing below for On Three's new address. On Three also offers software and hardware, including a 512K upgrade kit, and in its latest brochure (late August) there are two new games listed. One is called "The Apple /// Fruit Machine" for you slot machine fans and a "Card Machine" that will play you a game of blackjack.

If you would like to get any back issues of On Three, by the way, you can, for only \$5.00 for each of the six issues. I feel they are worth the money, although most tend to be filled with rather long ads for all those products being offered (a sore point with many ///ers). But there are some excellent articles too, so give them a try.

I should also mention that there are a number of /// users groups around the country that publish their own newsletters on a monthly basis. Some are available in the WAP office for you to read. Among them, The Third Apple Users Group (TAU) based in Wheaton, Illinois says its newsletter

contd. on pg 13

# Apple /// For Me Update

## By David Ottalini

Since last we left the Association of Independent Micro-dealers, /// Fans, a third catalog has come out listing many of your favorite /// products all at reduced prices. In addition, AIM has decided that due to the overwhelming success of their initial efforts, they will now begin taking memberships at \$25.00 per year. In return for the bucks, AIM says they will support the /// completely: they will make products, knowledge, support and advice available. And they'll introduce an 800 number to make communication easier.

AIM also says that if you are at anytime unhappy with your membership, you can quit and get a prorated portion of your money back. I like their catalogs simply for the descriptions of the software. It's easily the most complete you'll find at the present time. If you're interested in joining or getting more information, AIM's address is: 3010 N.

Sterling Ave., Peoria, Il. 61604. Phone is (309)-685-4843.

I should also mention while I've got your attention that another ///er who is growing due to success is Charles F. McConathy. He deals in /// hardware and software exclusively. A recent flyer from him indicates a move to bigger quarters: CMC Computer Systems, 1514 East Edinger #H, Santa Ana, CA 92705; 714-835-2462.

McConathy offered a number of specials during September. Many of them beat AIM's prices for the same products rather handily: For example, Versaform from McConathy is \$99.00; from AIM it's \$230.00. He's also offering a complete 256K /// system for \$695.00 that includes a clock, Apple Writer, VisiCalc, and Quick File along with all cables and system software. The ///s are all reconditioned with 60 day warranty. ☞

### Apple /// Newsletters contd. from pg 12

is distributed on an international basis (but then again, so is the WAP Journal and the newsletter published by the Apple /// Owners and Users International group headed by H. Joseph Dobrowolski out of the Norfolk area).

| MAGAZINE/NEWSLETTER         | COST/YR. | ADDRESS                    | CITY       | ST | ZIP   | PHONE        |
|-----------------------------|----------|----------------------------|------------|----|-------|--------------|
| /// CHEERS                  | \$40.00  | 12513 SE 216TH             | KENT       | WA | 98031 | 206-630-2343 |
| ON THREE                    | \$40.00  | 4478 MARKET ST., STE 701-2 | VENTURA    | CA | 93003 | 805-644-3514 |
| THE /// NEWSLETTER/MAGAZINE | \$35.00  | 3201 MURCHISON WAY         | CARMICHAEL | CA | 95608 | 916-485-6525 |

I'm working on a complete and up-to-date list of those groups and will share the results with you in a future article (along with the results of a survey sent to all of them). In the meantime, here's the addresses and other information about the magazines and newsletters mentioned above:

### Apple /// SIG News contd. from pg 10

Our Pascal Tutorial was postponed due to scheduling conflicts until October 7. This is proving to be a popular event. I hope those who really want to go will have responded early. Ralph Hofmeister, our tutorial leader, recommends a book to help us with Pascal along with what we learn at the tutorial. He will have a copy with him, but if you are like me, you will want to have your own copy. "Koffman, Elliot B., Pascal: A Problem Solving Approach, Addison Wesley, Original Edition 1982." Ralph has used this himself and feels it's the best introduction for Pascal programmers. It may be available in later editions, or no longer available. Perhaps someone can check this out and report findings at the tutorial.

I realize that you do not get your newsletters until some time into the month, perhaps after our meeting. There are a couple of ways to beat the system. You can elect to pay first class postage with your annual subscription, or you can drive to the monthly general meeting, which is the fourth Saturday of the month, and pick up your copy before the meeting starts. It isn't necessary to stay for the meeting to obtain your newsletter.

Bart Cable has a copy of Multiplan available for sale. If interested, call 360-1876 between 7 and 9 PM.

I can't over-emphasize the importance of protection against static electricity. Winter is soon approaching and the cool air and heated rooms seem to make static problems more visible. Learn how to avoid getting shocks when touching your equipment. Static electricity can damage software as well as hardware. Mats and furniture are available that work well, or you can touch something else that will discharge the buildup of static in your fingers before you put your hands on your computer equipment. ☞

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# GAMESIG NEWS

by Ronald Wartow

## OCTOBER MEETING

The next meeting will be held on October 3, 1985, at the office beginning at 7:30 p.m..

## SEPTEMBER MEETING

About forty people attended the September meeting. Nominations for GAMESIG Chairman and Journal Columnist were solicited.

## NOMINATIONS AND ELECTIONS

In accordance with the WAP Bylaws, Article X, this is to solicit nominations for the positions of GAMESIG Chairman and Journal Columnist. Nominations should be made in writing no later than October 1, 1985, and addressed to Sharon and Barry Bedrick, Nominations Committee, c/o the office, or by phoning the Bedricks at 703-534-7891. The election will be held at the October meeting, and all interested parties are invited to attend.

## NEW SOFTWARE DONATIONS

We have four new games this month and they will be reviewed in the November Journal (space permitting): Inca (Hayden Software for Apple //s with 128K); The Holy Grail (Hayden Software for Apple //s with 128K); Balance of Power (Mindcape for Macintosh); and Deja Vu (Mindcape for Macintosh). For more information on these see the software-received section in "Review Corner" by Jim Burger elsewhere in this issue.

## GAMESIG PARTY

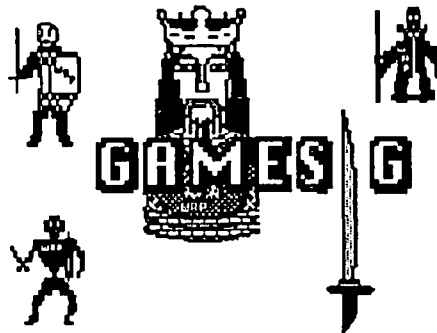
On August 24th, a few hours after GAMESIG sponsored the WAP meeting, about 20 GAMESIG members attended a party graciously hosted by Janice and Paul Moore. In the spirit of the SIG, it was no easy task getting into the house, and Paul had prepared a particularly fiendish puzzle before entry could be gained. Paul also had previously distributed 3 pages of coded instructions and directions which had to be deciphered. The members were treated to the Moore's excellent food, a "group solve" of a never-before-seen graphic adventure prepared with Adventure Construction Set, and a gaming trivia quiz. Originally, the high scorer on an overall basis for the evening was to get any software (under \$60) of his/her choice; however, the group awarded the prize to the Moores after they refused to accept any pecuniary help for the considerable expense they obviously incurred.

## SOFTWARE POLL

You only have about 1 month to vote in the club's software poll so that a representative and viable result can be published in time for holiday buying.

## WHAT'S COMING IN GAMING SOFTWARE

The software companies are ready to unleash a torrent of software for holiday buying. By the December Journal, which




will be distributed in late November and early December, we hope to be able to give everyone the word on what's worth buying and what isn't.

## HOTLINE

Two GAMESIG members are now on the HOTLINE, one for the Apple // series games and another for Macintosh.

## GAMESIG POSTER ARCHIVES

The GAMESIG Poster Archives first unveiled at the August meeting will permanently reside in the office. We wish to thank the companies donating them: Spectrum Holobyte, Origin Systems, Penguin Software, Hayden Software, FTL Games, and Electronic Arts. 

# CHIPWITS FOR THE APPLE //: A Review

by Dave Granite

Oboy, Oboy! A new program to teach your kid to think like a computer! (Whadyamean, he already thinks like a couch potato, and you don't want him imitating other inanimate objects.)

Actually, CHIPWITS is a successful attempt to teach LOGO-like concepts coupled with an idea of how the computer thinks. It involves placing a cute robot in various environments where they gain points by taking, avoiding, or destroying different objects. In this respect, it is much like ROBOTWAR, but, alas, there is no beating up, maiming, or incapacitating of the other guy as in ROBOTWAR. CHIPWITS is a relatively non-violent game with only a few opportunities for random destruction.

I constructed a robot by building circuit boards from a set series of icons. I picked up the icons via an arrow guided by the joystick in a fashion similar to PINBALL CONSTRUCTION SET, and placed them inside chips, which can be interconnected, to give the robot a series of commands. Unfortunately, my elderly self-centering joystick usually grabbed the wrong icon, or, upon grabbing the correct one, wouldn't let go. After a half hour of frustration, I convinced the 'stick that I was its master and created a robot able to leap tallest buildings in a single moment and run faster than a speeding bullet.

The game does rather painlessly and surreptitiously teach programming concepts. It is prevented from dead-ending too  
contd. on pg 47



# ULTIMA III: A Review

## by Richard Grant

It's hard not to admire a piece of work - whether it's a novel, a cathedral, or as in the present case, a role-playing game - that shows such meticulous craftsmanship as *Ultima III*. Written originally for the Apple II by "Lord British" (who endorses his checks under the name of Richard Garriott), the game was converted for the Macintosh by James Van Artsdalen and is distributed by Origin Systems, Inc.

It was the Macintosh version of the game that I was given by GAMESIG chairman Ronald Wartow with the warning: "I probably shouldn't give you this to review, since you're new to this kind of thing."

Well, I was and I wasn't. *Ultima III*, which is certainly a very difficult game to master, was my first experience of a genre that describes itself as "real time fantasy role-playing." On the other hand, I write fantasy stories for a living, I've read *The Lord of the Rings*, and I'm passingly familiar with the rules of D&D. *Ultima III*, I found, is so true to the spirit of that particular fantasy tradition that despite my inexperience I was able rather quickly to develop a feel for the game.

The job that lies before you, when you take up the *Ultima* quest, is a formidable one. The fabled land of Sosaria, benignly presided over by Lord British himself, has been beset by an Evil so vile that it dare not speak its name. At least, its name is not spoken in the instruction booklet. What one must do, if one wishes ever to get back to one's home and family again, is to rid Sosaria of this scourge by taking on the roles of up to four custom-made adventurers. This "party" is assembled in a Dungeons & Dragons-like manner. It may contain any combination of members of five races (Human through Fuzzy) and eleven professions (Druid through Thief). Each character has four attributes - Intelligence, Wisdom, Dexterity and Strength - which are allocated at the time of the character's creation and may be increased later on through arcane processes understood only by the initiated.

They will march and fight and blunder their way through a fantasy world that is almost daunting in its complexity. The (so to speak) visible portion of the world is displayed one section at a time as the party progresses across the computer screen. It is also depicted in a colorful (and, I would guess, un-xeroxable) fabric map that is included in the game. This part of Sosaria is large enough to be interesting, with the usual topographical mix of plain, forest, mountain, et al. But even more intricate is the "hidden" portion of the gameworld - a multi-tiered labyrinth of towns and dungeons and other shady places that are not shown on the map and are left for the player to discover. If you're the sort of person who enjoys exploring the twisting roads and alleys and one-way streets of Washington, you may be in your element in *Ultima III*. If, on the other hand, you enjoy the company of a roadmap, and the assurance that if you just keep driving long enough you'll eventually live to see the beltway, you may find the game unsettling.

There is no assurance of anything in *Ultima III*. In the first couple of days of playing I saw my characters killed off with alarming frequency. I replaced them with "improved"

versions which met even more hideous fates. There are so many intricacies to come to grips with: provisions to buy, weapons and armor to learn about, intractable townspeople to interview, hints to unravel, bald lies to smell out, guards to bribe, treasures to abscond with - not to mention the innumerable minions of Evil to overcome - in a phrase: all that fantasy stuff. How seriously you are willing to commit yourself to doing these things, and how much patience you have about learning from your own mistakes, will have very much to do with how well you enjoy *Ultima III*.

"When thou art satisfied with the composition of thy party," the rule booklet instructs us - and I quote here purposefully - "go to the FILE MENU, and select JOURNEY ONWARD. The adventure begins..."

It is a quirky marriage: hacking and heroism. Like other marriages, it works most of the time, though not without a certain amount of squabbling. Computerizing the more tedious aspects of D&D-type games - the endless rolling of dice, for example - was definitely a good idea. And *Ultima III's* sophisticated graphics provide a depth and immediacy of experience that was altogether lacking in early computer adventures, which relied rather heavily on the player's visual imagination. (*You are in a maze of twisty little passages, all different.*)

There is, however, a sense in which the player of this breed of "real time fantasy" becomes just another element in the world-building scheme of the programmer. Out of what I suppose is a kind of cybernetic necessity, *Ultima III* is designed for a certain series of events to occur, and it is the mission of the player to discover what those events are and take steps to bring them about. There is a certain scope for creativity in causing the fore-ordained outcome to occur, but generally speaking this kind of game (and I'm sure *Ultima III* is not unique in this regard) is not so much an adventure as a *problem*. The player's task is to guess what the programmer had in mind. You may, to choose a trivial example, think that "mount" or "ride" or "lasso" or "feed" is the appropriate thing to do to an ill-gotten horse. But unless you understand that the programmer was thinking of "board" - chiefly because he had already incorporated that command into the game in the context of what to do with a frigate - you and the animal can stand their whinnying at each other until your food runs out, or guards arrive.

Let me now address a couple of remarks specifically to players of the Macintosh version of the game. The Mac translation is pretty well done, especially in the sense that it's possible to do almost everything in the game, from fighting to buying foodstuffs, exclusively with the mouse. Playing *Ultima III* on the Macintosh does introduce a couple of odd irritants, however, and at least one nifty way to "cheat."

The first irritant: there is no normal "Quit" command.

To exit the program you have to turn the power off or push the Reset button on your machine. I found this to be disturbing and difficult to understand. Perhaps the game designers did not wish the player to discover the existence of files like  
contd.

"Ultima Party," which is used to store things like the attributes and current level of health of one's game characters. (In which case, see below.)

Irritant two: there is something quirky about the procedure for selecting common game commands with the mouse. Unless the pointer is positioned with great care - and in my experience, sometimes not even then - a selected command will not register with the program. This is a great inconvenience in the heat of a battle with large angry beasts.

Now for a suggestion which is worth at least half the price of the program to a Macintosh owner. First you need to use a utility like *MacTools* to change the file called "Ultima Party" from invisible to visible. Then, when you play the game, run it under the Apple program called the Switcher. This allows you, without quitting the game, to return to the Finder and make a duplicate of "Ultima Party" just before you plunge into any situation that could prove deleterious to your characters' health. If your contestants are wiped out, you can quit the game, erase "Ultima Party", replace it with "Copy of Ultima Party", and you've only lost about five minutes of file manipulation instead of long hours of play.

And here's another Switcher trick. There is a technique in the game, the exact nature of which would be unethical for a reviewer to reveal, by which it is possible to catch a brief glimpse of one's surroundings. But as Kodak might say, why not make that brief glimpse last forever? Take a "screen shot" by pressing <Shift>-<Cloverleaf>-3, use the Switcher to open MacPaint, and print the document thus created, which will be titled "Screen 0." You can now return to the game with the comforting support of a roadmap.

But ... but ... is this fair? Is it, well -- *sporting*?

Remember: this isn't an adventure. It's a computer problem. Lord British thought he had his weapons assembled when he equipped himself with invisible files and copy protection and plunged into the fabled land of Gaming. But there were a few surprises in store for him.

Let the adventure continue...

⌘

## CHIPWITS FOR THE MAC: A Review by Jessica Weissman

Chipwits is simply the best piece of educational software for a microcomputer that I have ever seen, and I spent ten years working in a University lab on elementary educational software. It's fun and challenging, enjoyable for adults or older kids, teaches logical thinking and planning skills in a painless way, and has enough variety and depth to keep anyone interested for months.

Computer programming is typically an abstract task, with a loose connection between the program and seeing the result. Chipwits is different. It turns programming into a direct visual activity, with immediate, rewarding visual results. For intelligent kids who have some trouble with language, Chipwits can open up a new world. One of my friends has a gifted but dyslexic son. The boy has been frustrated for years by the gap between his mental capacity and his ability to use

language. With Chipwits he is not only programming, but getting the confidence that comes from mastering something difficult.

In Chipwits, your task is to use a special picture-oriented programming language called IBOL, Icon-Based Operating Language. You create and wire together the chips that guide a robot's movement and activities. The Chipwit's world includes Good Things like pie, coffee and disks. Bad Things include electro-crabs and bouncers. Teaching the robot to pick up the good things while avoiding the bad things is the key to success in Chipwits. Best of all, there are eight different environments, which require different programming for the Chipwit to succeed. This may sound dull, but once you see and hear the Chipwit in action, you'll be captivated. You may even forget that you are learning to program.

In the Macintosh version, the animation is superb. The designers took full advantage of the Mac user interface. Changing the Chipwit's program takes only a mouse click or two. Moving from the Workshop, where the Chipwits are programmed, to the environments where Chipwits carry out their missions, takes a few seconds. The flexibility and responsiveness make the program a joy to work with. You can concentrate on making the Chipwits work right, a task which any programmer knows is not easy. But even when the Chipwits don't do what you think you've programmed them to do, watching them do it is fun. And there's nothing like the reward of seeing the Chipwit rack up points because YOUR program works right. ⌘

## THINK FAST: A Review by Donald Smith

Think Fast from Brainpower Inc. (the people who brought you Chipwits) is really more educational than a game, but it's still fun. Think Fast is a memory improvement "game" in which you attempt to compare, copy or recall different shapes, letters, or numbers in a given amount of time.

Compare Trials asks you to compare two sets of letters, numbers, or shapes on the screen to determine if they are the same or different. The lower part of the screen contains two boxes: "Same" and "Different". One of them is highlighted; use the arrow keys (or optional joystick) to choose, and then press return (or space bar).

Copy Trials asks you to copy a set of pattern blocks on the left half of the screen into a set of blank boxes on the right half, again using the arrow keys and return.

Recall Trials displays a set of letters, number or shapes, in a given order. Then from memory you must duplicate the order.

Think Fast asks you to make several choices as to the skill you want to be tested on: Speed (fast, medium, slow); Difficulty (5 levels); Risk Taking (5 levels) - risk taking refers to the amount of points taken off for a missed question; and Number of Trials (the number of questions you want to be asked).

I was afraid that Think Fast might be a boring quiz game. I was wrong. It is both fun and easy to use. But more

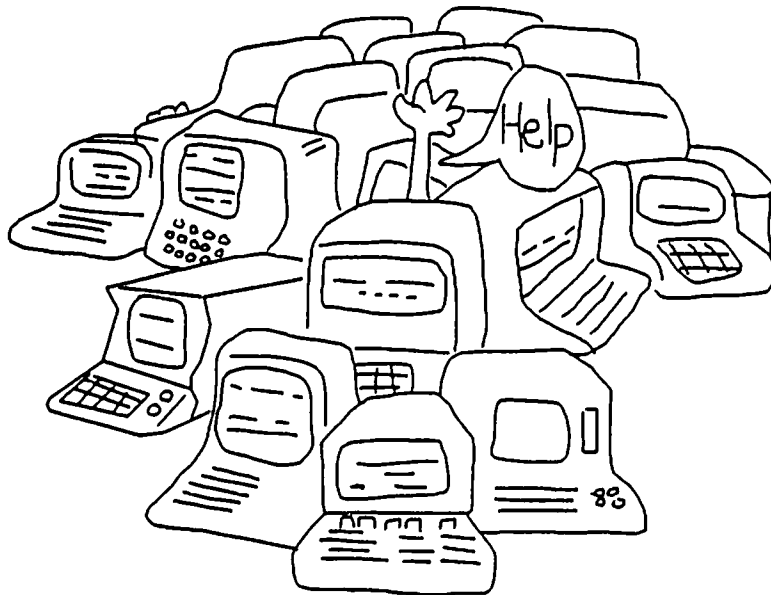
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# APPLE LISTENS: A Short Report on the 1985 Apple Users Group Conference

by Tom Warrick

(Ed. note: Space limitations prevent us from running a copy of Tom's full, six-page report. If you would like a copy, send a \$.39 stamped, self addressed business-size envelope to "Users Group Conference Report, Washington Apple Pi, 8227 Woodmont Avenue, Suite 201, Bethesda, Maryland 20814.)

Representatives from 14 users groups met with employees and officials from virtually every major group within Apple on September 8-10 to discuss how Apple and users groups could work together for mutual benefit. At the conclusion of the meeting, the representatives made a formal presentation for future cooperation to top Apple management, including John Sculley, President and Chief Executive Officer, and Jean Louis Gasse, Vice President for Product Development. The meeting was particularly noteworthy for the degree to which Apple listened to what users groups are saying.

**The focus group:** The conference began with a "focus group," in which the users groups' representatives discussed Apple Computer, Inc. and Apple computers in one room while Apple representatives watched and listened in another. The consensus of the group was that while people had warm feelings about Apple, Apple was in the process of losing goodwill because it was not responding to users' needs. It was agreed that Apple could benefit greatly from working with users groups, because the groups, by educating their members, increased their satisfaction with their computers. This in turn led those people to spread the word about Apple and thereby increased Apple's sales.

**Consumer Marketing:** Dave Côté, Manager of Consumer Marketing, presented an overview of what he described as "The New Apple." In the old Apple, Dave said, the Apple // line and the Macintosh line duplicated much effort. Apple focused on products, not markets. This led to a number of mistakes, such as trying to sell the Mac to business without formally supporting a letter-quality printer.

In the new Apple, development, manufacturing, distribution and operations for both Apple // and Macintosh lines have been consolidated into a single Product Operations division, with sales and marketing in a separate division. Marketing has been divided into three areas: Consumer, Business, and Education. Within Consumer Marketing, Dave said, they were concentrating on three areas: home education, home business, and the installed base, i.e., current Apple owners.

Dave said that Apple now recognizes that existing customers are a critical factor in Apple's success. He cited studies indicating that 90% of Apple owners said they would buy Apples again, and that the number one factor influencing people's decision on what kind of microcomputer to buy was word-of-mouth. Following this presentation, Dave and his colleagues discussed a number of marketing issues with the groups' representatives. One of the foremost of those was how to improve relations between Apple and users groups.

**Public Relations:** The groups' representatives discussed with Apple's Public Relations department the possibility of getting product information on a more timely basis. Apple in turn expressed an interest in hearing from users groups about "success stories" involving the use of Apple computers.

**Software Marketing:** Guy Kawasaki, Manager of Software Product Management described the many things Apple was doing to encourage third-party developers to write software for the Apple // and the Mac. Guy gave some tips to software developers that also revealed Apple's intentions regarding new hardware:

1. Macintosh developers should target the 512K Mac. (This means that new software will be less likely to run on a 128K Mac.)

2. Support the "Apple" interface, formerly called the "Mac" interface. (In other words, Apple intends to bring the Macintosh environment to the Apple //!)

3. A number of unfilled needs exist in Apple and Macintosh software: for the Mac, high-end word processors and vertical markets; for the Apple //, innovative educational programs and mouse-based software.

We asked Guy whether users groups could distribute programs from the Mac Software Supplement, and he said that he hoped that those programs got into the hands of everyone who could make use of them. (Without the blessing of Apple's legal department, however, it would be premature to rely on these statements.)

Another hot topic was MacBasic. During the conference, one of the Bay area newspapers reported that Apple had bowed to pressure from Microsoft not to release MacBasic. The report, which had been circulating as rumor for weeks before the conference, said that the ten-year license for Applesoft BASIC, which Microsoft had originally developed, was up for renewal in 1988, and that one of Microsoft's conditions for renewal was an agreement by Apple that it would not release MacBasic, which was behind schedule and over budget anyway. Guy confirmed that Apple has no plans, present or future, to publish MacBasic, and would not let users groups distribute it either. When asked whether Apple would enforce its copyright on MacBasic, he announced that he was going to "make Apple history" and admit that this was a question to which he didn't know the answer.

A number of users groups, including WAP, asked for permission to license for distribution to members the DOS 3.3 System Master disk, including utilities like FID and COPYA. This subject was also discussed with several groups within Apple, including Marketing and Legal departments, and there is hope that something can be done on this in the next few months.

At the end of the session, Guy generously gave to each of the groups present a box containing virtually every Apple confid.

software product for the Mac, a copy of Borland's Sidekick (after playing with it, I went out and bought a copy--I hope Borland gives you a commission, Guy), Through the Looking Glass (formerly "Alice"), the Mac Software Supplement, the "phone book" version of *Inside Macintosh*, a brochure on how to become a certified software developer, an Apple sweatshirt, and a brochure on Instant Pascal (this program, about which little has been heard for many months, is the Apple II version of MacPascal). We all, of course, asked Guy where were our free flat-panel color lap Macintoshes.

**Sales:** Ellen Nold, Manager of Sales Support Programs, discussed Apple's dealer support programs. She was aware of the problems that dealers and users groups had with each other, which many on both sides of the table agreed were largely problems of perception rather than substance. She was interested in hearing the groups describe their tutorial programs, and said that only five to ten percent of dealers offer such courses. She suggested that a tutorial program whereby dealers provided facilities and equipment and the users groups provided teachers might be a fruitful avenue of cooperation between users groups and dealers.

Ellen also described AppleLink, a new electronic mail and database that will soon be available to dealers. Using AppleLink, a customer will be able go into a dealer with any question on Apple products and expect that the dealer will be able to search through the extensive database of technical and product information to try to find the answer. AppleLink also has an electronic mail capability to allow Apple and its dealers to communicate more easily. There was some discussion as to whether users groups could get on AppleLink, and Ellen took the matter under advisement.

Several groups asked whether it would be possible for Apple to put a one-page flyer into the boxes of Apple computers that would explain to purchasers the benefits of joining a users group and would indicate where the nearest one was located. The Apple representatives did not think that such a scheme would be fruitful, as most people tend to discard such information, and that by the time they are ready to benefit from a users group, a one-page flyer would not even be remembered. The Apple people said that only ten to twenty percent of Apple purchasers return their registration cards, and that the users groups actually knew the addresses of more Apple owners than Apple did.

**Dealer Sales:** The next morning's meetings began with a session with Louis Miller, Manager of Dealer Sales, Catharine Nunes, in charge of Dealer Programs, and Debra Kuhns, Field Marketing Manager. The group discussed how dealers and users groups can work better together. A number of users groups' representatives offered to meet with Apple's Dealer Advisory Council, and users groups were encouraged to meet on a local level with the dealers in their areas.

**Product Management:** One of the most interesting meetings was with the people who set product policy for Apple: Randy Battat, Hardware Product Manager; Guy Kawasaki; Sue Espinosa, Manager of User Education; Bill Watson, Hardware Project Manager; Bud Tribble, Software Product Engineering Manager; and others. Randy opened with a description of Apple's product development process. Basically, he said, Apple takes a lot of ideas for products and then builds a few prototypes. Those prototypes are reviewed

and evaluated, during which time they may be modified or discarded altogether. Ultimately only a very few products actually get shipped. (This process is not unique to Apple.) In the new Apple, he said, more products are likely to make it through the prototype stage, which means that it will be impossible to know during the development stage which products actually will be shipped. Although he did not say it, one should take this to mean that rumors that Alan Kay has such-and-such on his desk do not necessarily mean that it will ever be shipped.

Several of us asked about product development in the Apple II line, and Randy said that Apple was pouring as much R&D into the II as into the Mac, and that Apple II development was not now being held back. He said that Apple's product development philosophy, was to work to improve the power of its products, rather than to work to reduce prices.

Randy and his people then asked the groups' representatives for suggestions and ideas for the future Apple products. Among the suggestions made were:

- Open architecture
- Apple should set and adhere to standards that third-party developers can follow. Randy said that Apple was interested in adhering to standards except where substantial benefits were to be had.
- Build in a clock/calendar.
- Use modular telephone company connectors for AppleTalk rather than the hard-to-find custom connectors now used.
- Allow people with older Apples, like the ][+, a way to get the benefits of software written for newer Apples, like the enhanced IIe, by encouraging third parties to develop add-on boards to duplicate the increased power of the newer models.

Guy Kawasaki said that one subject hotly debated within Apple is whether a mouse should be bundled into the II, even if it means adding \$80 or \$90 to the retail price. The consensus of the groups' representatives was that it should, because it would mean easier-to-use software. Guy seemed pleased at this--draw from that what you may.

It was apparent that the Apple people were taking these suggestions very seriously. Gone, they said, was the day in which Apple would let technology drive product design. Apple was now going to take better account of consumers' wants in determining what features the next generation of Apple computers would have.

After lunch, the users groups' representatives met to discuss the recommendations we would make to Apple management. We were assisted in this by three Apple employees, Anne Seip, Jim Hoyt, and Harlan Felt, who served as "reality checks" on some of the more ambitious (and unrealistic) ideas put forward by a few. This effort continued until 3:30 a.m. Special recognition is due to Anne and Harlan, who stayed with Reese Jones (Berkeley Macintosh Users Group) and me until the bitter end to help us put the presentation into final form.

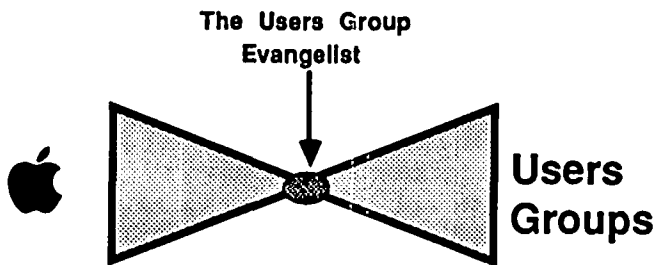
**Presentation of recommendations to top Apple management:** The next morning we met in Apple's Board Room with Jean Louis Gasse, Vice President for Product Development; Debi Coleman, Director of Manufacturing; Mike Mount, Manager of Sales Planning and Development; Mike Lorelli, Director of Marketing; and others. Dick Hubert of A.P.P.L.E. Co-op presented the introduction. As he contd.

began, John Sculley, Apple's President and Chief Executive Officer, quietly walked in and sat at the front of the room. Dick described the demographics of users groups, which he said are not just hackers, but rather are a cross-section of Apple computer owners. Dick also described the functions and activities of a typical users group.

Jonathan Rotenberg of the Boston Computer Society then described the advantages to Apple of a good working relationship with users groups. He said that users groups support and educate Apple customers, thereby increasing the value of Apple products to users. Users groups assist Apple dealers by providing kinds of support that dealers are not able to provide. Also, by increasing users' understanding and knowledge of Apple computers, users groups increase users' satisfaction with their computers, thereby building brand loyalty and encouraging them to spread the word of what their computers can do. Jonathan cited figures showing that word-of-mouth is the most powerful force in motivating people to buy a particular kind of computer, and users groups increase the likelihood that people will recommend favorably the kind of computer they use. Together, Jonathan said, all of these factors act to improve the "bottom line" for Apple by generating sales of systems and add-ons. Thus, he concluded, Apple stands to gain much by working with users groups.

Next, I presented the group's five recommendations for a better working relationship:

1. *Apple should set up a "Users Group Evangelist,"* who would act as liason or focal point between Apple and users groups much in the same way that Apple's software evangelists work with third-party software developers. The Users Group Evangelist would serve as the "knot" in a "bow tie":



In order to make the program workable--a point I stressed--the evangelist would work with groups meeting certain minimum guidelines, such as having a constitution or charter, a regular publication, open membership, and a policy against piracy.

2. *Formalized communications:* Apple should give users groups new product information, technical information, and information about exchanges and upgrades to Apple products. Users groups should keep Apple advised by sending Apple their publications and by letting Apple know of special events that could be of interest to Apple. In addition, Apple should sponsor annual or semi-annual meetings of a Users Group Advisory Council, just as it currently supports a Dealer Advisory Council.

3. *Enhance dealer-users group cooperation:* Apple should formally encourage good relations between dealers and users groups through its verbal and written communications with

dealers. The groups' representatives expressed a willingness to meet with their counterparts on the Dealer Advisory Council to explore ways in which groups and dealers can work together.

4. *Equipment loans:* Apple should consider making long- or short-term loans of equipment to users groups for workshops, classes, demonstrations, and the preparation of publications.

5. *Speakers:* Apple should establish a clearinghouse whereby Apple people who are in a position to speak to users groups can do so.

Ken Silverman then summarized the entire presentation and turned the floor back to the Apple representatives.

John Sculley thanked the users groups' representatives for their recommendations, and said that they would be carefully considered. Mike Lorelli, Director of Marketing, spoke next. He said that he was pleased that the proposals presented were practical. His reaction to each of the five proposals was positive, although he could not endorse them on the spot. Mike Mount, Manager of Sales Planning and Development, liked the idea of a Users Group Advisory Council and said that he considered this as its first meeting. He encouraged groups to seek out speakers from Apple's regional offices, where he said valuable people were to be found.

In contrast to the restraint of the two Mikes, Debi Coleman was rarin' to go to work right away to implement each of the five recommendations. My pen could not keep up with her enthusiasm--the key words she used were, I believe, "Absolutely!" and "Do it!!"

Jean Louis Gasse, Vice President for Product Development, said that he was a strong supporter of users groups, having set up Le Club Apple in France. (See Jim Burger's review of Le Club in the September 1985 Washington Apple Pi Journal, page 60.) He also expressed admiration for the moderation and restraint of the recommendations, and said that we had his vote.

*Legal:* After the presentations, three of us--representatives from A.P.P.L.E. Co-op, International Apple Core and WAP--met with representatives of Apple's legal department to explore whether users groups could license DOS 3.3 and the Software Supplement for distribution their members. I agreed to draft a letter outlining how such a proposal could be handled consistent with Apple's other objectives.

When we returned to the informal luncheon Apple had arranged following the presentation of the groups' recommendations, several Apple people we had met before were in attendance. To everyone's surprise, including the Apple people who had arranged the luncheon, another product design team came in and, like the one the day before, began soliciting ideas for future Apple computers. Apparently, this team had heard of the ideas generated by the meeting the day before, and wanted a session of their own.

*The Fremont Manufacturing Facility:* Next we were taken on a tour of the Fremont Manufacturing Facility, where Apple assembles Macintoshes and Apple //c's. (No, no flat-panel color lap Macintoshes.) The tour, incidentally, is available to anyone who reserves a spot far enough in advance--about two months in advance. Write to Debi Coleman, Apple Computer, Inc., Mailstop 24-E, 20525 Mariani Avenue, contd.


Cupertino, California 95014, for more information.

**Conclusions:** It is too early to tell whether the 1985 Apple User Group Conference will produce tangible results. I am, however, more optimistic than I was before the Conference started. It said much for Apple's commitment to a working relationship with users and users groups, that John Sculley and Jean Louis Gasse and many other people took time out from their busy schedules to sit and listen to fourteen people who comprise (as one cynic among us said) only about five percent of their customers.

Second, Anne Seip and her staff at Apple should be commended for pulling the Conference together in only a few weeks. Considerable work was required to set up all the meetings and panels they arranged, and the success of the Conference was in no small part due to their efforts.

Finally, I must pass on to you some observations about "Apple culture." Apple is a small, very close-knit organization. Apple has so few employees for a company its size that it ranks first among the Fortune 500 in revenues per employee. It compensates for this in part by hiring only the best. In addition, its people are very supportive and encouraging of each other. A typical example: At the end of one meeting, Chris Espinosa, Manager of Developer Support, and Ellen Nold, Manager of Sales Support Programs, hugged each other in congratulations for having chaired a good meeting. There was also a strong but gentle push toward the users groups' representatives arriving at a consensus, even though given the diverse nature of the groups represented, such a consensus could only be on the broadest of generalities. In addition, several people remarked that Apple was like a "Peyton Place"--alas for all you gossip columnists reading this, they did not elaborate.

All of this confirms that Apple Computer, Inc. is in many respects a small, insular community. This gives the company one of its greatest strengths--the ability to take a relatively small number of people, make enormous professional and personal demands on them, and still have them turn out work of incredible quality. This attitude is, in part, Steve Jobs' legacy to the company. There is, however, another side. In such a small community where everyone is expected to be supportive and encouraging, there needs to be someone, or a group of someones, to act as in-house cynics. Someone must be able to say, "It would be crazy to offer a computer for the business market today unless it supports both a letter-quality printer and a hard disk with at least ten megabytes."

We were told time and again by Apple representatives from the vice presidential level downwards that the arrogance was gone from Apple. Presumably this meant the arrogance that a few design engineers or top managers knew what was best for the consumer. This is, however, only part of the solution. Apple's real need is to listen to what its users want, because real people provide the best "reality check." The 1985 Apple User Group Conference is but one sign that the new Apple has learned this lesson. 

NOTE: Change in location of 4th Saturday meeting for October and November. See "Event Queue" for details.



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# Q & A

by Bruce F. Field



A few columns back I reported that Larry Washburn could supply a new F8 ROM for Franklin computers that would allow them to run ProDOS. Unfortunately Larry is no longer able to sell these ROMs. However he has sent along a tech sheet on how to modify your F8 ROM to make it ProDOS compatible. I have included his instructions here.

1. You must have the ability to program EPROM's, either a 2716 (Intel +5 volt only) for the ACE 1000 or a 2732 EPROM (or 'A' version) for the ACE 1200.

2. ProDOS upon booting, looks at the F8 (Monitor) ROM at location hex FB09 the start of the Title used. See page 144 of the Apple II Reference Manual. All eight characters must be in place utilizing those hex codes. (BFF note: The eight codes are \$C1, \$D0, \$D0, \$CC, \$C5, \$A0, \$DD, \$DB, and spell 'APPLE ]['. )

3. Copy the Franklin F8 Monitor ROM into RAM and then using the monitor change the eight values to the new values at location \$309 plus the starting address of your RAM address where you loaded the copy of the ROM. Use the patched code to burn a new F8 EPROM.

4. Insert the new F8 EPROM into the motherboard and then try to boot ProDOS.

This completes the modification.

EPROM programmers can be purchased (about \$65-\$100) to plug into Apple compatible computers. Check the back of many magazines and the Computer Shopper newspaper. EPROM's can also be purchased from the same companies generally for about \$4-5 for a 2716 and \$4-9 for a 2732A. Access time of the EPROMs should be rated at 450 nano-seconds or less."

Thanks for sharing your information with us Larry.

I have had a couple of people write to provide a better answer to a question on consolidating spreadsheets using Appleworks. My original answer said it wasn't possible, for which I apologize. I have never used Appleworks and got my information second hand from a couple of people. However Dr. George LaCroix has written with a very complete answer.

"I noted in your column, your answer regarding consolidating several spreadsheets into one using Appleworks. While your answer is correct you cannot consolidate several spreadsheets into one automatically, but there is a way of moving spreadsheets from one file into another spreadsheet file. I have used the following technique on occasion when I wish to cross reference related spreadsheets in the same file. Simply, the technique is to set the spreadsheets for manual calculation, copy them to the clipboard and then copy them to the spreadsheet file that I wish to consolidate. If the column widths are the same in both spreadsheets, you can copy directly beneath the first spreadsheet, thus having the two close to each other for viewing. If, however, you wish to have the freedom of altering the number of rows or columns, then what I do with the spreadsheet to be moved is to insert a number of columns so that when consolidated it is diagonally lower and to the right. This permits freedom with column and row manipu-

lation. I have, however, found easier manipulation in keeping related spreadsheet files in a subdirectory and take the time to load those that are related to the desktop. I personally prefer smaller spreadsheets to the larger consolidated ones."

Steve Meuse has written to explain how to simulate a shift key mod on a //e so that word processors designed for the ][ or ][+ can be used. According to Apple's "Technical Overview of the //e" Developer mailing:

"The shift key mod may be duplicated by soldering a 500 ohm resistor across the logic board connector at X6. NOTE: The warranty is voided by doing this."

Steve adds that he has seen in letters elsewhere that the 500 ohm resistor is not needed, that a drop of solder will do fine. Steve also warns readers not to press Control-Open and Closed Apple-Reset on //c's with external drives as the disk in that drive will have a track erased. This doesn't make a lot of sense, pressing Control-Open and Closed Apple-Reset on an enhanced //e only runs the system diagnostic program. Perhaps the problem only occurs on a //c if you are writing to a disk when the combination is pressed. In any case consider yourself forewarned.

Q. I have the Buffered Grappler+ and a Keytronic KB200 keyboard for my Apple ][+. In normal operation (i.e. text and graphics) the combination doesn't have any problem. My problem occurs when I wish to clear the buffer. The Grappler manual says to press and hold the reset key down for 2 seconds. However, on the Keytronic keyboard the reset doesn't stay on. I suspect that, unlike the Apple keyboard, the grounding of the reset key is not allowed to remain in the reset position. Consequently, I am unable to clear the buffer and the unwanted printing continues. So, my question is: can I modify (by adding an external switch) my Apple so that the reset key stays on? If so, how?

A. There are a couple of ways. The least destructive is to buy an Apple prototyping card that plugs into one of the Apple slots. At the bottom of this card are numbered fingers that plug into the connector in the Apple. Connect a normally open pushbutton switch (a Radio Shack #275-1547, or #275-1572 will do) between number 26 and number 31 on the card. The prototyping card is in theory available from Apple dealers, but may be hard to find. It is also available from JDR Microdevices for \$15.15 (part number P500-1). JDR's toll free number is 800-538-5000, or in CA 800-662-6279. The disadvantage of this method is that it uses a slot.

Another way is attach a switch to the keyboard connector on the Apple motherboard. The cable from the keyboard plugs into a 16 pin connector at the front of the motherboard. If you attach very fine wires to the pushbutton switch (#30 wire wrap wire works well) you can slip these into the holes in the connector and also plug in the connector from the keyboard. You want to connect the new pushbutton switch between pins 3 and 8. The connector is numbered starting in the lower right hand corner as you face the computer and continues back along the right side. Thus pin 3 is the third pin from the

contd.



front on the right hand side, and pin 8 is the last pin in the back on the right hand side. This method is somewhat less reliable than the first if you wiggle or pull on the wires.

Q. The letter in your column about the fast garbage collection routine which appeared in Call -A.P.P.L.E. In Depth, Volume 1, All About Applesoft, prompted me to get around to assembling it, which I did according to your suggestion of JMP NZTAB. It does collect garbage FAST. There does seem to be another bug, however, in the first routine which decides whether or not to collect. Shouldn't line 55 read "SBC STREND+1" so you're comparing the two high bytes? I incorporated the new garbage routine into a BASIC program which reads lengthy files from disk and sorts through them with string routines. I temporarily put a line in the program so I could watch program free space after each string is processed. I also injected "JSR \$FF3A" after line 59 of the assembly listing of the fast garbage routine. That way I get a beep whenever the fast garbage program passes its introductory decision and begins to collect. Until I changed line 55 it didn't. I'm not imagining all this am I?

A. Welcome to the Twilight Zone. Actually you are correct, the introductory decision should compare the high byte of FRETOP (the end of numeric storage) to the high byte of STREND (the start of string storage) otherwise it may not garbage collect when needed, or collect more often than needed. Thanks for pointing this out. For those who missed the original correction the instruction JSR NZTAB at line 60 should be removed and a new instruction JMP NZTAB placed immediately before label FNDVAR2.

Q. My current puzzle is about Applesoft Basic keyword token editing. Do you know of any editors that can deal with Applesoft on a token level? The reason I ask is because I've received a recent update of The Data Factory from the quiet folks at MicroLab. They haven't answered any of the several letters I've written but they do seem to be able to process my annual \$30.00 warranty extension payment. Their latest version is written in copyable BASIC but with some very long lines of compressed code. The programs will list but can't be worked with. The A.P.E. I recently received from A.P.P.L.E. won't handle the "long" lines. Neither will GPLE, Apple Tool Kit or Big Edit. Exec-ing the representative text file after looking at it with Appewriter II just chokes the Apple.

A. I have not used a program that allows one to create "long" Applesoft lines, however a friend of mine thinks that "ProCmd" will do it. (Notice how I absolve myself from any responsibility here.) ProCmd is available from the author, Glen E. Bredon, 521 State Road, Princeton, NJ 08540, for \$20. However, I suspect that the original program was written with short lines and then the tokenized program "compressed" to create long lines. If ProCmd doesn't work, I think you are on the right track by "listing" the program to a text file and editing it with Apple Writer II. Before you can exec it back though you must shorten all the "long" lines. Each line must be less than 242 (244? something like that I can't remember exactly) bytes long. Each BASIC keyword takes one byte, and each character or space takes a byte. Remove the colon separating the statements and insert a carriage return and a new consecutive line number in the

middle of the long line to break it into acceptably shorter parts. You must watch out for IF statements, if the IF equates true then all the statements on the line after the THEN are executed, otherwise the first statement on the next line is executed. You may need to add some GOTOs if you break up IF statements. This can be tedious to do by hand. Except for IF statements, it is fairly easy to write an Applesoft program to scan a text file and break lines at colons when they are over a certain length. Good luck.

Q. I am converting a number of VisiCalc files to SuperCalc 3 and have to convert them from DOS 3.3 to ProDOS. The problem is that VisiCalc allows you to save spreadsheets with a number at the start of the filename and the ProDOS CONVERT program doesn't like this. Of course the DOS 3.3 RENAME command doesn't work either. Is there anyway I can get DOS 3.3 to accept a number as the first character?

A. The DOS 3.3 code checks for a number starting at \$A048. The first character of the filename is in the accumulator at this point and the accumulator is then left shifted one bit. Then two tests are performed, BCC to \$A050 and BMI to \$A050, or a JMP to \$A000 if both tests fail. If the first character is not a number or control character the code at \$A050 is executed, if it is not a legal character the program jumps to \$A000. To defeat this replace the jump to \$A000 with NOPs, i.e. at \$A04D through \$A04F place \$EA, \$EA, \$EA.

Q. I have used a Master Catalog program and enjoy the ability to develop a catalog of my files. However, the program is set to print on an Epson in condensed mode. I have an Apple Imagewriter and am trying to figure out how to modify the print commands to use condensed mode, make horizontal tabs work, and eliminate double spacing. No luck, can you help?

A. Fixing the condensed mode is the easiest part. To get a printer to print in a special mode, i.e. condensed, the program must first turn the printer on with a statement such as "PR#1" and then print one or more special characters, that the printer interprets as commands, to change the print mode to what you want. Since the program already works with the Epson all we have to do is find the print statement that prints the special condensed command to the Epson and change it to the one for the Imagewriter. The command for the Epson is CHR\$(15). Somewhere in the program is a statement like PRINT CHR\$(15) which sends the command to the printer. It may be part of another statement, or part of an IF statement like, IF A\$="Y" THEN PRINT CHR\$(15). You must change the CHR\$(15) to CHR\$(27);CHR\$(81). If you look on the Imagewriter Reference card in the back of your Imagewriter User's Manual you will see the codes needed to control the printer under the heading General Control Codes. If you are using an Applesoft program, look at the column labelled 'Decimal' and use those numbers with the CHR\$ function as I've done above.

Horizontal tabs and double line spacing are usually controlled by the printer interface card plugged into your Apple or the printer itself. If the program contains statements such as PRINT TAB(13) these should work correctly. When using a BASIC program extra line feeds can be generated because the interface card is set to produce a line feed every time it sends out a carriage return AND the printer is set to produce a line  
contd. on pg 47

# WAP Q & A INDEX

by Paul Koskos

## INTRODUCTION

In the spring of 1983, Dave Morganstein asked for volunteers to do some indexing of the WAP Journal, and after some discussion, this author undertook to compile an index of Bruce Field's Q & A articles, which had been appearing in the Journal since Paleozoic times. (Bruce's appearance is deceptively youthful.)

This turned out to be a more difficult task than anticipated at first glance, involving the reduction of one or more paragraphs of question to a single line digest lending itself to indexing. In any case, the fruit of this effort appeared in the July 1983 Journal, and covered the issues from November, 1980, to June, 1983.

In the spring of 1985, while he was still President of the Pi, and still had clout, he mused as to how it would be nice if the Index were to be updated to the present. Eager beaver that I was, his wish was my command, and I leapt to a flurry of inaction for some months. Eventually, however, my conscience got the better of me, and the task has now been completed.

The Index includes all questions handled by Bruce Field from November, 1980, through September, 1985.

Several explanatory comments:

- The questions are arranged alphabetically, first by Subject Category (Column 1), and second by KEY WORD in the Question (Column 2).
- The year and month of the Journal issue in which the questions appeared are under Issue (Column 3)
- The question number is in the last column, labeled "Q#". Since no question numbers appear in the Journal articles, and some questions generated by Bruce do not even have a "Q" before them, you may have to read carefully, and mark your Journal with a pencil to identify the questions with my numbering system. But this should not be difficult, because of the uniqueness of each question.
- The updated Index has over 450 questions. To simplify future updating and sorting, it was transferred from the original WordStar file to an AppleWorks Data Base, and may soon be available on the Journal ABBS, where, if all goes well, one can use the Appleworks "FIND" function to locate a subject without visually scanning the whole file.

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# THOUGHTS ON THE FUTURE OF WASHINGTON APPLE PI

by Joe England

"The Future of WAP" was the theme assigned to the special September meeting. With the many changes in the leadership and the direction of both Apple and WAP, this is an ideal time for members to consider the aspects of this well chosen theme. It's just as important that the resulting ideas and opinions be discussed, voted upon, and presented to the board of directors for possible implementation. Obviously, without active input from the membership this vital process can't take place.

I believe that there is presently no well defined procedure by which the general membership can make its thoughts known. Individual members occasionally speak up, and relatively small groups of members attend board meetings and such. Sometimes an energetic and well motivated individual will even take it upon himself to start a SIG or see a project through to completion. This is highly commendable and appreciated by all, but to expect each of WAP's four or five thousand members to start his own SIG or project every time he has an idea is unrealistic.

Much better to have a permanent forum, generally accessible to all members, where ideas, suggestions, and opinions could be presented by any member for examination and discussion by all before being voted upon. If the results of the vote(s) were recorded (perhaps even published in the Journal), there would be several benefits:

- An incredibly potent resource - the ideas and suggestions of thousands of intelligent and imaginative Apple users - could be readily tapped for the benefit of all WAP members.
- The hard working and sometimes beleaguered WAP leadership would have an accurate and constantly available barometer of the feelings and opinions of the majority of the general membership.
- Members would probably feel more involved, interested, and cohesive, even as WAP grows larger and more diverse. This might result in more volunteerism.
- Re-occurring squabbles among persistent or outspoken members could be more easily laid to rest if their (often good) ideas could be presented and voted upon once and for all.

What forum is available which meets the requirement of general accessibility? Two come to mind: the general meetings and the Journal. (If all members had modems, and if the ABBS were more frequently available than it is, I'd also suggest the WAP BBS, but it doesn't meet these conditions.)

The Journal is the perfect vehicle for bringing the suggestions and opinions of the widest range of members to light. People who are reluctant to stand up in person at a meeting and make a view or thought known often find it much easier to submit the same suggestion in written form, or even over the phone in a one-to-one conversation. Possibly, all that's needed is advertisement of an address and/or phone number allocated for this specific purpose. Of course, the WAP office address and phone number spring to mind, or maybe a P.O. Box could be used. A volunteer would be needed to edit the collected material into a column for the Journal. The column might consist of a number of "yea or nay" type questions that could be presented for a series of quick, 'advisory' votes at the following meeting. Those who don't/can't attend the meetings could send in their votes by mail. The results of the previous month's voting could be included in the column.

As the result of a majority vote, the suggestion or idea would at least have to be taken up by the board of directors at their next meeting. I don't see how the votes could be given any more weight without causing disorganization or budget shredding. However, I believe that the leadership would give any very popular idea the amount of attention it deserves.

Well, that's my suggestion. Would it work? I think it would be interesting to find out...



# FREDERICK APPLE CORE

A SLICE OF THE WASHINGTON APPLE PI



## OFFICERS & CHAIRMEN

President - Lynn R. Trusal  
 Vice President - Tony Svajlenka  
 Secretary/Treasurer - Bruce Taylor  
 Librarian - Scott Galbraith  
 Program Chairman - John Lee  
 Membership Chairman - Randy Pasley  
 Newsletter Chairman - Lynn R. Trusal  
 Newsletter Editor - Kathy Kenyon  
 SIG MAC Chairman - Lynn R. Trusal

## HOTLINE MEMBERS

Lynn R. Trusal - (301) 845-2651  
 Randy Pasley - (301) 695-9416  
 Kurt Holter - (301) 663-4199  
 Bruce Taylor - (301) 371-8181  
 Scott Galbraith - (301) 865-3035

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 Frederick Apple Core meets the second Thursday of each month in the large conference room of the U.S. Army Medical Research Institute of Infectious Diseases, Ft. Detrick, Frederick, MD 21701-5011 at 7:30 PM.

The SIG MAC of the Frederick Apple Core meets on the fourth Tuesday of each month in the same location and at the same time. MAC owners in the local area are welcome. Call Lynn R. Trusal for details.

### Upcoming Programs

October 10 - Computers as home controllers  
 November 14 - Cracker Barrel BBS demonstration

### SIG MAC Upcoming Programs

September 24 - Copy and spelling programs  
 October 22 - Demo of Microsoft's Chart program

## CONFESSIONS OF A SYSOP: What Is a BBS Anyway?

by V. Scott Galbraith,  
Frederick Apple Core

Those of us heavily involved in telecomputing sometimes tend to forget that most of the world's microcomputer owners still do not own modems and are, therefore, not intimately familiar with a lot of our "jargon". In view of that, let me set out some basics for those of you who have never experienced the joy of dealing with fellow computer users via a computer BBS. "BBS" stands for Bulletin Board System. There are many varied types of computer based BBS's in existence today running on just about any type of computer one could imagine.

Early BBS's consisted mainly of a dial access computer system where users of the system could call and read messages left by other users and/or leave messages of their own. They were open systems with lots of commonly accessible text files and a rudimentary command structure. Hence the name, "Bulletin Board System"; they were just like any public bulletin board in an office building or supermarket and most were accessible to any person with at least a dumb terminal and a modem. Over the years, the BBS has evolved until there are now systems which rival mainframe dial access information networks such as CompuServe and The Source. In

fact, one could consider systems like the two named to be BBS's at the very top end of the scale! However, the vast majority of BBS's in the world today are of a much smaller scale and are running on a single Apple, Radio Shack, or IBM computer with one to many floppies and maybe a hard drive.

A person who runs a BBS is commonly referred to as a SYSOP (among many other things!), which stands for System Operator. In many cases the SYSOP is also the owner/provider of the computer equipment and telephone line needed to run the system. Initially, due to the cost of equipment, most BBS's (also referred to as "boards") were installed and supported by computer user groups. In recent years, many have been placed into operation by individuals who absorb the entire cost out-of-pocket or support the operation by instituting subscription fees or requesting donations from system users. In the BBS world it is a good and wonderful thing to be a "USER" - one who uses a BBS!

Most USERS are wonderful people. However, as in anything else, there are always those who delight in making life miserable for their fellow man. As BBS's have evolved, it has become necessary for most of them to become somewhat

contd.

restricted in access. On most boards, a prospective USER must furnish name, address, and telephone number to the SYSOP and wait for a password to be assigned before complete system access is allowed. Many boards will not allow any access at all until the information has been validated and a password has been mailed to the USER. Most boards now provide services other than simply an ability to post and read bulletins. At a minimum, there will usually be multiple, subject-specific sections on the BBS with access to sub-sections limited to given security levels assigned according to a given USER's interests, computer type, and/or subscriber/contributor status. Many boards now also provide private electronic mail (E-MAIL) ability among the USERS as well as public domain and "freeware" software for downloading. Within the Washington, D.C. and Baltimore, MD, urban/suburban areas there are literally hundreds of BBS's. Most are provided by computer user groups or are partially supported by user groups and subscriptions. The vast majority of BBS's are machine specific as far as topics and online information are concerned - however, many are run to support non-computer related interests. Good examples of such are: the "Family Historians" BBS (703-978-7561), which is dedicated to genealogy; the "Grateful Dead" BBS (717-334-8680), which is devoted to information relative to that music group; and the "Handicapped Exchange" BBS (301-593-7033), which is dedicated to information and problem-solving for the handicapped. There are also boards which are devoted to the exchange of ideas, hints, etc. among the many people who are interested in adventure gaming and D&D pursuits. In fact, many boards are now adding sections where USERS can participate in adventure and role playing games on-line. BBS usage is really limited only by the imagination of the SYSOP and the USERS. They are also limited from abuse only by the responsibility of the SYSOP and the USERS.

BBS SYSOPS do not have an easy time of it. They must be constantly alert for abuse of the system by those with a limited sense of social responsibility. As with anything used by a large cross section of humanity, the BBS is a two-edged sword. On systems which provide private E-Mail among USERS, most SYSOPS must monitor these exchanges, at least on a spotcheck basis, to insure that their system is not being used to support illegal activities. Because of this, the SYSOP must also be mature and responsible enough to ignore/forget anything he sees which is not illegal and is none of his business. There is always system maintenance work to be done. There are prospective USERS to check out and add to the system, non-users to remove, out-of-date bulletins and public messages to remove, uploaded software to check out and move to the download sections if suitable, etc. One of the chores I just mentioned is one which really bugs me at times - removing out-dated material from the bulletin section. Most USERS have no trouble remembering when they want to post an announcement about an upcoming event or when they want to advertise something for sale; however, they rarely remember to go back and remove the message once the event has passed or the item has sold! Please, if you want the best from any BBS which you use, try to at least help the SYSOP in that area.

Whether you are an experienced BBS USER or new to the

game, I strongly urge you to dump and print a system's help file during one of your initial uses. Many system commands are similar; however, most boards will have a few commands distinct to that system and most boards also have commands which will make the USER's life simpler but which are documented only in the detailed help file. Also, when in doubt, don't hesitate to ask for online help from the SYSOP! After all, that's part of what he's there for. Most systems support a CHAT or PAGE command for requesting a discussion with the SYSOP. If you don't get a response, then leave your question for the SYSOP via feedback and check back later that day or the next. Also, please remember that the SYSOP receives precious little (normally none) monetary compensation for his time and effort spent running the BBS. Even if the system is based totally on subscriptions, it will barely cover its ongoing costs and take years to recover initial investment unless it has a huge USER base - running a BBS is not a 'get rich quick' program. So, if you use a BBS, don't abuse it. In most geographic areas, BBS SYSOPS are forming loose associations or groups for mutual protection and assistance. USERS who abuse their privileges or the rules of any one BBS should expect to be denied usage of all BBS's in the area. We all know that it is close to impossible to create an accessible computer system which can't be crashed. Therefore, those who run around 'crashing' BBS's and damaging files which represent days or weeks worth of individual work are proving nothing but their own immaturity.

Well, you're probably wondering about my qualifications for writing this article. I must confess that I am a SYSOP (most of you probably guessed that!). I am the SYSOP for the Cracker Barrel BBS which is located in Frederick County, MD, and is reachable at 301-662-3131. The system is partially supported by subscription (\$10/year) but most of it is accessible to non-subscribers. Subscribers get a longer online time limit, no limit to calls per day, downloads per call, and a few other niceties. There are areas of the system which are only accessible to WAP/FAC members. The system is not machine or subject specific and everyone who enjoys using a good BBS is invited to call and try out the system. I do allow limited access to guests and non-validated users. However, for full access you will need to complete a user application when you first log on and wait about 24 hours or so for me to validate the password which the system will assign you. The system is in operation 24 hours a day at 300/1200 baud (2400 baud coming!) and employs a data format of 8-bit word length, no parity, and 1 stop bit. The boards which you will see represent months of work and are continually evolving. I have managed to cut back some lately on the time I spend working on the system simply out of desire to let my family see what I look like again and out of necessity to trim the grass low enough that friends can still find the two-story house I live in!

This article was never intended to be an in depth description of the operation/use of a BBS. I hope that it has provided those of you unfamiliar with BBS usage with an idea of the wealth and variety of BBS's available and that it will stir you to acquire a modem and get "online" with the leading edge! I also hope that those of you who use BBS's will be inclined to pay mine a friendly visit sometime. ☞

# LAP COMPUTER TO APPLE COMMUNICATIONS

Featuring Model 100

Reported by Nancy Harvey

June 15 Workshop sponsored by WAP Telecommunications SIG, conducted by George Kinal and Dave Harvey.

## A. Before you begin:

1. Check files you plan to transfer. If any of them are not text files they will have to be converted to a text file before they can be sent or received with Model 100 communications. (See C. below for how to do this).

2. Model 100's Telcom program does not send linefeeds after a carriage return unless you specify save to command of text or BASIC and specify COM:stat. This mode does not request width so you must be sure carriage returns occur as often as receiving word processing program requires.

## 3. Apple to Model 100

a. Most word processing programs for the Apple which allow you to set the output slot to modem rather than printer can be set to provide line feeds after carriage returns as the text is transferred. Best done at 300 baud unless software offers XON, XOFF option. At faster speeds 4 to 5 characters per paragraph are lost unless XON/XOFF used, or the software allows adding of nulls. (This is true for most communications and word processing software).

b. Sending file from Apple Disk to Model 100 does not work well at the higher baud rates, as the Apple cannot service an interrupt (XOFF) while accessing disk; as a result, text is lost. Therefore, text should be sent from memory (use "M" as the file name with AE-Pro).

4. A useful public domain program, XMODEM, is available for the Model 100 from the Model 100 SIG on CompuServe. XMODEM will check transmissions for errors and retransmit if any errors are detected. XMODEM protocol is compatible with AE-Pro protocol mode, with MODEM-7 under CP/M, and many other communications packages. The use of protocol mode will also solve the XOFF-interrupt and character dropping problems mentioned above.

## B. Three major methods are available to transfer a file:

1. Direct use of Model 100 built-in 300 baud modem with a modem connected to the Apple.

a. Connect Model 100 modem to Apple modem using the modular telephone jack that came with the Model 100.

--Model 100 to Apple

b. Put Model 100 in Telcom Mode, Originate (switch on side).

c. Put Apple modem in Answer Mode.

Note: the method used will depend on your modem. Some modems require that a switch be changed; others accept a command to switch from the Apple keyboard. The standard DC Hayes command used by many modems is "AT A" followed by a carriage return.

-- Apple to Model 100

a. Put Model 100 in Answer mode

b. Put Apple in Originate mode. (e.g. DC Hayes command "AT D" followed by a carriage return.)

c. Put Model 100 Telcom program in Terminal mode

2. RS 232 Connection (The DB25 connector). To use this method you must have the following:

a. A serial communications card. This is an extra purchase for the Apple ][ or //e, and is built-in on the Apple //c and ///.

b. A "null modem" cable connection, e.g. the Quick and Dirty Interface described in section D below, or a purchased one such as the "smart cable".

c. A communications program loaded into Apple and set to same speed, bits, and word parity as the Model 100.

Steps:

a. Connect cable to Model 100 and Apple serial ports.

b. Call STAT function on Model 100 and set parameters to: 5711E (1200 baud, 7 bits, Ignore parity, 1 stop bit, XON/XOFF enable)

Note: the 5 in the series 5711E above tells Model 100 to use 1200 baud and go to RS232 port. Other baud rates may be possible or required, as noted previously.

3. Special programs: e.g., Disk Plus.

Disk Plus. (Portable Computer Support Group, Dallas Texas, List \$149.95) Provides user with a ROM that goes into the Model 100 and a Program on disk for the Apple. When using this the Model 100 becomes a dumb terminal and the Apple disk drive becomes accessible for file storage. Transfers at 9600 and 19,200 baud are possible. Program is simple to use, however the present version only works with an Apple Super Serial card. Attempts during the workshop to use the program with Super Serial card emulators such as the Seri-All card were not successful.

Macintosh. Transfer follows similar principles, except the Mac has a different connector. This means an adapter must be bought, or a different cable made/purchased.

## C. Applesoft to Text Conversion

1. Capture programs in a text file (p.76 in the old DOS 3.3 manual).

contd.

a. Add the following lines to beginning of Applesoft program you want to convert to a text file. When the program is RUN, a text file on disk will be created.

```

1 D$ = CHR$(4)
2 PRINT D$, "OPEN LISTING"
3 PRINT D$, "WRITE LISTING"
4 POKE 33,30 :REM - This is an
ABSOLUTELY
    ESSENTIAL statement
5 LIST 10,63000 : REM - This assumes original

```

program begins at Line # 10 or later.

```

6 PRINT D$, "CLOSE LISTING"
7 TEXT : END

```

b. Run the program. Applesoft BASIC program will now become a text file on disk with the name "LISTING".

c. To convert a received text file which has been stored on disk to Applesoft, use the "EXEC" command and the downloaded file name. (The same procedures work with PRODOS, but the CHR\$(4) is not required.)

d. An alternative is the AE-PRO utility program EXEC MPF.A, or other public domain utilities designed to create EXEC files. NOTE: CP/M BASIC files are already in text form and do not need to be converted.

2. To send a file from Apple to 100

- a. Load the file to be transferred into Apple's memory.
- b. Turn the Model 100 capture buffer on (down, F2, command).

**D. Quick and Dirty Interface cable.**

George Kinal claims this cable will work with almost any computer with an RS-232 connector and the "DTE" convention (all Apple interface cards except CCS-7710, and virtually all other micro-computers). In other words, if the computer can be connected to a modem without a special or unusual cable, then the Quick and Dirty cable will connect it to another such computer (like the Model 100). This cable has all the "handshake" leads on both ends always set high. Pins 2 and 3 are crossed over, in the usual "null modem" manner. All computers (including the Model 100) except the IBM-PC (!!!) require a male DB-25 connector on the end of the cable. (See figure 1).

- 1. Known cases where this cable is not the answer:
  - a. Will not work if the application requires hardware handshaking.
  - b. With IBM PC unless a female DB25 is substituted on PC end.
  - c. If interface on Apple is DCE (wired to drive a printer instead of a modem).
- 2. Cautions:
  - a. Be sure the DB connector does not have a hood style that interferes with connecting to a Model 100.
  - b. If interface card is set in printer mode (looks

like DCE), eliminate crossover of pins 2 and 3.

**Additional Articles:**

Goodman, Danny. A MARRIAGE OF STATE-OF-THE-ART COMPUTERS. Sep 84, Portable 100, p. 42. Transfers from Model 100 to Macintosh MacWrite. Author notes that printer cable for Apple Imagewriter printer works with Model 100 and Mac serial port.

Guren, Clifford. INS AND OUTS OF FILE TRANSFER. Jun 85, PICO, pp. 17-19. Smart cable, file transfer software, Telecommuter, and Disk Plus.

Heck, Michael. SOFTWARE REVIEW DISK PLUS. A PICO-PC CONNECTION THAT ADDS UP. Apr 85, PICO, pp. 6-8. Discusses both IBM and Apple performance of Disk Plus.

Hildebrand, J.D. USING THE DATA. Aug 84, Portable Computer, pp. 26-30. Reviews three major methods to transfer data and suggests a fourth, electronic mail.

Holter, Kurt. THE LAP COMPUTER AS AN APPLE PERIPHERAL. Apr 85, p. 23. Washington Apple Pi. Modem to Modem using DC Hayes public domain PICKUP program available on WAP disk 19.

Kepner, Terry and Scott Spangenberg. THE APPLE 100 CONNECTION IS EASY WITH RIGHT HARDWARE. Mar 84, pp. 32-35. Experiments with various equipment.

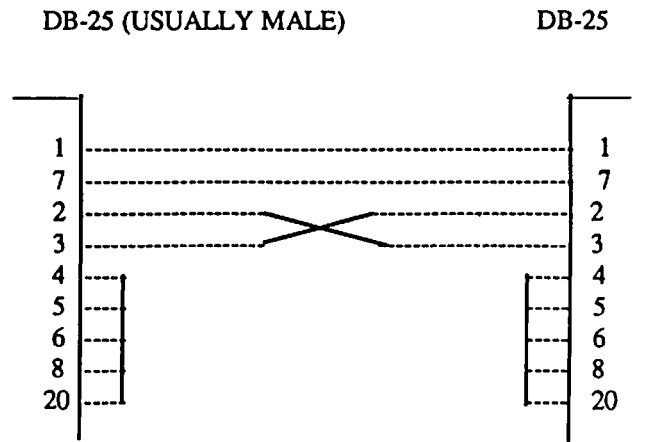
Kepner, Terry. BUILD YOUR OWN NULL MODEM. Sep 83, Portable 100, p. 38.

Kinal, George and Tom Gross. TRANSFER OF COMMODORE 64 PROGRAMS TO APPLESOFT. Apr 85, Washington Apple Pi, p. 22. Principles apply to Model 100 as well.

Kisor, Henry. OSBORNE AND WORDSTAR MEET THE 100. Apr 84, Portable 100, pp. 46-51. BASIC program for Model 100 to transfer Wordstar text via RS-232 ports with line feeds and carriage returns kept.

Ross, Richard, Jr. THE MODEL 100 MEETS THE BIG BLUE MACHINE. Aug, 84, Portable 100, pp. 42-46. Recommends communications for IBM PC be set at 2400, no parity, 8 data bits and 1 stop bit.

**Figure 1  
THE QUICK AND DIRTY CABLE  
INTERFACE CABLE**



3

# THE ENA VISION: What Is ENA?

## Compiled and Edited by Mike Ungerman

[Adapted from "NETWEAVER", Volume 1, Number 1, c) Electronic Networking Association.]

The Electronic Networking Association (ENA) is an organization that grew out of the First Intersystem Symposium conducted by Lisa Carlson, a Washington, DC resident, during which Lisa took ("ported") comments from one electronic network to the other until, finally, people from many places began to feel they knew each other. In April 1985, 50 of those people representing MANY networks came from all over the country to meet in NYC. And ENA was born.

Since then, although the organization officially "meets" on Unison, a system based in Denver, Colorado, a growing number of systems get reports of ENA activities through a growing number of "porters," who download items considered interesting and then upload them to the system they call "home."

ENA's credo: "Our purpose is to promote electronic networking in ways that enrich individuals, enhance organizations, and build global communities."

For some if not all of the people who met in NYC in April, ENA is a rather serious venture to promote the new medium of computer conferencing (cc) and to deal with the problems inherent in it now. To many it is important to deal with substantive issues - such as transmission problems, protocols, software, intersystem links (either software or human) - at the same time that they accomplish the first online intersystem network, intended to serve as an example of the potential of this medium to facilitate global communications of associations, movements and business groups.

For people who were not in NYC in April - people who became curious either through a conference on Parti on The Source, or through some reference to or conference about ENA that they found on one of the many online networks represented by ENA members - there were varying ideas about what ENA is. Some newcomers put their "own personal vision onto it"; even the "Original 50" had different ideas. Their backgrounds were business-oriented, independent telecommunications corporate/government consultant types - and 'the rest of us.'

However, the feeling prevailed that ENA was not formed just to serve the business and professional communities; but also to help any online organization accomplish its goals through networking. That could be a peace movement, a research team worldwide, a business thinktank, a select society, or a social club."

Areas where ENA is expected to concentrate include:

- For networking systems: Pooling examples of successful applications of computer conferencing to use in marketing and public relations efforts.

- For networking professionals: Sharing learnings about how to moderate conferences more effectively, how to introduce new users to the medium, and how to conduct professional activities online.

- For organizational network users: Supporting research and development related to networking technology and practice to give a source of ideas and information about using the medium to improve organizations as information and communication become a larger part of every enterprise.

- For individual network users: Becoming a collective voice would help to preserve the aspects of networking which are important; like privacy and free speech and to be heard on the many issues which will arise as this new technology develops within our society.

This will be a big task. But using the widely distributed system of networks and networkers to collect ideas about needs and strategies from a much larger and more diverse group than the average organization will facilitate its accomplishment.

All we need is \*you\*! The Electronic Networking Association's first face-to-face, in-person, real-time meeting is coming up. Plan to be there.

The Dates: November 7-10 (beginning Thursday evening with a gathering).

The Place: George Washington University, Washington DC.

Plans are still being made online, but here's an idea of some of the areas that will be covered:

### LEARNING AS A THEME

Learning how to establish an association without walls--a beyond-time-and-space organization. Courses about computer conferencing itself for people who are interested but have never tried it before will be conducted.

### ONLINE ONSITE

There are some facilities at the university for terminals which will be providing online capabilities for three purposes:

- (1) teaching new users (see above)
- (2) vendor demonstrations
- (3) communicating with member's home systems.

### NETWORKING AND SESSIONS

There will be ample time for networking and getting to know one another. We want some sessions that will bring us up to date on the field of electronic communications. We seem to be heading more for case studies and informal panel discussions than reading papers or giving long addresses.

Would you like to participate in the Fall Meeting? You do not have to be an ENA member to attend. If you are a user of the WAP BBS, information will be posted about registering for the conference as it becomes available. Periodic newsletters of ENA, "Netweaver" are posted on the NOVAPPLE BBS (703-527-4328) and Barry Fox's BBS, The Connection (703-820-6261). Discussions concerning all aspects of telecommunications take place in the TELECOM SIG which meets immediately following our monthly general meetings. ☿

# DISCOUNTS

### 3 1/2 INCH DISKETTES & STORAGE

- SS/DD, BOX OF 10 ..... 24.00 \*
- 10 DISK STORAGE BOX ..... 2.50
- 36 DISK STORAGE BOX ..... 9.00

### 5 1/4 INCH DISKETTES & STORAGE

- SS/DD, BOX OF 10 ..... \$9.00
- SS/DD, PAK OF 25 ..... \$21.50
- SS/DD, CASE OF 100 ..... \$83.00
- SS/DD, CARTON OF 500 ..... \$395.00
- 2-NOTCH/DS/DD, BOX OF 10 ..... \$11.00
- 2-NOTCH/DS/DD, PAK OF 25 ..... \$26.50
- 2-NOTCH/DS/DD, CASE OF 100 ..... \$103.00
- 10 DISKETTE CASES ..... \$2.50 EACH

(COPYCY COLOR CHOICES: BERGE, BLACK, BLUE, GREEN, GREY, RED, YELLOW; COMPACT CASES: CLEAR, SMOKE, AQUA)

- 70 DISK CASE ..... \$11.00
- 140-DISKETTE LOCKING WOOD FILE CABINET ..... \$29.00

### PRINTERS

- PANASONIC P1090 ..... \$189.00
- PANASONIC P1091 ..... \$249.00
- CITIZEN MSP-10, 160 CPS ..... \$279.00 \*
- PANASONIC P1092 ..... \$359.00 \*
- CITIZEN MSP-15, WIDE ..... \$379.00 \*
- CITIZEN MSP-20, 200 CPS ..... \$349.00 \*
- SILVER REED 500, LQ ..... \$269.00
- AJ 831 w/KEYBOARD, LQ ..... \$349.00
- TOSHIBA P1340 DOT/LETTER ..... \$565.00

### PRINTER ACCESSORIES

- 2500 SHEETS OF PAPER ..... \$31.00
- STANDARD PARALLEL INTERFACE ..... \$49.00
- GRAPHICS PARALLEL INTERFACE CARD ..... \$75.00
- FINGERPRINT PUSH-BUTTON GRAPHICS CARD ..... \$109.00
- MICROFAZER BUFFER ..... \$149.00
- PRINTER STAND ..... \$14.00
- SWITCH BOX 3 PARALLEL OR 3 SERIAL PORTS ..... \$79.00
- UNIVERSAL SWITCH BOX ..... \$99.00 \*

### FLOPPY DISK DRIVES

- FOURTH DIMENSION ..... \$159.00
- MITAC ..... \$144.00
- GAMMA ..... \$129.00
- DISTAR ..... \$119.00

### MONITORS

- 12-INCH GREEN/AMBER ..... \$89.00
- AVT AMERICA, 25 Mhz ..... \$149.00
- PANASONIC 1300 COMPOSITE & RGB ..... \$239.00
- 400 RGB ..... \$289.00 \*
- MONITOR STAND ..... \$16.00

\* DENOTES NEW PRICE OR ITEM

LONG DISTANCE: CALL TOLL-FREE FROM ANY TONE-GENERATING PHONE: DIAL 950-1088; (IF YOU RECEIVE A RECORDING, DIAL 800-446-4482 INSTEAD); WAIT FOR TONE; DIAL 363-1313.

### MODEMS

- ZOOM TELEPHONICS 300 ..... \$109.00
- IIe MODEM & SOFTWARE ..... 159.00
- CENTAURI 300 ..... \$145.00
- US ROBOTICS 1200 ..... \$229.00
- PENRIL 1200 ..... \$309.00
- PROMETHEUS 1200A ..... \$319.00
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# The View from Durham

by Chris Klugewicz

Mail (or the lack thereof), New  
Micros, and Some Other Stuff

Chris Klugewicz  
P.O. Box 22171  
Duke Station  
Durham, NC 27706

CIS 72437,3267

Hello from Duke and Durham! Freshman Orientation is finally over, and I can start getting my own act together. The weather down here has been terrible ever since I got in (rain, rain, and more rain); I spent most of the week trying to deal with a leak in my friend's new car and stay dry. (Neither effort has been completely successful so far.)

**Selections from the Mailbox.** Unfortunately, the mailbox hasn't been exactly overflowing with mail. (Things addressed to "Resident, Box 22171" don't count.) However, the WAP Mac BBS did have a couple of messages aimed in my direction: Bob Masso wrote to deliver his impressions of the Atari 520ST "Mac-alike." According to Bob, it's slow, clunky, and very buggy. Of course, the operating system hasn't been burned into the 128K ROM yet, but somehow I don't expect to see much improvement. GEM was designed for MS-DOS, which just isn't fast enough for Mac-like stuff. Bob also complained about the resolution on the monitor: the only time it's in the same ballpark as the Mac's is when you're in monochrome mode! So much for the much-hyped hires color. Me, I like the Commodore Amiga, but that's another story.

**Another story.** The Commodore Amiga is a much more serious challenge to the Mac than the Jackintosh. It's a powerful, fast machine that was actually developed outside of Commodore. As seems to be the rage, it has a mouse and a Mac-type user interface. Its color display is much higher in quality than the ST's, but the resolution still doesn't match that of the Mac's monochrome monitor. It seems that Commodore is having trouble getting dealers to stock Amiga's because the dealers feel that the market is saturated, and what they don't need right now is a new machine without any software - even if it is more powerful than others on the market. My suggestion: watch and wait.

**The AT&T UNIX PC.** I was in a computer store the other day, and I spent some time (a couple of minutes) playing with the much-touted AT&T UNIX PC. Well, I was not at all impressed. They had UNIX up and running; and it is slow. I couldn't get used to how sluggish the mouse was and how clumsy the pull-down menus seemed. I'll take my Mac. (Word to the wise: this is not a review; all I did was move the mouse around and pull down a few menus.)

**Rumors from that other company in Boca Raton.** The rumored IBM PC-II is still just a rumor. Rumbblings of the earth, flashes of colored lightning, and other such happenings have been reported by my friends in Boca, but not so much as a detail has emerged from the engineering labs in Florida.

**Guess what.** I finally took the plunge: I went out and subscribed to CompuServe's Consumer Information Service

(better known to those of us who've received our first bills as CIS). So now those of you who are CompuServe subscribers can send me EasyPlex electronic mail. My CIS ID is 72437, 3267. I'm still pretty much floundering around (using up lots of connect time) in MAUG and the EasyPlex system, but my initial impressions of CompuServe are: fantastic!, wonderful!, incredible!, *expensive*.

**By the way.** I still love my modem (the Prometheus ProModem 1200). However, I now hate the software it came with (ProCom-M). I use Red Ryder 6.0C (a beta-test version), a "freeware" program written by Scott Watson. Red Ryder is simply wonderful. For a beta-test version, there are very few bugs - none of them serious. It has macros, automated procedures, DEC VT-100 emulation, and great documentation (although it does have its share of spelling errors; I'm now accepting donations for the "Buy Scott a Copy of 'Hayden Speller' Fund"). If you have a Macintosh and use a modem, do yourself a favor and get Red Ryder; it's worth triple the \$40 price tag.

**And another thing.** Do send in the payment required by freeware authors if you don't erase the disk with the program on it. These people have spent lots of time on their products and they deserve a return on their investments - especially when the program is of the quality of Scott Watson's "Red Ryder."

**PR dept.** I got a letter in the mail the other day from Microsoft Corporation out in Bellevue. The letter simply thanked me for my comments on the product registration card I'd mailed in after buying MS-BASIC. It was personally addressed ("Dear Mr. Klugewicz,") and hand-signed. I am annoyed with Microsoft for many reasons, beginning with copy-protection and ending with upgrade policy. However, I want to commend Microsoft for taking the time to at least scan the comments on the registration cards. Policies such as this can only help them keep in touch with the needs and desires of their customers. I just wish I could remember what I wrote on my card.

**More on mail.** You can now send me mail two ways: by regular, United States Postal Service first-class mail or by CompuServe's EasyPlex electronic mail. (Both my USPS mailing address and my CIS ID number are in the box at the end of this column.) Because of editorial deadlines, there is usually a delay of one month (one Journal issue) between my receiving mail and its being published in this column. If you want a prompt reply, please say so in your letter; I guarantee that I will answer within a week. (I won't guarantee that I'll reply by EasyPlex if you send me E-mail, though; remember, I'm on a student budget!) You can write about most anything - the software you hate most, the computer you love most, the  
contd. on pg 41



# THE WORDSTAR/STARCARD PACKAGE REVIEWED

by Joe England

You may have noticed the ads placed in several computer magazines by a mail order company named Broadreach Marketing. They offer a package consisting of WordStar 3.33 and the Applicard 2.0 Z80 card (or 'Starcad') for \$164.95. Since WordStar normally sells for about \$185 and the Applicard goes for about \$250, it's easy to feel insecure about such an ad. Well, I threw caution to the wind, called the 800 number, and ordered the package. I'm very glad I did. I've been using it for a couple of months now, and I haven't found any GOTCHA's yet. In fact, I consider this to be one of the best purchases I've ever made.

## WORDSTAR

WordStar has been my word processor of choice for the last couple of years. After struggling with Apple Writer ], Letter Perfect, and several others, WordStar seemed so much more capable and logical to use that I stopped looking for a better program. There may possibly be better word processors, but there are several reasons why I'm not interested in them. First, I can use WordStar on a wide variety of machines. About any CP/M or MS-DOS machine can run WordStar. Second, it does everything I want it to do quickly and efficiently. Third, the relatively modest gains in power and performance I would (maybe) get from another program wouldn't be worth the trouble of learning a new word processor.

## APPLICARD

The Applicard 2.0 (or 'Starcad') is a quality 6 MHz Z80 card that comes with CP/M 2.2 and the usual assortment of utility programs. It runs rings around the 2 MHz Softcard I've been using for the past couple of years. WordStar is a pleasure to behold running on the faster Applicard.

The Applicard CP/M TPA (transient program area, or free memory) is larger than the TPA provided by 60k Softcard CP/M. The Applicard comes with 64k of fast RAM built-in. Since it doesn't have to deal with a 16k card, it doesn't have to do any bank switching, and this allows for a larger TPA and a more standard implementation of CP/M. Several public domain programs that wouldn't run on the Softcard seem to work fine with the Applicard.

If you don't have an 80-column card, the Applicard can use Apple graphics to give you 70 columns. However, use of an 80-column card is far preferable to this. My old Videx Videoterm works well with the Applicard.

There are a number of other reasons why I prefer the Applicard to the Softcard. Applicard CP/M uses part of the Apple motherboard RAM as a place to store drivers. The rest is used as a good-sized print buffer, about 35k depending how you configure CP/M. With the addition of an optional piggy-

back board, the amount of RAM on the Applicard can be extended to 192K (but make sure you have a healthy power supply). Under Softcard CP/M, if you do a warm boot with a data disk (no CP/M system on it) in drive A:, you get a hung system. Not so under Applicard CP/M. Another nice feature of Applicard CP/M is the ability to re-boot the system at any time without the need of BOOT.COM.

Amazingly, both the Applicard and the Softcard can reside in the same Apple at the same time. When Softcard CP/M is booted, it uses the Softcard. When Applicard CP/M is booted, it uses the Applicard. Simple as that. Thanks to Charles Franklin for telling me this.

In the minus column, I can only think of a few minor deficiencies. The Applicard can't run CP/M 3.0, but neither can the Softcard. The Z80 cards that can run CP/M 3.0 are all pretty expensive. There are only a couple of programs which I haven't yet gotten to work under Applicard CP/M. One is MDM740, but I know there's an overlay available to fix this - I just haven't found it yet. The thing I miss most is ZCPR2, but that too can be adapted in time.

Although Applicard CP/M 2.2 does not include a BASIC interpreter, I've been using the BASIC from my 56k Softcard CP/M disk without problems. The BASIC from the 60k Softcard disk doesn't work under Applicard CP/M. However, I can run a larger BASIC program using 56k BASIC under Applicard CP/M than I can using 60k CP/M BASIC. Programs such as Deskmaster are now usable because of the larger memory and faster execution.

The Applicard is capable of being used as a 64k RAMdisk under DOS 3.3, but only in a very limited way. This only works with straight DOS 3.3 (no Diversi DOS, etc.) and FID (ugh). I tried using several other programs which normally recognize extra RAM on the ][+ without success.

## SUMMARY

I consider the WordStar/Starcad package to be an exceptionally good value at \$164.95. When used with a good 80-column card, it adds excellent word processing capability to the Apple ][, ][+, or //e. &

# FIXING WORDSTAR REV. 3.3 FOR THE APPLE II+: The Bracket that MicroPro Forgot

by George Kinal

[A Preface...: Yes, I know. There probably aren't more than three readers out there with Apple II's (not IIe-s) and WordStar Rev. 3.3. On the other hand, some of you might find this information useful some day soon. The migration of micro owners to newer hardware and software is giving those of us with the "obsolete" stuff an incredible opportunity to acquire some very powerful capabilities at a small fraction of their original cost. Maybe equipping an Apple for WordStar wasn't worth \$1000 to you back in 1981 (software, a Softcard, memory card, an 80-column card), but today by buying used software and hardware, or the now much cheaper accessory cards, the same setup will cost you \$200 or less.)]

## 1. WHERE'S MY CAPITAL M ????

I bought recently from a fellow WAP member a WordStar package, Rev. 3.3 (1983), and proceeded to install it on my Apple II+. I used the installation option for an Apple II with "single wire shift key modification." To my dismay and horror, shift-M yielded a left bracket ( [ ) instead of capital M. The only way to obtain M was to shift-lock first, then type M, then unlock.

Inquiry on the WAP ABBS told me that: earlier WS versions did not have this problem, and that some version 3.3 owners were indeed coping with the problem by using the shift-lock solution. That, to me, was unacceptable. (On a IIe, or with an external keyboard, the problem does not appear since the shift key modification is not necessary.)

## 2. MICROPRO'S FAULTY CODE

One of the beauties of CP/M is that, because there is no copy protection, it is possible to examine and modify programs. Several hours of "research" led me to the source of the problem. In order to make the WordStar program functional with the many different brands and flavors of Apple CP/M, the keyboard patch was placed not in the operating system part of memory, but right within the (uninstalled) WSU.COM program code:

| Location | Code   | Description (mine, not MicroPro's)                     |
|----------|--------|--------------------------------------------------------|
| \$4885   | CPI 40 | Compare with "@"                                       |
| 4887     | JRZ, 3 | No: continue; Yes: goto 488C                           |
| 4889     | CPI 5E | Compare with "^"                                       |
| 488B     | RNZ    | No, then Return                                        |
| 488C     | XRI 10 | Exclusive OR with 10<br>(40 becomes 50, 5E becomes 4E) |
| 488E     | RET    | Return                                                 |

Three things are apparent:

- (1) This is indeed the shift-key patch (it takes care of the caret put out by shift-N, and the "@" put out by shift-P.
- (2) Somehow, MicroPro managed to take care of those

two characters, but forgot about the shift-M !

(3) There is not enough room in the code between \$4885 and \$488E to accommodate a patch for all three "problem characters" (at least, not for a brute force programmer like me....)

## 3. A SOLUTION

My solution to this dilemma was to replace the MicroPro patch with a subroutine CALL to a patch outside the program. A reasonably safe place in MicroSoft CP/M is the Slot1 BIOS patch area between \$F200 and \$F27F. So fixing the problem involves two major elements:

1. Modify WS.COM locations \$4885 - \$488E, to go to an external patch routine.

2. Writing, editing, assembling, and installing the patch subroutine, and incorporating it into the operating system.

NOTE: If you have a different brand of CP/M, the details of the following procedure might differ, because you may have to use an area other than \$F200 - \$F27F. Also, some WordStar users might have installed other patches in this area. You could use one of the other user patch areas (\$F280 or \$F300) instead.

## 4. STEP-BY-STEP INSTRUCTIONS

- (1) Make yourself several copies of a fully configured Wordstar disk (with installation completed, and with the CP/M operating system tracks copied).

- (2) Use DDT.COM (from a CP/M Master Disk) to load WS.COM into memory: [d: means the drive of your choice, probably B:]

DDT d:WS.COM

- (3) At the DDT prompt (-), use the A command to make the following changes:

```
-A4885
4885 CALL F26F
4888 RET
4889 NOP
488A NOP
488B NOP
488C NOP
488D NOP
488E NOP
488F . (At this point, enter a period and RETURN to
```

```
terminate Assembler.)
(4) Confirm that the patch is correct with the command
L4885.
```

- (5) Exit to CP/M using the command GO.

- (6) Save the modified program on drive "d:" :  
SAVE 74 d:WS.COM

- (7) Now type in the following code using ED.COM, some other text editor, or an unmodified copy of Wordstar itself (non-Document file!):

contd.

```

    ORG 0100H           ; Origin for ASM.COM only
ORIGIN SET 0F27FH-LENGTH ; True origin
OFFS  SET  ORIGIN-PATCH
OLDADR SET 0FE69H      ; IO Vector for Punch Dev.
;
    DB 1               ; One patch to IOCB
    DW ORIGIN
    DW LENGTH
    DB 1               ; A phony - punch dev. N/A
    DB 8
    DW OLDADR
;
PATCH CPI 40H         ; The @ sign.
      JZ $+0BH+OFFS
      CPI 5DH         ; The ] - Micropro's mistake!
      JZ $+06+OFFS
      CPI 5EH         ; The caret... ^
;
      RNZ             ; None of the above - return
      XRI 10H        ; Converts all three
      RET
;
LENGTH EQU $-PATCH   ; Get length of code
END

```

(8) Save the text file under the name KEYPTCH.ASM.

(9) Use ASM.COM (from a System Master) to assemble:  
ASM d:KEYPTCH

(10) If assembly occurs without errors (no error messages), print out the file KEYPTCH.PRN to document the patch, and for future debugging.

(11) Load the patch (using LOAD.COM from Master disk): LOAD d:KEYPTCH

(12) On disk d:, the file KEYPTCH.COM should now appear.

(13) From System Master, enter:  
MBASIC CONFIGIO.

(14) Choose menu choice #3 ("Load user I/O driver software"), and provide the filename d:KEYPTCH.

(15) Now choose menu choice #4 ("Read/Write I/O Configuration Block"), make the "W" choice, and designate the disk drive in which the Wordstar disk you wish to modify is located.

(16) Do a complete cold boot of the patched WordStar disk. Without WordStar having been run, the keyboard should act in its "normal" fashion. Now, run WordsSar ("WS"), and confirm that shift-P, shift-N, and shift-M (hooray!) work properly.

## 5. POSTSCRIPT

I hope the editors let me make a few public comments here giving my opinions about this problem. First of all, WordStar for the Apple has been on the market for quite a few years, and certainly MicroPro should understand the Apple ][+ keyboard. No respondent to my ABBS inquiries indicated that MicroPro ever issued a recall or upgrade notice to registered owners. Indeed, to date I have not received a reply to my letter to MicroPro.

Certainly, I must not be the first to have discovered this problem, nor the first to contact MicroPro about it. It seems that this "consumer be damned" attitude is becoming ever

more prevalent in the software business. It used to be that a good argument for buying software through legitimate channels was that you were getting product support. What, pray tell, is MicroPro offering to the customer for the \$200 to \$500 that WordStar is usually sold for? Shouldn't legitimate purchasers be rewarded by decent product support, rather than be punished by perpetuation of a deficient product?

Note: After this article was written, I received a letter from MicroPro stating, "I am sorry that you were inconvenienced by the 'left bracket' problem with WordStar running on an Apple with the StarCard. MicroPro has been aware of the problem for some time. Initially we had a paper patch, but a later revision of the product resolved this problem. Therefore, I am authorizing a defective exchange of your software to version 3.33. Thank you for sending us a copy of your patch material." Readers may be interested in the apparent availability of the upgrade to Version 3.33. ☞

View from Durham contd. from pg 38

situation in the Middle East (just checking to see if you're still with me). All I ask is that technical questions be directed to the Q & A authors--Bruce Field for Apple // and /// and Jonathan Hardis for the Mac. (You can still ask me technical questions if you want to, but I'll probably just end up sending them to Bruce or Jonathan anyhow.) You can also send me messages on the area BBS's, but as I'm out of town (and poor), I can't guarantee that I'll be able to call in and retrieve them. The first two methods are safer.

**Software of the month.** Richard Grant's *Saraband of Lost Time*. (Yeah, I know, it's a book, not a program. But, hey, it's softcover, right?) This is a superb science fiction novel, set in the distant future. I won't say much about it except that all of you should read it, even if you don't normally like science fiction: this is not your typical SF story. At present, it's in the running for a Nebula award (if you don't know what that is, just look impressed).

**Hardware of the month.** The Prometheus ProModem 1200. The more I use it, the more I like it. It's fully Hayes-compatible, and it can be expanded by adding lots of RAM and an alphanumeric display. Besides, it's the best-looking modem around. (It's also a conversation piece: everybody around here keeps asking me what it is.)

**The end and other misleading statements.** Next month promises to hold many surprises, both from Apple and elsewhere, mainly concerning the Mac. (// owners, don't despair! The guy across the hall has a //e, so look for some hardware and software comments.) For lack of anything further to say: Ciao. ☞

# DOWNLOADING CUSTOM CHARACTERS INTO THE APPLE IMAGEWRITER

by Chester H. Page

## Problem 1

The Imagewriter manual tells what sequence to send to the printer to download a custom-designed character, but not HOW to send it. If you send with an Applesoft PRINT, all downloaded characters get bottom lines added (like underlining on the line) and can be called only by ESC \*, not by ESC ' as expected.

## Problem 2

Even if Problem 1 is solved, certain patterns wreck the downloading. Any pattern that contains a column of dots described by the number 9 or 137 is interpreted by the printer interface card as a Ctrl-I, which is the lead-in character for various commands!

## Problem 3

Problems 1 and 2 can be avoided by using Apple's Imagewriter Tool Kit disk to load a set of subscripts and superscripts. The code ESC ' is used for all the calls in this set of characters (more on this point later). In the set incorporated in the Tool Kit, A-Z are used to call A-Z as subscripts, and a-z to call A-Z as superscripts. The digits 0-9 call 0-9 as subscripts, but calling 0-9 as superscripts requires using punctuation marks listed in a table! These punctuation marks are, for 1-9, quite logically these digits using the shift key -- provided you have an Apple ][+ and not the //e! The marks +, -, /, (, and ) require a look-up table.

## Results of This Study

With my routines, ESC ' makes A-Z, 0-9, +, -, /, (, and ) call Xsame characterY as a superscript (reduced in size, of course), while ESC \* makes these inputs yield the same characters as subscripts. Thus inserting <ESC>'A<ESC>\$A<ESC>\*A<ESC>\$ into this text results in 'A\$A\*A\$ and similarly with the other characters. (Inserting <ESC> requires using CTRL-V. The final <ESC>\$ restores normal printing.) If lower-case subscripts and superscripts are desired, they can be designed and added to the downloader and have the same properties. There are NO arbitrary relations between calling characters and resulting characters.

To understand and appreciate the situation, you should reread a few paragraphs from the Imagewriter User's Manual:

ESCAPE ' fetches custom characters in both 8-dot-maximum and 16-dot-maximum storage modes assigned to ordinary keyboard characters (including space) - ASCII characters with decimal values 32 through 126 (see Appendix C).

ESCAPE ' also fetches custom characters assigned to ASCII characters with decimal values 160 through 191. These characters can't be more than eight dots wide and must have been stored in the eight-dot-maximum mode. When you use ESCAPE ' for this purpose, make sure that DIP switch SW 1-5 is open or an ESCAPE Z CONTROL-@ control code is in force (see Data Byte Length earlier in this chapter).

ESCAPE \* fetches custom characters assigned to ASCII characters with decimal values 160 through 239. In effect, it reassigns them to characters 128 lower -- in other words, ASCII 32 through 111 (all of the normal keyboard characters except the punctuation marks {,},~, and lowercase letters above o).

Since the ESCAPE ' control code permits you to change to a font containing up to 95 custom characters of any width (regardless of the position of DIP switch 1-5) and fetch them with ordinary keyboard characters, you will probably never need to use the ESCAPE \* control code. However, it is available if you ever need to store and use as many as 175 custom characters up to eight dots wide.

Now reread the next-to-last paragraph again - the one explaining what ESCAPE \* does. It doesn't mean what it appears to say. What happens is that ASCII codes from 129 to 255 are identical, for most purposes, with their counterparts from 0 to 127 - the hi-bit is ignored in most terminal operations. For example, Applesoft always adds the hi-bit when you use a PRINT command, but if the same character is sent to a printer with the hi-bit a 0, from machine code, it will print exactly the same way. For characters sent to the monitor screen, the hi-bit is important; a 0 hi-bit is a signal to use a flashing or inverse letter (which, depends on another bit). Downloaded characters are substitutes for the characters that are sent to the printer, the calling characters. Suppose we define Pattern1 as a substitute for A, where the A was sent with its hi-bit being 0 - ASCII 65 or \$41 - and define Pattern2 as the substitute for a hi-ASCII A - an A sent as 193 or \$C1. Now when we use ESC ' as the code, and send "A" to the printer, the printer reads the incoming A as low-ASCII and substitutes Pattern1; if we use code ESC \*, the printer reads the incoming A as hi-ASCII and prints the substitute Pattern2. Thus for characters whose substitutes are defined in the 8-dot-maximum mode, the use of ESC ' and ESC \* controls how the printer reads the incoming letters - as high-ASCII or low-ASCII. Knowing this, it is easy to define superscript and subscript substitutes for all keyboard characters, with the position controlled by the choice of ESC ' and ESC \*

contd.

## How It Is Done

Problem 1 can be solved by stripping the hi-bit which was forced by PRINT, and then restoring it if it had been present before PRINTing. For example, if we are transmitting a sequence of numbers by PRINT CHR\$(X) we first POKE 6,X then use the output hooks (CSW) at \$36,37 to subject CHR\$(X) to the following before sending it along to the printer interface card:

```
AND          #$7F
ORA          $6
```

If the original data are single-character strings, X\$, using PRINT X\$, then POKE 6,ASC(X\$) puts the proper value in \$6.

PR#1 sets CSW to \$C100, but the first byte sent to the interface card triggers an initialization routine which in turn resets CSW to \$C107 for a serial card, \$C102 for a parallel card. I think these addresses are correct for all printer cards for the Apple, but it is easy to examine \$36,37 after your card is initialized to check the new address. For the bit restoring routine, CSW is reset for some convenient address, say \$300, where we locate the routine

```
AND          #$7F
ORA          $6
JMP          $C107
```

We now face Problem 2. The first step is to search the interface card manual to learn the location of the command byte, \$9. For the Apple Super Serial Card, this is \$5F9, or D1529. By POKE 1529, 255 we change the CTRL-I lead-in to \$FF which represents a solid column of 8 dots and can occur only in very special cases. It certainly can't occur in subscript or superscript characters which are only 5 dots tall. DOWNPRINT uses this solution to demonstrate "A" as both subscript and superscript.

Another solution is to avoid PRINT by sending the data, not to the input area of the card, but directly to its output area, bypassing all examination for commands. This is done by POKEing the data in the card's "transmit register". For the Apple SSC, this location is \$C098, or -16232 in decimal. This solution is given in DOWNPOKE with the data for the entire character set. After RUNing DOWNPOKE, RUN SET.TEST will display the character set. DOWNPOKE is probably the best approach in BASIC, but a machine code program will run much faster (and character designs are easier to read as hexadecimal numbers!).

With machine code, there is a new problem. If we write the equivalent of DOWNPOKE, it won't work. The machine code routine puts out bytes faster than the transmission to the printer can handle. To solve this, study the SSC manual to find how normal transmission is controlled. The answer is, store the byte in \$27 and JMP \$CC02. The routine there waits for a ready signal, then sends the byte from \$27 to the transmit register.

Having solved this problem, it is time to dress up the machine code by making it self-locating, so that it can be used at any location in the memory. (This allows using it when there is already a program in memory.) As written, DOWNLOAD\* loads at \$2000, but it works just as well in response to BRUN DOWNLOAD\*, A\$5678.

Finally, a matter of technique in entering machine code

with editing capability. Whenever you enter a sequence of several hundred bytes, you always make at least one error. If it is an incorrect byte, it is easy to correct, but if you have omitted a byte (usually near the beginning!) you must juggle the data with memory moves or do a lot of retyping. When I copy a published program, particularly one listed as a hex dump, or when there is a lot of data, as in the character designs in this paper, I prefer to write the program on a word processor for use as an EXEC file. Entering the data in batches using ":", as in DOWN.MAKER, not only makes it easier to inspect and correct, but allows easy modification of the design of a particular character. In the general case where there is no nice recurrence pattern, omitted bytes can easily be inserted since we are dealing with word-processor text.

To generate the binary file DOWNLOAD\*, the disk carrying DOWN.MAKER is inserted, and EXEC DOWN.MAKER entered from the keyboard. The file is then saved with BSAVE DOWNLOAD\*, A\$2000, L\$370. There is, however, one special trick involved. In entering data, the monitor uses \$40/41 to hold the address at which the next byte is to be stored; ":" calls up this address. Unfortunately, DOS also uses \$40/41 as a pointer, so EXEC ruins the program. To circumvent this, I have one disk on which DOS uses \$85/86 instead of \$40/41, and boot this disk before EXECing. The locations where \$40 needs to be changed to \$85 are:

9E1C, A26F, A2D7, A30A, A6A6, A739, A749, A751, A779, A785, A79D, A7A7, A7AD, A7B8, A7D9, A7E9, A7EE, A7F2, A7FA, A801, A805, A80C, A810, A81D, A824, A829, A832, and A835.

The locations where \$41 needs to be changed to \$86 are:

A2D3, A6A1, A73E, A77D, A7A5, A7BF, A7DE, A7F5, and A826.

## LISTING 1

```
10 REM DOWNLOAD USING "PRINT"
20 D$ = CHR$(4):E$ = CHR$(27)
30 FOR I = 768 TO 774: READ X: POKE I,X: NEXT
40 REM LOAD AND,ORA ROUTINE AT $300
50 DATA 41,127,5, 6,76,7,193
60 REM SET UP OUTPUT VECTOR FOR SLOT 1
70 POKE 62,1: CALL - 361
80 PRINT : REM ACTIVATE CARD
90 POKE 1529,255: REM LOCATION DEPENDS ON
CARD
100 POKE 54,0: POKE 55,3: REM SET OUTPUT
DETOUR VIA $300
110 CALL 1002
120 POKE 6,0
130 PRINT E$-"E$I";
140 READ X: IF X = 255 THEN 170
150 POKE 6,X: PRINT CHR$(X);
160 GOTO 140
170 PRINT D$
180 PRINT E$"A"E$"$A"E$"*A"E$"$
190 PRINT D$"PR#0": END
200 DATA 65,72,0,28,10,9,10,28,0,0
210 DATA 193,104,0,112,40,36,40,112,0,0
220 DATA 255
```

contd.

LISTING 2

```

10 REM CHARACTER SET DEMO
20 D$ = CHR$(4):E$ = CHR$(27)
30 PRINT D$"PR#1"
40 PRINT
50 FOR I = 1 TO 3: FOR J = 1 TO 14
60 READ A$
70 PRINT E$" ""A$E$" "A$E$" ""A$" "": NEXT
80 PRINT
90 NEXT
100 PRINT E$" $"
110 PRINT D$"PR#0": END
120 DATA A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,
    T,U
130 DATA V,W,X,Y,Z,0,1,2,3,4,5,6,7,8,9,+,-/,(),""
140 REM THE FINAL "" IS A NULL STRING
150 REM TO COMPLETE THE COUNT

```

LISTING 3

```

10 REM DOWNLOAD USING POKES
20 D$ = CHR$(4):E$ = CHR$(27)
30 PRINT D$"PR#1"
40 PRINT E$"-"E$"I":
50 FOR I = 1 TO 821: READ X
60 POKE -16232,X: NEXT
70 PRINT : PRINT D$"PR#0"
80 END
90 DATA 65,72,0,28,10,9,10,28,0,0
100 DATA 66,72,0,31,21,21,31,10,0,0
110 DATA 67,72,0,0,14,17,17,17,0,0
120 DATA 68,72,0,0,31,17,17,14,0,0
130 DATA 69,72,0,0,31,21,21,17,0,0
140 DATA 70,72,0,0,31,5,5,1,0,0
150 DATA 71,72,0,0,14,17,21,29,0,0
160 DATA 72,72,0,0,31,4,4,31,0,0
170 DATA 73,72,0,0,17,31,17,0,0,0
180 DATA 74,72,0,0,8,17,15,1,0,0
190 DATA 75,72,0,0,31,4,10,17,0,0
200 DATA 76,72,0,0,31,16,16,16,0,0
210 DATA 77,72,0,31,2,4,2,31,0,0
220 DATA 78,72,0,31,2,4,8,31,0,0
230 DATA 79,72,0,14,17,17,17,14,0,0
240 DATA 80,72,0,0,31,5,5,2,0,0
250 DATA 81,72,0,14,17,17,21,14,16,0
260 DATA 82,72,0,31,5,5,15,16,0,0
270 DATA 83,72,0,0,18,21,21,9,0,0
280 DATA 84,72,0,1,1,31,1,1,0,0
290 DATA 85,72,0,15,16,16,16,15,0,0
300 DATA 86,72,0,7,8,16,8,7,0,0
310 DATA 87,72,0,15,16,12,16,15,0,0
320 DATA 88,72,0,17,10,4,10,17,0,0
330 DATA 89,72,0,1,2,28,2,1,0,0
340 DATA 90,72,0,17,25,21,19,17,0,0
350 DATA 48,72,0,0,14,17,17,14,0,0
360 DATA 49,72,0,0,0,31,0,0,0,0
370 DATA 50,72,0,0,18,25,21,19,0,0
380 DATA 51,72,0,0,21,21,21,31,0,0
390 DATA 52,72,0,4,6,5,31,4,0,0
400 DATA 53,72, 0,0,23,21,21,29,0,0
410 DATA 54,72,0,0,30,21,21,29,0,0
420 DATA 55,72,0,0,17,9,5,3,0,0
430 DATA 56,72,0,10,21,21,21,10,0,0
440 DATA 57,72,0,0,18,21,21,14,0,0
450 DATA 40,72,0,0,0,14,17,0,0,0
460 DATA 41,72,0,0,0,17,14,0,0,0
470 DATA 43,72,0,4,4,31,4,4,0,0
480 DATA 45,72,0,4,4,4,4,4,0,0
490 DATA 47,72,0,16,8,4,2,1,0,0

```

```

500 DATA 193,104,0,112,40,36,40,112,0,0
510 DATA 194,104,0,124,84,84,84,40,0,0
520 DATA 195,104,0,0,56,68,68,68,0,0
530 DATA 196,104,0,0,124,68,68,56,0,0
540 DATA 197,104,0,0,124,84,84,68,0,0
550 DATA 198,104,0,0,124,20,20,4,0,0
560 DATA 199,104,0,0,56,68,84,116,0,0
570 DATA 200,104,0,0,124,16,16,124,0,0
580 DATA 201,104,0,0,68,124,68,0,0,0
590 DATA 202,104,0,0,32,68,60,4,0,0
600 DATA 203,104,0,0,124,16,40,68,0,0
610 DATA 204,104,0,0,124,64,64,64,0,0
620 DATA 205,104,0,124,8,16,8,124,0,0
630 DATA 206,104,0,124,8,16,32,124,0,0
640 DATA 207,104,0,56,68,68,68,56,0,0
650 DATA 208,104,0,0,124,20,20,8,0,0
660 DATA 209,104,0,56,68,68,84,56,64,0
670 DATA 210,104,0,124,20,20,60,64,0,0
680 DATA 211,104,0,0,72,84,84,36,0,0
690 DATA 212,104,0,4,4,124,4,4,0,0
700 DATA 213,104,0,60,64,64,64,60,0,0
710 DATA 214,104,0,28,32,64,32,28,0,0
720 DATA 215,104,0,60,64,48,64,60,0,0
730 DATA 216,104,0,68,40,16,40,68,0,0
740 DATA 217,104,0,4,8,112,8,4,0,0
750 DATA 218,104,0,68,100,84,76,68,0,0
760 DATA 176,104,0,0,56,68,68,56,0,0
770 DATA 177,104,0,0,0,124,0,0,0,0
780 DATA 178,104,0,0,72,100,84,76,0,0
790 DATA 179,104,0,0,84,84,84,124,0,0
800 DATA 180,104,0,16,24,20,124,16,0,0
810 DATA 181,104,0,0,92,84,84,116,0,0
820 DATA 182,104,0,0,120,84,84,116,0,0
830 DATA 183,104,0,0,68,36,20,12,0,0
840 DATA 184,104,0,40,84,84,84,40,0,0
850 DATA 185,104,0,0,72,84,84,56,0,0
860 DATA 169,104,0,0,0,68,56,0,0,0
880 DATA 171,104,0,16,16,124,16,16,0,0
890 DATA 173,104,0,16,16,16,16,16,0,0
900 DATA 175,104,0,64,32,16,8,4,0,0
910 DATA 4

```

LISTING 4

PRINT "DOWN.MAKER generates DOWNLOAD\*"
CALL -151

```

2000: 20 58 FF BA CA BD 00 01 18 69 34 85 06 BD 01
01 69 00 85 07 A9 01 20 95 FE A9 00 20 ED FD A2 00
A1 06 C9 FF F0 0D 85 27 20 02 CC E6 06 D0 F1 E6 07
D0 ED 4C 62 FA 1B 2D 1B 49

```

```

:41 48 00 1C 0A 09 0A 1C 00 00
:42 48 00 1F 15 15 1F 0A 00 00
:43 48 00 00 0E 11 11 11 00 00
:44 48 00 00 1F 11 11 0E 00 00
:45 48 00 00 1F 15 15 11 00 00
:46 48 00 00 1F 05 05 01 00 00
:47 48 00 00 0E 11 15 1D 00 00
:48 48 00 00 1F 04 04 1F 00 00
:49 48 00 00 11 1F 11 00 00 00
:4A 48 00 00 08 11 0F 01 00 00
:4B 48 00 00 1F 04 0A 11 00 00
:4C 48 00 00 1F 10 10 10 00 00
:4D 48 00 1F 02 04 02 1F 00 00
:4E 48 00 1F 02 04 08 1F 00 00
:4F 48 00 0E 11 11 11 0E 00 00
:50 48 00 00 1F 05 05 02 00 00
:51 48 00 0E 11 11 15 0E 10 00

```

contd.

```

:52 48 00 1F 05 05 0F 10 00 00
:53 48 00 00 12 15 15 09 00 00
:54 48 00 01 01 1F 01 01 00 00
:55 48 00 0F 10 10 10 0F 00 00
:56 48 00 07 08 10 08 07 00 00
:57 48 00 0F 10 0C 10 0F 00 00
:58 48 00 11 0A 04 0A 11 00 00
:59 48 00 01 02 1C 02 01 00 00
:5A 48 00 11 19 15 13 11 00 00
:30 48 00 00 0E 11 11 0E 00 00
:31 48 00 00 00 1F 00 00 00 00
:32 48 00 00 12 19 15 13 00 00
:33 48 00 00 15 15 15 1F 00 00
:34 48 00 04 06 05 1F 04 00 00
:35 48 00 00 17 15 15 1D 00 00
:36 48 00 00 1E 15 15 1D 00 00
:37 48 00 00 11 09 05 03 00 00
:38 48 00 0A 15 15 15 0A 00 00
:39 48 00 00 12 15 15 0E 00 00
:28 48 00 00 00 0E 11 00 00 00
:29 48 00 00 00 11 0E 00 00 00
:2B 48 00 04 04 1F 04 04 00 00
:2D 48 00 04 04 04 04 04 00 00
:2F 48 00 10 08 04 02 01 00 00
:C1 68 00 70 28 24 28 70 00 00
:C2 68 00 7C 54 54 54 28 00 00
:C3 68 00 00 38 44 44 44 00 00
:C4 68 00 00 7C 44 44 38 00 00
:C5 68 00 00 7C 54 54 44 00 00
:C6 68 00 00 7C 14 14 04 00 00
:C7 68 00 00 38 44 54 74 00 00
:C8 68 00 00 7C 10 10 7C 00 00
:C9 68 00 00 44 7C 44 00 00 00
:CA 68 00 00 20 44 3C 04 00 00
:CB 68 00 00 7C 10 28 44 00 00
:CC 68 00 00 7C 40 40 40 00 00
:CD 68 00 7C 08 10 08 7C 00 00
:CE 68 00 7C 08 10 20 7C 00 00
:CF 68 00 38 44 44 44 38 00 00
:DO 68 00 00 7C 14 14 08 00 00
:D1 68 00 38 44 44 54 38 40 00
:D2 68 00 7C 14 14 3C 40 00 00
:D3 68 00 00 48 54 54 24 00 00
:D4 68 00 04 04 7C 04 04 00 00
:D5 68 00 3C 40 40 40 3C 00 00
:D6 68 00 1C 20 40 20 1C 00 00
:D7 68 00 3C 40 30 40 3C 00 00
:D8 68 00 44 28 10 28 44 00 00
:D9 68 00 04 08 70 08 04 00 00
:DA 68 00 44 64 54 4C 44 00 00
:B0 68 00 00 38 44 44 38 00 00
:B1 68 00 00 00 7C 00 00 00 00
:B2 68 00 00 48 64 54 4C 00 00
:B3 68 00 00 54 54 54 7C 00 00
:B4 68 00 10 18 14 7C 10 00 00
:B5 68 00 00 5C 54 54 74 00 00
:B6 68 00 00 78 54 54 74 00 00
:B7 68 00 00 44 24 14 0C 00 00
:B8 68 00 28 54 54 54 28 00 00
:B9 68 00 00 48 54 54 38 00 00
:A8 68 00 00 00 38 44 00 00 00
:A9 68 00 00 00 44 38 00 00 00
:AB 68 00 10 10 7C 10 10 00 00
:AD 68 00 10 10 10 10 10 00 00
:AF 68 00 40 20 10 08 04 00 00
:04 FF

```

# MODIFICATION TO DISKCAT

## by Rick Chapman

I just finished typing in Bob Velke's DISKCAT program that was published in the May 1985 WAP Journal. The program is very useful, but has a minor bug as published. Whenever a file name with 15 characters is encountered, the last character is displayed several spaces to the right of where it should be displayed (or printed). The problem is due to some simple errors in addressing the file descriptor string. It can be corrected by making the following changes (the changes are highlighted in bold):

```

650 PRINT MID$(SP$,1,LV(X) * 2;MID$(F$,1,16)
660 HTAB HT : PRINT MID$(F$,17,RM)
:
:
980 HTAB HT : PRINT MID$(DI$(X + 1),17,RM)

```

After making these changes you should also delete one period from between the words 'NAME' and 'TYPE' in line 570 in order to insure that the column headings are correctly lined up.

Because I don't always remember the prefix of the disk that I want to catalog, I also added a feature allowing the user to set the prefix to drive 1 or drive 2. This feature can be added by inserting the following line:

```

430 DN = VAL (P$(1)) : IF DN = 1 OR DN = 2 THEN PRINT D$;
"PREFIX,D";DN : GOTO 390

```

I hope that you will find these changes useful.

⌘

## Washington Apple Pi Bulletin Board SYSTEMs

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# APPLE KEYS

by Tom Kroll

When I first started to learn to program in Basic, I always wanted to program the OPEN APPLE and CLOSED APPLE keys. I mean I did buy an Apple computer, and Apple would surely show me how to use them, or at least explain them to me in my //c owner's manual. Well, so much for naiveté. But my stubbornness has never let me forget about using those two keys.

When I found a copy of the Apple //c User's Manual, I found in the back a list of "Useful PEEKs and POKEs". And lo and behold, there were the PEEKs for the OPEN and CLOSED APPLE keys! Now the fun began (what are PEEKs and POKEs?). I must have spent a couple of evenings of work to figure out how to use them. The book said that if the value of the memory locations (49249) or (49250) was 127, the OPEN or CLOSED key was pressed, and if the value was less than 127 then the key was not pressed.

For about two nights I tried to write a simple program that would print "OPEN APPLE" and "CLOSED APPLE" whenever I pushed the appropriate keys. However, the computer would print the OPEN and CLOSED messages either all the time, or whenever IT wanted to. I got desperate and decided to see if I could actually see what the value at these locations were.

So I wrote the following program to see what was going on inside my computer. (Don't laugh, it was big doings to me.)

```
10 A = PEEK (49249)
20 PRINT A
30 GOTO 10
```

The value of "A" would change anywhere from 30 to 128 with the OPEN APPLE key pressed, or from 128 to 230 depending on the computer's whim!!

Now this just couldn't be for a guy who was going to master his machine using Basic and then learn Logo, Pilot, and then MACHINE language in a year. From somewhere I picked up the value of 160 for the memory locations, and they worked. Using this little program I proved to myself that the keys could be programmed.

```
10 IF PEEK (49249) => 160 THEN 200
20 IF PEEK (49250) => 160 THEN 200
30 GOTO 10
100 PRINT "OPEN APPLE": PRINT PEEK
(49249):
PRINT TAB (10); PEEK (49250)
200 PRINT "CLOSED APPLE": PRINT PEEK
(49249): PRINT TAB (10); PEEK (49250)
210 GOTO 10
```

This little program will not only print out the OPEN and CLOSED APPLE messages, but will also give you the value of the memory locations when you do. Handy, huh? But what good are they, you say? Well, that depends on the

person doing the programming. They're great for a decision (press OPEN APPLE to do this and press CLOSED APPLE to do that). Or, you can make function keys, just like Big Blue has (OPEN APPLE 1 to do this, etc.).

Maybe one day I'll submit some utilities to the club using them to automatically print some statements for writing a program (PRINT CHR\$(4); GOTO, GOSUB, ON X GOTO, etc. Maybe one day I'll even learn machine language.

God bless.

☞

## INDEXERS ARISE!!

by Leon H. Raesly, LCSW

Apple Pi INDEXERS arise and be counted. We need volunteers that are willing to work (or better yet, have FUN!) indexing the Washington Apple Pi Journal. Emil Levine (953-3017 evenings) has agreed to chair the Committee. We already have two volunteers (Bonnie Walker WAP2652 and Jeff Berger WAP6007) and need a few more.

The idea is that when completed, the index will be available on the NEW Journal BBS (provided by Alice Allen - special thanks to you Alice!) in two forms. You will be able to peruse it in a "printed page" format, just as you could read it in the Pi Journal. (There will also be a printed copy at the PI office.) In addition, it will also be on the Journal BBS as a separated field sequential text file.

Thus, after each item on one record (or line) will be a <cr>. Thus, any member will be able to download it to a text file of their own, then upload it into their own data base! You will be able to do your own sorting, or searching, offline with your own favorite data base!

Emil has also gotten the cooperation of Fran Spigai, President of Database Services, Inc. (Boy, I sure hope I spelled your name right, Fran! It is as confusing as mine!). Her company maintains the Micro-Computer Index on Dialog. She has offered to let the Pi use their Thesaurus of micro-computer terms! A special thanks also to you, Fran!

Paul Koskos (of Pi office fame - known affectionately to many of his friends as "Your Paulness"! ) has already completed the updating of the Index to Bruce Field's Q & A column. Paul's work will be printed in the next Journal, and a printout of the full index from year one to now will be maintained at the Pi's library at the office. Also, the completed index to Bruce's Q & A is now available to be downloaded from the Alice Allen's Journal BBS in both forms described above!

So join in now! No experience necessary, and you don't even have to have a Modem! Looks like lots of FUN and GOOD TIMES ahead for this group! Give Emil a call at his number above.

And after the WAP Journal, who knows what's next!

☞





# USUS NATIONAL MEETING TO BE HELD IN BALTIMORE

by Michael Hartman

The Fall 1985 national meeting of the UCSD p-System User's Society (USUS) will be held in Baltimore at the Omni International Hotel on Friday, October 25 through Sunday, October 27. USUS is an organization of users of the UCSD Pascal system and its derivatives, including Apple // and /// Pascal and the Mac Advantage UCSD Pascal compiler. The theme of the meeting is "A Workshop on the UCSD p-System Family", and it will include technical presentations, tutorials, workshops, Q & A sessions, hardware and software demonstrations, and SIG meetings. Everyone with an interest in UCSD Pascal is welcome to attend; you do not have to be a USUS member. Several of the meeting sessions will be Apple-specific, and many of the general ones will be of interest to Apple users (nearly half of USUS's members own Apple computers). Other computers which the UCSD p-System runs on include the Stride/Sage line, IBM PC, and TI 99/4A. The following is a partial list of the scheduled sessions:

#### Technical Presentations-

- "Pascal Data Base Systems" by Tom Swan (author of several books on Apple Pascal)
- "UNITs and Modular Programming" by Margaret Dexter
- "Advanced System Editor Macros" by Arley Dealey (one of ASE's authors)
- "A Modula-2 Console Operations Module" by David Rhoads
- "Moral and Ethical Issues of Artificial Intelligence" by Chris Cherniak

#### Workshops-

- "Mac Advantage- UCSD Pascal on the Macintosh" by Dave Neumann and Robert Platt
- "Writing Communications Software" by Craig Vaughan (author of ABBS and MAGUS)
- "Apple // Attach and Device Drivers" by Michael Hartman

#### Tutorials-

- "Advanced Topics in UCSD Pascal" by Tom Woteki (aka Dr. Wo)
- "Introduction to the UCSD Pascal Language" by Jon Bondy
- "Introduction to Modula-2" by Jon Bondy

Another highlight will be a talk by Eli Willner on "The Future of the p-System". As some of you may know, Sof-Tech Microsystems, the vendor of the UCSD Pascal products for the Macintosh and other machines, was put up for sale in June. By the time you read this, a group headed by Eli should have signed a final agreement to acquire all of the assets of SMS. Expect several announcements that will increase the

viability and importance of UCSD Pascal in the micro-computer marketplace.

Meeting registration for all three days is \$25 in advance or \$35 at the door. One-day registration is \$18 in advance or at the door. Student rates are \$20 for three days and \$10 for one day, in advance or at the door. (Students must show a current school ID to obtain the special rates.) To register in advance, mail a check for the appropriate amount to:

USUS  
Fall Meeting Registration  
P.O. Box 3277  
Silver Spring, MD 20901

Please make checks payable to USUS, Inc. Advance registrations must be received by October 15. The Omni International Hotel is located at 101 West Fayette Street in Baltimore's Inner Harbor area. For any of you who plan to stay at the hotel, there are special room rates on a space-available basis (by the time this is published). Tell the Omni that you are attending the USUS meeting, and also indicate this with your meeting registration.

I have been to several USUS meetings around the country and have found them to be both enjoyable and informative. Attendees are a mix ranging from super-expert to novice, and a great deal of informal discussion and assistance takes place. The national meeting held in Washington two years ago was well-attended and resulted in the formation of a USUS Local Users Group here, which is still going strong. A "LUG Lunch" will also be held this time. If you have any further questions about the meeting, please contact me by phone at (301) 445-1583 or on CompuServe at 73075,1171. I hope all of WAP's Pascal users will attend. ☞

## LETTER TO THE EDITOR

From: Adrien Youell, VP (Programs)

Dear Editor,

Re: "Glen Echo Project". Glen Echo is ripe for development and Washington Apple Pi should lead the field for acquisition of parts of Glen Echo as a Computer Arts Center. Most of our members may not be aware that Bernie Urban has 'pushed' this project for some time. Now is the time to think about our American heritage and to incorporate Glen Echo as a possible permanent Washington Apple Pi site. Bernie is the 'visionary' who sees the possible development of Glen Echo as representing all our forces; ALL our computer forces; Apple, IBM, Commodore, Atari (and Sinclair), and the performing arts. Glen Echo is a sufficiently memorable site to inspire all Arts lovers and computerists. Computerists are, after all, artists. Members, I urge you to visit Glen Echo Park and feed-back to Bernie your views of your impressions. I would be very happy to receive and annotate your views, should you wish to mail your data to me. I have an IN tray in the Pi office, which I inspect regularly. ☞

# PIG Library Reissues

by Michael Hartman

Issued recently were revised versions of four disks in the Pascal Interest Group Library. Two of these were revised to fix bugs, while the other two were updated to work with the 1.2 release of Apple // Pascal.

On PIG0:, ATTACH/BIOS for Pascal 1.1, a documentation error in the ordering of the UnitStatus call's parameters on the stack was corrected. Note that this disk is supplanted for Pascal 1.2 by the Apple Workbench product Apple // Pascal Device Support Tools. However, while the UnitStatus call stack is documented correctly on page 19 of that manual, the original mistake is repeated on page 90. For those writing device drivers, some example code is contained on PIG0: which does not appear in the Workbench manual.

As mentioned in the January 1985 WAP Journal, there was a bug in the PascalZap program on PIG4: which prevented patching in values between \$01 and \$0F. That bug has been corrected on the PIG4: reissue.

The new release of PIG2: contains a different version of Tom Woteki's MiniFiler program. The program is now a UNIT which can be called by your own programs, and it also will run under Pascal 1.2 or 1.1. To use the program under 1.1, you must change the value of the CONSTANT *maxunit* in Filer.Text from 20 to 12 (as documented in the program). In order to update MiniFiler for version 1.2, I traced through the 1.2 System Global variables. It appears to me that the only difference between the 1.1 and 1.2 Globals up to the Unit Table is the growth of that table by 8 entries and an offset in the Globals' starting address, which is different for the 64K and 128K systems of 1.2. Thus most programs which use absolute addresses under 1.1 to access System Global variables can be made to run under 1.2 by adding an offset to the addresses. For an excellent method of locating the starting address of the Globals, see the FUNCTION FindGlobals, written by John Stokes, which is used in the new version of MiniFiler.

Lastly, John Stokes provided a version of his NewRoot program on PIG11: which works with both Pascal 1.1 and 1.2. This originally appeared in the WAP book Perfect Pascal Programs. The program on the new PIG11: includes some modifications of my own to make NewRoot more compatible with Volition Systems' Modula-2 package. Unfortunately, I managed to place the penultimate version of the source code on the library master disk, and it produces a compiler error. Just change all references to the VARIABLE *VPoint* in the FUNCTION FindGlobals to *VersaPoint* and all will be well. (This error will be corrected shortly.)

A few weeks ago I discovered one other PIG Library bug. On PIG5:, the PROCEDURE DOS\_Read in the file DOSIOIN.Text should use modulo 128 of the ordinal value of the DOS file character {CH := Chr(Ord(P^.FBUFP.PTR^[0]) MOD 128);}. Most Pascal I/O procedures mask the high bit of a character, so not doing this usually makes no difference, but problems will result with control characters and in some other situations. If you have any other PIG disk bugs to report, please contact John Dyer, the current PIG Librarian. ☞

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# THE BEST OF THE WAP ABBS

by Brian Mason

From WP6836 To ALL 07/25 ProDOS SmartCom I

I recently bought a copy of the Hayes Smartcom I communication software that supports ProDOS. I have been having some problems with the cursor stalling in the middle of text when I am trying to read messages on this BBS and others. Does anyone else out there own this particular software and, if so, is it giving you trouble. I've run the DOS 3.3 version without any problems and think that the software may have a bug. I am using the software with a Hayes Micro-Modem //e. Thanks for any help you give me. \*\*Bob T. WP6836\*\*

From WP4795 To:WP6836 07/26 SmartCom I ProDOS

Are you running Smartcom (PD) on an "enhanced //e"? The old 3.3 Smartcom started giving me extra and random cursor blocks on the screen at the left margin. The company said they were working on a solution but could offer no fix at that time. Does your cursor stall, then restart by itself? If that is the case it may be the software holding up for the sending computer or its software (provided the cursor restarts). In any case you may want to consider getting a better terminal program (ASCII EX in PRODOS gets my vote) that will work with the MM //e. If you want any further information of ASCII EX give me a call. Bob Wood WP4795..

From WP2513 To ALL 07/26 Northeastern Software

Now for the other side of the coin - a company that did good for once. Northeastern Software (ads in A+) have great service and large inventory. I ordered Softerm //e from them last Saturday, & received it in the mail on the next Thursday! 45% off retail too. Give em a ring on their 800 # sometime. Chris Schanzle

From WP3544 To ALL 07/28 Best Buys

Msg 171 recommending Northeast Software for best buys provides type of information we should be sharing on a continuing basis on this board, in the Pi, and at monthly meetings. Along same line: -is Frederick Computer sale price of \$1310 best buy for //e system (128K; duo drives; monitor)? Meanwhile let's have more info on where to get the most for the least.

From WAP713 To:WP3544 07/29 No, It Isn't

Eli, I kinda doubt that \$1310 is the best price for a //e. Frederick is reasonably priced, but I think that if price is your chief concern, you might get the setup for less. For example: Harmony Video (cf. New York Times) has //e & 1 drive for ^\$750, 2nd drive from VF Assoc. for ^150, Ramworks card from VF or elsewhere ^150, and monitors vary (70-150). Good luck, Sam WAP713

From WP5994 To ALL 07/28 Best Buys

Two more good sources for cheap software - very fast service are: Silicon Express in Columbus, Ohio at 800-228-0755 has slightly lower prices on some items than Northeastern and Software Discounters of America in Wildwood, PA - 800- 223-7784 - has some items not available from the other two places. -Glen

From WP5963 To:WP5994 07/29 Good Buys

Have to agree with Msg 179'S endorsement of Operant Systems. It's local (Langley Park, MD), reasonable, and best of all, run by someone who's reputable. Don Kline (WP5963)

From WP3274 To ALL 07/31 Great Dealers

Re the subject of great dealers, let me highly recommend Programs Plus, of Stratford, Conn. They have low prices, fast delivery, wide selection and good support. They're the main competitor of the aforementioned Northeast Software (same town). And my own opinion is that Programs Plus has a slight edge. -- Walt Mossberg

From WAP029 To ALL 08/04 Great Dealers

I had a somewhat different experience with Programs Plus of Stratford, Conn. I called and ordered a Thunderscan and they told me it would be shipped the next day. Two weeks later the charge appeared on my credit card but no Thunderscan. When I called, the person was unable to tell me if they had shipped it but promised to call me back. No one did. On the second call the person told me that there was a 3-week delay and the first person should not have told me it was to be shipped the next day. Three weeks after the original order it did arrive. Exercise caution in believing sales people. -- Bruce Field

From WP3544 To ALL 08/25 Best Buys

Harmony in Brooklyn appears to have lowest prices on a number of items: Shiba 1340 printer, 515; Panasonic 1093, 409; Apple IIE with single drive, 780; Amdek 300 monitor, 107. Has anybody had any experience with them/are they reliable? And if indeed these are lowest prices in country, should they not be target for WAP group buying program?

From WP5963 To ALL 07/26 Kyan Pascal

I'm looking for a Pascal compiler and would like to know if Kyan Pascal would be suitable for Apple //e. Any comments or comparisons with Apple Pascal would be appreciated. -- Don

From WP1095 To:WP5963 07/26 Get Turbo

With CP/M cards going for \$100 or less it would be advisable to look very seriously at Turbo Pascal. It certainly has Apple Pascal beat hands down, and it's hard to believe that a better Pascal is on the market without the word getting out pretty fast. Turbo is, I think, more of a "standard" now than any other version, since it is also sold for MS/PC-DOS.

From WAP208 To:WP5963 07/27 Pascal Compiler

If you need a good Pascal compiler and have a CP/M card, then check out the Borland Turbo Pascal package. Excellent software and has the advantage of being transferable to MS DOS machines. Theron Fuller.

From WP4795 To:WP5963 07/27 Pascal Reply

Don--are you aware that according to some publications Apple plans to release a interpretative version of Pascal about 1 Sep 85 with a cost (est) of \$140.00? Bob Wood

From WP6095 To ALL 07/25 Convert ][+ to //e!

The following message was lifted from another board in the area and it could be interesting: A new card by Checkmate is coming that is supposed to replace the 16K card in slot 0 providing complete compatability with all //e-//c software. The card is supplied with 64K of onboard RAM and is expandable to 3/4 MEG (768K). The card is being distributed by Colorado Software Connection (303-756-8819) and will be available for shipping on September 1, 1985. The cost is  
contd.

# Operant Systems

## --- HARDWARE ---

### PRINTERS---

|                                                              |         |
|--------------------------------------------------------------|---------|
| Epson FX-85 (160 cps, upgrade of FX-80).....                 | 359     |
| FX-185 (wide carriage version of the above).....             | 509     |
| LX-80 (replaces RX-80—call for specs).....                   | 249     |
| LQ-1500 (200 cps, fantastic letter-quality mode).....        | 949     |
| Okidata 192 (replaces Oki 92—call for specs).....            | 359     |
| 193 (132 column version of above).....                       | 519     |
| Toshiba 1340 (144 cps draft, BEST letter-qual matrix).....   | 559     |
| 351 (288 cps, wide carriage version of above).....           | 1149    |
| Texas Instruments TI-855 (150 cps draft, 35 cps NLQ).....    | 675     |
| NEC P2/P3 Pinwriter (180 cps, high quality matrix).....      | 519/725 |
| Citizen MSP 20 (200 cps matrix, 18 month warranty).....      | 435     |
| Panasonic 1091 (120 cps, Epson compatible).....              | 259     |
| Gemini 5G-10 (120 cps, same features as Epson MX).....       | 249     |
| Powertype (18 cps daisywheel).....                           | 335     |
| Quadram QuadLaser (8 pages/min, based on Canon mech).....    | 2495    |
| C.Itoh F-10 Starwriter (40 cps, office quality).....         | 849     |
| F-10 Printmaster (55 cps, same as above).....                | 1049    |
| Silver-Reed 550 (18 cps daisywheel, BEST at this speed)..... | 439     |
| NEC Elf (16 cps, par & ser interface, NEC/Diablo eaul).....  | 439     |
| 8830 (55 cps daisywheel, built like a tank).....             | 1399    |
| Diablo 630 API (40 cps daisywheel).....                      | 1549    |
| Que LetterPro 20 (20 cps daisywheel).....                    | 419     |

### MODEMS---

|                                                              |     |
|--------------------------------------------------------------|-----|
| Hayes Micromodem J1e (tone dialing/speaker/Smartcom I).....  | 145 |
| Smartmodem 2400 (2400/1200/300 baud, RS-232).....            | 595 |
| Smartmodem 1200 (1200 baud, RS-232, auto-dial).....          | 389 |
| Smartmodem 300 (300 baud, as above).....                     | 145 |
| Novation Apple-Cat II (w/ Coware; 1200 baud capable).....    | 199 |
| Smart-Cat 300/1200 (RS-232, auto-dial/answer).....           | 389 |
| Prometheus Promodem 1200 (300/1200 baud, RS-232).....        | 309 |
| Promodem 1200A (300/1200 card w/ software).....              | 299 |
| Microcom ERA 2 (300/1200 baud card with software).....       | 345 |
| ZoomModem J1e (300 baud Microcom compat w/software).....     | 125 |
| US Robotics Password (300/1200 baud, auto-dial/answer).....  | 239 |
| Courier 2400 (2400/1200/300, autodial/ans).....              | 449 |
| Anchor Automation Express (300/1200 loaded w/ features)..... | 289 |
| Volsmodem 12 (300/1200 baud, RS-232).....                    | 199 |

### DISK DRIVES---

|                                                |        |
|------------------------------------------------|--------|
| MicroSci A2 drive (100% Apple-compatible)..... | 169    |
| A.5 (half-height, 100% Apple compatible).....  | 169    |
| A.5c (half-height for Apple J1c).....          | 169    |
| Corvus Winchester drives.....                  | (call) |

### CP/M & 6502C SYSTEMS---

|                                                              |     |
|--------------------------------------------------------------|-----|
| Applicard (6 Mhz Z-80, 64K to 192K RAM, 70-col video).....   | 249 |
| Microsoft Softcard J1e (Z-80, 80 col & 64K on one card)..... | 265 |
| Softcard II (includes CP/M 2.2 and M8A51C).....              | 239 |
| Titan Accelerator J1e (3.6 Mhz 6502C coprocessor).....       | 209 |
| Speed Deon (6502C high-speed coprocessor).....               | 229 |
| Applied Engineering Z-Ram (256K, CP/M, readisk for J1c)..... | 365 |

### MONITORS---

|                                                              |         |
|--------------------------------------------------------------|---------|
| Adek 300G/300A (12" green/amber anti-glare, 18Mhz).....      | 125/139 |
| NEC JB-1201/1205 (green/amber anti-glare screen, 20Mhz)..... | 145     |
| JB-1260 (12" green, 15Mhz, best value for money).....        | 99      |
| USI PI-2 (12" green anti-glare screen, 20 Mhz).....          | 125     |
| PI-3 (12" amber anti-glare screen, 20 Mhz).....              | 125     |

### INTERFACES & BUFFERS & CLOCKS---

|                                                               |     |
|---------------------------------------------------------------|-----|
| Pkaso/U printer interface (superior graphics & more !!!)..... | 99  |
| ShuffleBuffer (32K—128K w/cut & paste/ser and par).....       | 269 |
| Grapplet+ printer interface (parallel w/ graphics).....       | 85  |
| Buffered Grapplet+ (16K to 64K buffer plus graphics).....     | 149 |
| CCS 7711 Super Serial (for printers & modems).....            | 99  |
| Practical Peripherals Graphicard (parallel w/ graphics).....  | 79  |
| ProClock (PRODOS compatible).....                             | 109 |

### VIDEO BOARDS---

|                                                              |        |
|--------------------------------------------------------------|--------|
| Videx Ultraterra (160 column/48 row display !!!).....        | (call) |
| Videtera (80-column w/ softswitch & inverse).....            | 215    |
| MicroSci 80-col card (w/64K RAM, AppleWorks-compatible)..... | 95     |
| Applied Engineering Viewmaster (Videtera on a budget).....   | 119    |
| Rasworks (64K to 1 meg w/80-col).....                        | 139    |

### MEMORY EXPANSION---

|                                       |     |
|---------------------------------------|-----|
| Microtek 16K RAM card.....            | 79  |
| Titan Technologies 128K RAM card..... | 199 |

## --- SOFTWARE ---

### WORD PROCESSING---

|                                                       |       |
|-------------------------------------------------------|-------|
| Wordstar 3.3.....                                     | 199   |
| ScreenWriter II (40/70/80 col display w/speller)..... | 85    |
| Bank Street Writer or Speller.....                    | 45    |
| pfs: Write J1e.....                                   | 79    |
| Pie Writer 2.2.....                                   | 99    |
| HomeWord / HomeWord Speller.....                      | 49/35 |
| Sensible Speller IV (DOS or PRODOS versions).....     | 79    |
| The Word Plus (super spelling checker for CP/M).....  | 95    |

### SPREADSHEETS---

|                                                      |     |
|------------------------------------------------------|-----|
| Multiplan (state-of-the-art spreadsheet).....        | 70  |
| SuperCalc 3a (powerful spreadsheet for the J1e)..... | 135 |

### INFORMATION MANAGEMENT---

|                                               |     |
|-----------------------------------------------|-----|
| dBASE II (w/ ZIP screen generator).....       | 289 |
| pfs: File, Report, or Graph.....              | 79  |
| The General Manager 2.0.....                  | 149 |
| Thinktank (electronic thought organizer)..... | 95  |
| DB Master 4+ (latest version).....            | 185 |

### BUSINESS & ACCOUNTING---

|                                                |                |
|------------------------------------------------|----------------|
| Dollars & Sense (accounting w/graphics).....   | 69 & 79        |
| Peachtree Peachpak (GL/AR/AP).....             | all three: 229 |
| Back to Basics Accounting (GL/AR/AP) each..... | 59             |
| BPI Accounting (GL/AR/AP/PAY/INVENTORY).....   | 245            |

### COMMUNICATIONS---

|                                                       |    |
|-------------------------------------------------------|----|
| Ascii Express Professional (for DOS 3.3).....         | 80 |
| Z-term Professional (for CP/M).....                   | 90 |
| CompuServe Starter Kit (password & 5 free hours)..... | 25 |

### LANGUAGES---

|                                        |     |
|----------------------------------------|-----|
| Microsoft TASC Applesoft compiler..... | 119 |
| Fortran-80.....                        | 125 |
| Terrapin Logo.....                     | 65  |

### ODDS & ENDS---

|                                                              |    |
|--------------------------------------------------------------|----|
| Kensington System Saver Fan (w/surge protector).....         | 66 |
| Kraft Joystick / TG Joystick / Hayes Mach III. 35/35/39..... |    |
| KoalaPad Graphics Tablet (with graphics software).....       | 85 |
| Flight Simulator II.....                                     | 36 |
| Print Shop.....                                              | 36 |

|                                                              |      |
|--------------------------------------------------------------|------|
| Filevision (graphics database system).....                   | 119  |
| Odesta Helix (database for the serious user).....            | 249  |
| Dollars & Sense (accounting w/graphics).....                 | 95   |
| Microsoft Word (what MacWrite should have been).....         | 125  |
| Chart (presentation business graphics).....                  | 85   |
| File.....                                                    | 125  |
| Basic (new version).....                                     | 99   |
| Multiplan.....                                               | 125  |
| MacEnhancer (has the ports Apple forgot).....                | 175  |
| Lotus Jazz (word proc, database, graphics, more) (call)..... |      |
| Assiilation Process Mac Memory Disk.....                     | 24   |
| Ionaga Bernoulli Drive (5 MEG removable cartridge).....      | 1349 |
| MacLion (programmable database for Mac).....                 | 239  |
| MacForth Level II.....                                       | 169  |
| Hippo C.....                                                 | 99   |
| Kensington MacModem (300 baud).....                          | 99   |
| Surge Protector (replaces power cord).....                   | 39   |

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From WP1333 To:WAP519 07/28 DOS Patches

Lee (and others with large files): The patches in the next two answers are from Call A.P.P.L.E. In Depth:All About DOS. They correct the bugs in DOS that will not append to files larger than 32767 bytes and also prevent large files from listing correctly when cataloged. The code should be typed into the monitor and then a new disk initialized. The first patch corrects the append bug:

B33E: 18 AD BF B5 8D EC B5 6D E6 B5  
B348: 8D E6 B5 AD C0 B5 8D ED B5 6D  
B352: E4 B5 8D E4 B5 90 03 EE E5 B5  
B35C: 60

The next patch corrects the catalog string for files over 255 sectors. Presently DOS starts over again, but with this patch, the correct count will be shown. This is also from Call A.P.P.L.E. In Depth, p. 197:

AE42: A0 02 A9 B0 48 A5 44 D9 A4 B3  
AE4C: A5 45 E9 00 90 10 85 45 A5 44  
AE56: F9 A4 B3 85 44 68 18 69 01 48  
AE60: D0 E5 68 20 ED FD 88 10 DB 60

The following patch goes with the above to correct VOL # listing:

ADAE: A2 0C BD AE B3 20 ED FD CA D0  
ADB8: F7 86 45

Now with all three patches, you can append and catalog large files.

From WP4609 To ALL 07/25 AE File Mismatch

After reinstalling my AE PRO, I find that I can't save a file. Instead, a message shows that says FILE MISMATCH. Did I install it improperly? Thanks.

From WAP208 To:WP4609 07/25 File Mismatch

Usually when you try to save a file to a disk and you get the dreaded "FILE MISMATCH" error, this means there is already a file on the disk, but it is not the same type as the one you are trying to save. So, instead of wiping out the original file and writing the new one, DOS or ProDOS tells you that you already have a file of that name, but a different type. If you don't already have a file with the name you're trying to save, then something is wrong with your AE PRO disk, or the AE PRO program itself. Try copying all the AE PRO files to a freshly initialized disk and see if that solves the problem.

From WP3195 To ALL 07/3 Flaky Duo-Disk Drive

A little while ago there were several msgs re' flaky Duo-Drives. One of the last msgs on subject (I think) gave the ident of the "bad chip". Could someone repost the chip number?

From WAP582 To ALL 08/01 Bad Duo-Disk Chip

The flaky chip on the DuoDisk is the 3141, ver 318 or 310. If you think you have a bad one you might check with Clinton Computer because they replaced a bunch of them for Mont. County schools and probably have them in stock. I don't know the chip coordinates but I believe it is the 2nd chip from the front of drive in right most row. ---Chuck

From WP2754 To ALL 07/31 //e-->LaserWriter

Has anyone ever done this. I have a Laserwriter hooked up to my Mac and I'd love to use it on my //e. The connection looks simple enough, but do I need any special software to run it (written in Postscript?) What progs if any support the Laserwriter. <>Marco<> <>WP2754<>

From WAP582 To ALL 08/01 //e & LaserWriter

The serial port on Laserwriter emulates a Diablo 630 daisywheel printer. This printer is supported by most word processors. I have never hooked one to a //e but I think all you need is a serial card that supports X/ON-X/OFF handshaking. I don't know if there is any way to support graphics from the Laserwriter serial port. ---Chuck

From WP3797 To ALL 08/02 //e & LaserWriter

Don Lancaster has an excellent article on Apple Writer and the LaserWriter combo. Has put together a utility package, too. See this month's Computer Shopper. Claims to blow away Mac. Tom Vier

From WP3794 To ALL 08/02 Warn ProModem Users!

Warning! Promodem users with OPU must never inadvertently hit "A/" just after a power on! It can wipe out your directory! Either by deleting it or making it up to ?K's worth of garbage! Guess how I found out..... -Tom Vier PS. Yes, I had a backup.....

From WP4725 To ALL 08/06 Help Micro Org 64K

I bought a new Micro Orange buffer 64K using //e + Oki 92. Unable to stop printer without stopping system? I can get print of catalog, then system locks up totally until I turn printer off? I'm not familiar w/card but have 64K Prac Peripheral card which works great! Very disappointed with this card! Can you help?? Ready to return card! Joe 301-247-4598

From WP2243 To:WP4725 08/07 Org Buffer (R)

Joe, Same type problem here. Can't 'flush' the buffer short of turning the whole system off. Next time, I'll know to stick to the 'stand alone' buffers that can be flushed without turning the world off. Brett

From WP2383 To:WP4725 08/09 Buffered Grappler??

Joe: I have the buffered Grappler and I think it's great. Don't get rid of it. If you are in the middle of a download to the printer and you want to stop the printer just take the printer off line with either the on/off or the deselect switch and empty the Grappler buffer (see page 19) of the instructions by pressing <Ctrl>-Reset ([I+] or Reset (/e) for two seconds. If your printer has a buffer, like mine does (Panasonic 1092) you must use the on/off switch for your deselect. Hope this is of aid to you. You will love the buffer. It really saves you time and allows you to keep moving while the printer is printing. Gary Hayman

From WP2243 To:WP3797 08/19 Reset (R,R)

Tom, yepper, that works....Did not look like it had, due to the 2K buffer in the F-10 Starwriter, but sure 'nuf, it stopped in a second or two. Thanks a lot. Brett

From WP2208 To:WAP029 08/11 A'Wrrr Patch for ^@

Bruce - I just tried the patch for Apple Writer //e to send nulls that you passed on in your Aug. Q&A column. It didn't work ... and made A'writer un-bootable. - Richard

From WP2208 To:WAP029 08/19 Apple Writer Patch

Bruce; I retried the A'writer patch on my DOS 3.3 disk ...this time it worked. Problem was, and still is, it doesn't work on my working copy of A'writer which is already patched to use a clock card. So now I have two A'writers ... one that can send nulls and another that can tell time. Guess one can't have everything, or at least all on the same disk.

From WP1095 To ALL 07/27 WordStar Help!!

I just bought WordStar semi-used from WAP member. It contd.

works fine except for one glitch on my ][+: the shift key mod patch supplied by Micropro maps shift-M into ']' instead of 'M', contrary to the manual. Anyone else out there had this problem with rev. 3.3? There ought to be a patch, though it isn't simple since they don't use the normal BIOS route for keyboard input.

From WP1095 To ALL 07/30 WordStar 3.3 Bug

Thanks to all that volunteered replies regarding the shift-M (]) bug. I examined the code, at \$4885, and indeed Micropro made an incredibly stupid and ignorant blunder in the code. How many users of rev. 3.3 are putting up with this nasty problem? (Has any registered owner ever received a notice or upgrade to this problem?)

From WP6836 To ALL 08/15 Messaging Software

I read recently that there was software available that would let you operate a remote computer via modem. I have an IBM at work and an Apple at home. If I understand the articles correctly, I could set the IBM up with this software to receive an incoming call from my machine and I could then access and run files resident in the IBM. Does anyone out there have any experience with such software. Can you recommend software that will accomplish this? Could I, for example, access Symphony on the IBM and run it from my Apple? Could I access word processing documents, edit them on-line and save them back into the IBM's files? Thanks for any info on this. Bob T. WP6836

From WP4893 To:WP6836 08/15 Apple to IBM

I don't know why anyone would want to talk about IBM (yuk!) on this board, but here goes: You can use something like Crosstalk by Microstuf on the IBM. It allows access to most DOS commands from a remote (e.g. Apple) computer. You can move files back and forth, but cannot run IBM's Symphony remotely. You can, however, play with Symphony's files. John V. WP4893

From WP1755 To ALL 08/17 Remote Use of IBM

Whoever sent the request about dialing in and using the host IBM PC, Microstuff makes a program called Remote that allows you to do that. It is like you were there, at the keyboard.

From WP4422 To ALL 08/18 Dollars & Sense

I'm throwing in the towel on this software! It has a nasty habit of giving me mysterious little messages like "Error 64 - - See Manual" (when there's no reference in the manual to error codes) and then nonchalantly informs me that my data disk (which contains the last 11 months worth of data) is "probably" destroyed. A further neat device is that the errors which apparently cause this to crash are duplicated on the back-up disk, without warning. I used to think this was a hardware problem (with my disk drives) because the program is in Pascal and "sensitive" to weird drives. But this has happened too often now. Has anyone else had problems with this program?---Mike

From WP4795 To:WP4422 08/19 \$ & Cents, Don't (R)

My experience with Dollars & Sense goes back over a year (84 & 85). I had an almost identical thing happen - had the program appear to "trash" a disk, then program would not boot and gave me a error. I called Appicare and took my drives in (I thought it was the Duodisk drive and the repair people could not find any problem with the drives but replaced them.) I wrote to the company and got a replacement disk (ver III). Since that time I have not had any problems with the program. It gave me a big scare as I did not know which was at fault (the program or the hardware). Since that time I feel it was the program. I have been able to copy the program for back up purposes and I am still using it. Bob Wood....

From WP6836 To:WP4422 08/19 Dollars & Sense (R)

I have Dollars & Sense and, while I have not had the problem you describe, my manual does explain Error 64. If you get this message, the manual instructs you that this is a "bad disk format" error. It says to reboot the disk. If the problem persists, it could be due to: 1) drive alignment and/or speed problem; 2) try switching drives with a two-drive system; 3) disk medium is bad. The manual says that if the error is recurrent, you can assist the Monogram technical staff by doing the following: 1) notice which disk is being read or written to when the error number occurs 2) identify at what point in the program the error occurred and the steps involved in reaching that point; 3) call tech support at (213) 215-0529. I hope this helps. Bob T. WP6836

From WP2851 To ALL 08/19 Modem Problem

I have a Promodem 1200, Apple //E, and Super Serial Card. Cannot use printer while in terminal mode. When using AE PRO, the ^Q followed by P, just uses the system to hang up. MDM740 also give similar results. Desperately need help.

From WAP580 To:WP2851 08/20 Printing/AEPRO

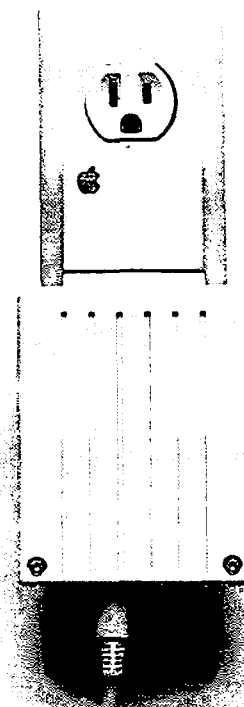
Your problem could be caused by what printer card you have. Are you running a printer driver and specified such in the install program of AEPRO? I would also change your terminal escape key from Ctrl-Q to something else, like ESC, Ctrl-Q might be reacting with the 80-col card.

From WP3797 To:WP2851 08/20 Super Serial/AE PRO

I suspect that you do not have the dip switches set correctly on your SSC. Specifically, the one to inable interrupts. SW2-6 should be on. This allows the program to gather incoming data while waiting for the printer. I assume the printer is online (not deselected) and works otherwise....-Tom Vier PS. "hangs" machine, not phone line, right?

From WP5139 To:WP2851 08/22 Modem Problem (R)

Try looking at the parameters for your installation. Also try using the printer with the modem set at 300 vice 1200. I have same set-up but with ][+ and have found that it is easiest for me to simply save data in buffer (^Q R) and then print out off-line. Hope this helps you. Jack Mortimer



# MAC Q & A

by Jonathan E. Hardis



## Mac Section

**Q:** C'mon now, when will the Switcher actually be available to us?

**A:** It's available now, on SigMac disk 25. This is version 4.4, which will be the release version. But by jumping the gun a bit, the SigMac disk doesn't have the benefit of the final version of the instructions. Apple dealers should have Switcher (with instructions) on their shelves in late Fall for \$19.95 (suggested retail). It should also appear sooner, bundled with other products such as Microsoft's Excel. Apple has referred to Switcher as a "Publically Available" (as opposed to public domain) program. So the terms of the software license may turn out to be more liberal than other, commercial programs.

**Q:** Using MacWrite, version 4.5, when trying to open large documents created with version 2.2, I get a message that the disk is full. Since it has lots of space on it, how do I continue?

**A:** It can be done, though I forget the exact recipe. Try it with MacWrite on the other disk (internal vs. external), and try a large block of free disk space on each disk. (You may need to make a thinned out copy of the MacWrite/System disk by deleting fonts, DAs, and unused files such as the Scrapbook.)

**Q:** Will using a RAM disk help or hurt in cases like this?

**A:** There is no way to predict in advance, for a particular version of a given program, what combination of (1) space on the internal or external or RAM disk, (2) memory available to the program (as opposed to the RAM disk), and (3) placement of the various files on the disks will get you out of a tight situation. There is no substitute for trial and error - except that once you find a magic combination, let me know and I'll include it in the column.

The knowledgeable user should watch for cases where a disk gains special significance because of a file already on it. Sometimes the "same disk that has the document on it" is important. Other times, it is "the disk that has the application on it". Most commonly, "the disk that has the System file on it" has special significance. Further, one disk is always the "default disk". This is the one that first comes up when you get an Open or Close dialog. You can change the default disk (and possibly alter the behavior of an application) by selecting Open or Close from the menu, pushing the Drive button until your desired disk appears, and then Canceling out of the dialog. There are also desk accessories, such as DiskInfo, which allow you to change your default disk.

There is no way to predict how long a given disk remains the default. The application can change it behind your back, when you're not looking. In the course of their work, applications have to reference files you might not think about, e.g. the Imagewriter (or LaserWriter) file (a.k.a. the Printing Resource), the "Spool" file (used for holding, temporarily, print paper images), the Scrapbook, and so on. Some applications are very rigid about which disks they look at when

trying to find or create files, and sometimes they change the default while trying.

All of this is not to evade the question. Studying the detailed behavior of a program, such as MacWrite 4.5, takes time. If you, the reader, take the time to look into it, you can find your name and your conclusions in print in a future column. Please!

**Q:** PageMaker seems to allow you to paste-up 16 pages at a time. How is this possible within the constraints of disk space?

**A:** Bernie Urban, Editor of this Journal, recommends that you ignore the 16 page feature, and just paste-up the articles or pages one by one. That's how the Journal is put together.

**Q:** Anything new in the world of Publishing software?

**A:** Yes. At MacWorld Expo in Boston, the second versions of MacPublisher and Ready-Set-Go were announced. Microsoft has entered the competition with Typographer.

**Q:** Is there any new information on non-Apple memory upgrades? Have any been "blessed"?

**A:** Absolutely not. Informed sources on CIS/MAUG™ are currently suggesting that a "Macintosh-II" will be announced at the January stockholders meeting. Present owners will be offered an upgrade package consisting of the new ROMs, a new and improved motherboard with additional "features", and even (one report suggests) a new back cover (hint, hint!). If you have altered your present motherboard, the package will cost you a premium. (The extra cost may not be "unreasonable".) The *only* way to get the new ROMs will be via this board swap.

If any company represents to you that their upgrade is "just as good as Apple's", that you won't be disqualified for service or upgrades, or that Apple approves of their product, get those claims in writing. You may also want to telephone Apple's customer service line for verification.

**Q:** I have an old Hyperdrive? What about me?

**A:** General Computer intends to have their ROM update package at their dealers before Apple delivers theirs. You will be offered a combined upgrade.

**Q:** A while back, WAP was shopping for digitizers. What is the current status?

**A:** The committee had good opinions of Magic and ThunderScan. The former captures any standard television image, while the latter works only off of paper. While slow, ThunderScan gave good results.

Even though none have been purchased for the office yet, Kevin has been known to let people use his ThunderScan if they ask him nicely.

**Q:** Where are the error numbers that show up on  
contd.



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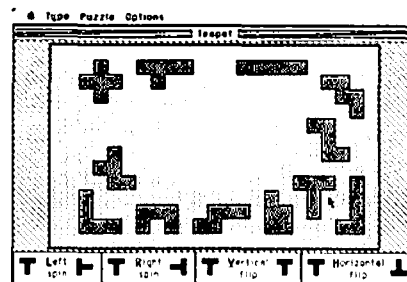
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the Bomb Dialog explained?

A: Both Macintosh Revealed (both volumes now at Crown Books) and Inside Macintosh have tables of what the codes stand for. However, unless you are familiar with how the application was programmed, they likely won't mean much to you. (For example, a bad bug in MacinTalk causes a divide-by-zero error. Knowing the error code stands for that doesn't help you.) Additionally, some applications add their own unique and undocumented error codes to catch internal errors. The Font/DA Mover bomb on 128K Macs is of this category.

Q: Is the Font/DA mover fixed yet?

A: Within Apple, version 2.3 fixes the known bugs. I don't know when or how they plan to release it.

Q: Speaking of unreleased software, when can we expect to see MacBasic?

A: Never. While the "product" was finally finished, the rights to it were sold to Microsoft. The Basic used in the Apple-// series is licensed to Apple by Microsoft, and they used this as leverage. I don't believe that either company wants MacBasic to see the light of day any more. And no, it is not now in the Public Domain.

Q: How will the new ROMs affect what's covered in Inside Mac and Mac Revealed?

A: It's hard to say, as the ROMs are currently Rumored Only Memory. Most of what is documented is likely to remain unchanged, with a major exception being the file system. If you are currently writing programs, don't lose any sleep over the differences. It remains to be seen what will be called ROM bugs and fixed, or called documentation bugs and not. There will likely also be some new functions added that will need to be documented somehow.

Q: Is there any hope for using the new AT&T memory chips in the Mac to get to 2 Megabytes?

A: If you mean, can I replace the 256Kbit RAM chips (in a 512Kbyte Mac) with the AT&T 1024Kbit chips in the same way the 256Kbit chips replaced the 64Kbit chips (in a 128Kbyte Mac), no. However, if Apple decides to market a Mac with more memory, they could do so at any time, using either the AT&T chips or more of the other kinds.

Q: How can I get schematic diagrams for the Mac?

A: Some of the third-party upgraders, such as Beck Tech, are beginning to publish what they've reverse engineered. Scan MacWorld for ads. (Beware of mistakes in these, though.) Also MacMag, a Canadian magazine sold in the U.S. too, began a series of articles, each with a piece. You can order the whole set from them directly for \$25 (Canadian, less in U.S.\$). Write: MacMag Ltée, 3743 rue Notre-Dame Ouest, Montréal, Québec, Canada H4C 1P8, (514) 935-2381.

Q: In my office, we use both IBM-PCs and Macs for word processing. How do we share the work?

A: The only software I know of on either machine that reads a formatted document (file) made on the other is Microsoft Word on the Mac, which reads Word documents from the PC. Other

than this one-way street, all documents edited alternately on both machines are limited to plain (unformatted) text.

To exchange files between the two machines, you could use AppleTalk and PC-Mac bridge, you could run communication programs (such as MacTerminal and PC-Talk) on the respective machines, or you could get a MacCharlie, which is alternately called a total waste of money or the best foot-in-the-door for the Mac, depending on the situation (try before you buy). Dennis Brothers recently noted that he bought a \$300 peripheral for his Mac that can read and write MS-DOS disks. It's called a "PC-Jr". (He runs communication programs on each machine, which are connected by a cable between their modem ports.)

With the Amiga advertising a feature to simulate a PC, can software simulation of the PC on the Mac be far behind?

Q: Forget the PC. How do I get files between the Mac and my Apple-//?

A: The problem here is that "binary" file transfer, the straight byte-by-byte copying of file images, is the wrong thing to do. (XMODEM is in this category.) On the Mac, the 8th bit (the high order bit) of characters are normally zero, except for some special characters which require a one. Under DOS 3.3, the 8th bit is always one. You should run communication programs on each machine, and just do a straight ASCII text capture on the receiving machine. At the meeting, SE Software's //Mac transfer program was given good recommendations.

Additionally, Apple has just announced the "800K", double-sided, 3 1/2", Mac-style disk drive for the // (\$568, Suggested Retail). Since we will soon be able to plop // disks directly into the Mac, can better tools be far behind? (Want to see the Mac simulate a //?)

Q: What other new products have been announced?

A: Most significantly, the 20 Meg Hard Disk for the Mac. It sits under the Mac (like a MacBottom), connects through the external disk port (and gives you another disk socket back, for a floppy, another hard disk, or a yet-unannounced backup tape drive), transfers at 500Kbit/second, and has a 85 msec average access time. It spins up in 15 seconds, and will automatically boot the Mac when you get the new ROM, too. Until then, you need a special floppy "boot disk", which installs the new hierarchical file system in RAM. In the new file system, the Folder serves as the subdirectory of files (to use the VAX term), replacing the multiple volumes used in current hard disk schemes. First dealer shipments start in about a month, with an allocation of two per dealer per month until production is expanded in early 1986. Suggested retail is \$1499.

Also, the Imagewriter-II replaces the current narrow-carriage Imagewriter. 250 chars/sec draft mode, 45 char/sec "letter quality". It comes with a four color ribbon (black, magenta, cyan, and yellow, which are the primary colors for pigments (cyan+yellow=green, for instance)). \$595 is suggested. There is an optional \$225 single sheet paper feeder, and an optional \$99 32K built-in print buffer. An optional AppleTalk card is in the works.

contd.

**Q: Will Thunderscan work on it?**

**A:** Version 2.7 of the software, which is being reproduced as the official update version, will not. Andy is now working on version 2.8 which will.

**Q: Will the new ROMs really offer "true multitasking"? What about Borland's new Sidekick for the Mac which advertises it?**

**A:** With due respect for Chris Klugewicz, the Mac does about all the "true multitasking" now it's going to do in the near term. And make no mistake about it - the Mac does do multitasking *now*. Any program can spawn a "vertical interval retrace task", which is the Mac's way of doing time-sharing. These tasks each get the opportunity to run each 1/60 of a second (unless one hogs the machine for more time than that). Besides standard functions that monitor the cursor and disk insertion, a VIR task that may be familiar to you is the crawling ladybug, installed by the "System Bugs" Desk Accessory on SigMac disk 5.

Desk Accessories themselves are also a form of multitasking. They are specialized "Device Drivers", which form another class of multitasking. Sidekick consists of a central application, and DAs which work well together. (Some are Don Brown's Mock series, which you've seen before.) This is the basis for Borland's claim.

Andy Hertzfield has expressed interest in writing a version of Switcher which will do a better job of timesharing multiple applications. But really, most applications require continuous contact with the user as they run. How could you substitute for that?

**Q: Even though I checked the "Locked" box in the Finder's GetInfo window for a file, I found I could still overwrite and delete the file from within applications. Why?**

**A:** That feature is only honored by the Finder. To really protect a file, you have to slide the disk "write protect tab", and perhaps make a backup copy of it.

**Q: What happened to the XLisa Workshop C?**

**A:** It's available now for \$195 from Apple Computer, Inc., 467 Saratoga Avenue, Suite 621, San Jose, CA 95129.

**Q: What is the current status of the XLisa aspect ratio problem?**

**A:** I don't know what Apple's up to lately, but Al Hatch recommends "BitFixer" from All Star Computer Services, 760 Dolores Street, San Francisco, CA 94110 (415) 282-0540.

**QUICKIES:** If you get a sad-Mac with 0F000D under it whenever you power up your Mac, check to see that the "Programmer's switch" on the side isn't stuck in the pressed position ... Mac Sidekick (the application) requires an extra-cost telephone dialer ... Borland is working on a revision to allow your Hayes modem to dial instead ... New Hyperdrive software allows for automatic print spooling with the 20 Meg drive ... the 10 Meg will get it later ... both work on the Imagewriter only (not the LaserWriter) ... Do not use the Finder's "Set Startup" feature with the Hyperdrive ... Use the Manager's "Preferences" feature instead ... MacBottom's print

spooler won't work with the older style Imagewriter cable ... Under no condition, at no time, should you install or use a two-way switch on an output port to a hard disk ... This is a confirmed cause of damage to the circuits on at least one model of hard disk ... Fontastic comes recommended as a fine Font Editor ... Beware of glitches when using MacTracks ... As usual, thanks to the people on CIS/MAUG™ for providing information used in the column. ☺

MacAdvantage contd. from pg 66

```
type
  WindowRecord = record
    device : integer;
    portBits: record
      baseAddr: MacPtr;
      rowBytes: integer;
      bounds: Rect;
    end;
    portRect : Rect;
    TheRest : packed array[1..68] of integer;
  end;
  WindowPtr = MacPtr;
  RectPtr = integer2;

var
  ptr : WindowPtr;
  wr : WindowRecord;
  Procedure Moveto (h,v: integer); external(-22381); {A893}
  Procedure EraseRect (r: RectPtr); external(-22365); {A8A3}
  Function FrontWindow :WindowPtr; external(-22236); {A924}

begin
  Moveto(0,16); {home the writeln cursor}
  ptr:=FrontWindow;
  absmove(ptr,locate(wr),sizeof(wr));
  {move the window into Pascal's memory variables}
  EraseRect(locate(wr.portRect));
  {erase the content region of the window}
end; {PageClr}
{no initialization code}
end. {Unit FilePack}
```

#### Listing 2

```
Program Test;
uses {$U Pas2:FilePack.Code} FilePack;

Procedure InitCursor; external(-22448);
var
  s : str255;
  i : integer;
  ch: char;

begin
  Writeln('Test of OldFileName');
  InitCursor;
  OldFileName(s);
  For i:=1 to 10 do
    Writeln(s);
  Writeln('Press a key to continue');
  Read(ch);
  PageClr;
  Writeln('Test of NewFileName');
  NewFileName('This is the prompt','EditMe',s);
  Writeln(s)
end. {Test}
```



# MacNovice Column

by Ralph J. Begleiter

## Fantastic Fonts #3

If you've been following the font fandango over the past few months, you should have discovered by now the fun and flexibility of changing typesyles by using the Mac's fonts. There are a few more tips to complete the story of fonts, which I'd like to accomplish in this month's column.

Most MacNovices are probably using Mac systems with the single, internal, disk drive...and probably using the 128K Macintosh. If you're in that boat, and you've been working with your fonts along with this column, you've probably already bumped into the small-memory and disk-swap nuisances caused by the fact that fonts use up so much space.

For instance, if you're trying to use a MacWrite disk with some fancy fonts for a writing project...or (more likely), if you're trying to work with MacPaint and some large-size fonts on a single disk drive system, you've certainly run into that message from your Mac which says, "This disk is almost full..." Or, your wrists have been worn out swapping disks while the Mac copies fonts into and out of its 128K memory.

Unfortunately, these are problems which won't be completely solved until you decide to add the extra disk drive or upgrade to a 512K Mac. But, here's a little procedure which can minimize the hassle.

When you want to add new fonts to the System File on a Write or Paint disk, you can save lots of disk-swaps if you avoid copying the entire fat "Fonts" file onto that disk for the operation. Instead, separate the fonts by title, by size, or by some other convenient grouping, so that you only need to copy a much smaller "Fonts" file.

Here's how to break up that fat fonts file into smaller ones:

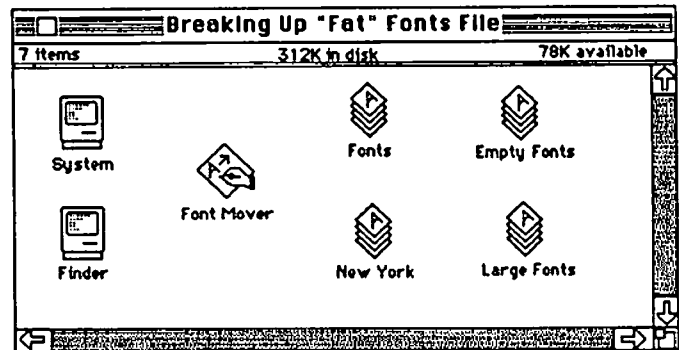
- Start with a blank disk. Copy onto it a small System File and a Finder (no need to copy the Imagewriter, Clipboard and other files found in the System Folder...just a System File and a Finder). Also copy the "Font Mover" (or "Font/DA Mover").

- Open the Font Mover.
- Now, "Copy" a single font (doesn't matter which one) in a single size (doesn't matter which) from the "Installed" section in the Font Mover into the "Fonts" file.
- Quit the Font Mover.
- When you're back to the desktop, you'll see a new "Fonts" file on your disk. It'll be a pretty small one, since it only contains one font, in one size.

Now, here's the tricky part:

- Duplicate that "Fonts" file. (Just "select" it and choose "Duplicate" from your File menu.) Now you have two identical "fonts" files on your mostly-empty disk.

- Rename those new Fonts files. Give one the name "Empty Fonts." Give the other the name of one of the other fonts you intend to "break-out" of the fat fonts file on your System Disk. (For example, call it "New York".)



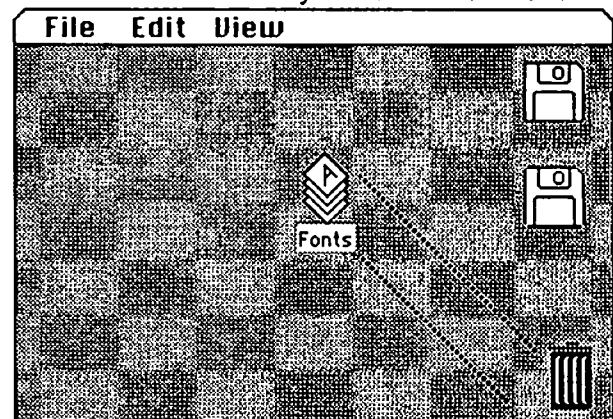
- Now, copy from your System Disk (the disk from Apple with all the fonts on it) the fat fonts file which Apple gave you with your Mac. It'll take quite a few disk swaps to accomplish that "copy" because the fat file really contains a lot of stuff.

- Open the fat "Fonts" file by clicking twice on it. This will also automatically open the Font Mover. You'll see in the "Installed" section the few fonts you already had in your small System File on the disk. In the "Fonts" section, you'll see the names of all the Apple fonts, in all their various sizes.

- "Select" all the fonts in the "Fonts" section. (Shift-click them or simply position your pointer on the first font, hold down the mouse button and drag down through the entire list of fonts. They'll all turn black, meaning they're all "selected.")

- "Copy" all those "selected" fonts into the "installed" section, which will put all the fonts into the disk's System File. After this step, your disk will be pretty full, because you've now, in effect, made a duplicate of the fat "fonts" file.

- Quit the Font Mover. Once back at the desktop, throw the fat "Fonts" file into the trash. (Don't worry, you still have the original copy on your System Disk, and you've already installed a copy of all those fonts in the System File of the disk your working on.) You're throwing away the fat "Fonts" file to make room on your disk for more work.



contd.

- Now, open the file you earlier named "New York." It will automatically open the Font Mover again. On the left, in the "installed" section, you'll see all the fonts from the fat fonts file. On the right, in the section now called "New York", you'll see only the single font you chose at the beginning when you created the file.

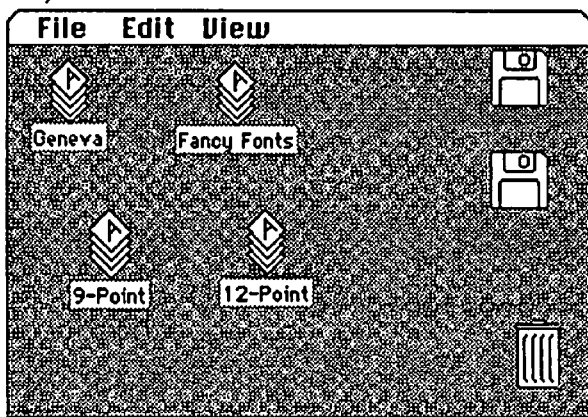
- "Select" and "remove" that lone font in the "New York" file.

- Now move your pointer back to the "installed" section and "select" all of the New York font sizes. "Copy" them into the "New York" file. Now "remove" them from the "installed" section.

- Quit the Font Mover. You'll now see the "New York" file on your disk again, but now it'll be filled with all the New York fonts, and only the New York fonts.

To continue creating new fonts files for each of the available fonts, simply "duplicate" your "Empty Fonts" file. Rename the duplicate, giving it the name of the next font you want to "break-out" of the fat file (let's say you call the next one "Geneva"). Then open the new "Geneva" file and copy all the Geneva fonts from the "installed" section into your new "Geneva" file. Remember to always "remove" the copied font from the "installed" section each time you do this operation. That will keep your disk empty enough to continue working.

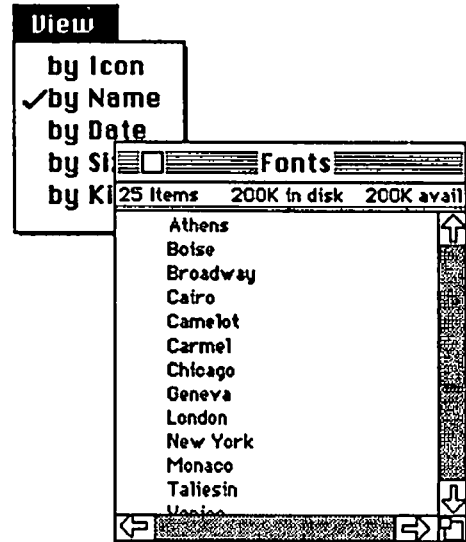
You needn't use the names of individual fonts for your new files, by the way. You might choose to organize them differently. For instance, you might decide to organize all fonts by size instead of typestyle. So, you'd create a "9-point" file, and a "12-point" file, and so on. Or, you could create a file of "Fancy Fonts" (containing, let's say, London and Venice), or "Writing Fonts" (containing New York and Geneva).



Repeat the process for all the fonts, or groups of fonts, you want to have filed separately. Once you've got them all separated, make yourself a "Fonts Disk" which contains all the separate files. To make it easier to find the one you want later on, choose "by Name" from the "View" menu on your desktop. Mac will automatically display your font files alphabetically by name!

This is a tedious task, especially with a single-drive, 128K Macintosh system. But, as with so many Macintosh tasks, it's one you'll rarely have to repeat. Occasionally, as you acquire new fonts, you'll create new files for them. Or, you'll copy them into existing files. But you'll probably never face another fat fonts file like Apple's which needs breaking up.

The advantage of breaking up the fat file is this: Suppose



you want to create a MacPaint document with a large-size font headline. On a single-drive system, you've already got on your disk the MacPaint program, your System Folder, and your document. There's hardly enough space left for a very big or fancy document. So you'd never have space to move the entire fat fonts file onto that disk for the purpose of simply creating one headline.

With your individualized font files, you probably do have room on the disk for just that one headline-size font file. You can copy it onto the disk, install it into the System File, and throw it away...all without having Mac inform you that "This disk is almost full..." When you're finished with the headline, remove the font from the System File, leaving yourself more space to create other parts of your document.

One word of caution: With MacPaint, you need only have a font actually on the same disk while you're creating your headline. MacPaint will print the headline later without the font in the System File. But, in MacWrite, the Imagewriter needs the font in the System File while printing. So you can't remove it until you've printed your document.

If you're working with a 512K Mac or a two-drive system, you may not need to do this chore. You can keep fonts on one disk while keeping working documents and applications on the other. But I find it handy to locate my fonts having separated them, and the Mac loads fonts into its memory in less time if it doesn't have to load the entire range of fonts just to make one addition to a System File.

Now you've probably heard more about fonts than you can stand for awhile, so we'll turn to other topics in the next MacNovice column.

By the way, if you have any suggestions for future columns, or if you have questions about how to use your new Mac, feel free to pass me your comments, suggestions or criticisms for this column through the Washington Apple Pi office..in writing, please.

What's **YOUR** MacNovice Interest?

# REVIEW CORNER



by James M. Burger

## MacWorld Exposition II

Almost 300 exhibitors listed and over 15,000 attendees were at the recent Boston MacWorld Exposition. Virtually everything was larger than the San Francisco exposition: The hall, the crowds and the number of exhibitors. Also, there was much enthusiasm among users, vendors and Apple representatives. The show was well worth attending. For those of you that couldn't attend, a number of your fellow Apple Pi members have vowed to bring an Apple show to DC. (Such a show should also include the Apple // line). There were many new software and hardware products, and the following is only a sampler.

### Software - Business

The emphasis was on Mac in business (although there were exciting new games). Several new accounting products were demonstrated: One, by Layered, which not only contains the standard general ledger, but has an expert system that produces reports and advice on your company's financial situation. Another, by Future Design Software (see "Review Corner" in the September Journal), reads numbers back out loud (it has a SmoothTalker module in the accounting software). Yet another was a high-end accounting program, gallery by Micromax Systems, that appeared powerful enough for any small to medium sized office.

In addition to accounting systems, there were: a desktop spell checker, MacSpell+, by Creighton Development, which appeared to be superior to Hayden Speller; another desktop publisher - Typographer by Microsoft; and AppleTalk office electronic message software from Great Britain - Express Mail. These were just a few that caught my eye. It was impossible to cover the entire exhibit thoroughly in three days, particularly when there were so many interesting people to talk to and interesting demonstrations to watch.

There was software on the lighter side (although, to see a Ron Wartow GAMESIG demo, it might be hazardous to so characterize them). PBI Software had an interesting strategy game called Strategic Conquest, an electronic version of the Avalon Hill war board games. Claiming to offer two billion board configurations, it should keep the dedicated wargamer happy for a while. PBI also showed an interested biplane flight simulator which, according to Product Manager Donna Benzola, has just been released; but, I did not get a chance to see it in any detail. Also, Silicon Beach was there, in force and Hawaiian shirts (reportedly not let into the General Computer party because of the attire, and probably no invitation). They had a new "dungeons and dragons" type game just about to be released. The interaction, graphics and digitized sound carry Macgames to a new level. They let us peek at a fascinating "world builder." It lets you cut and paste scenes between games and then edit both the action (from dialogue boxes) and the graphics with a fascinating

MacPaint/MacDraw type tool. SB doesn't have any immediate plans to release the program. They probably want to sell some games first before they let the rest of us become game/world builders.

### Hardware

As if 10 megabytes weren't enough, General Computer showed their 20 megabyte Hyperdrive; speedy access to that much storage! But at a list of nearly \$3,000, a little expensive. Paradise was showing its new 10 megabyte sider for the Mac.

One of my least favorite attributes of my favorite computer is waiting while the Mac prints a high resolution document. (My second least favorite is waiting for the desktop to rebuild which either a hyperdrive or good organization and the minifinder nearly eliminate). Several devices (including the MacCharlie) claim to have spooling of a sort. But, Mac's print driver spends a lot of time writing to the disk (or so the techies tell me); therefore, a simple RAM spooler will not give you much help in high resolution (although it does in draft). DataSpace Corporation had a "prototype" of a device which they claim will cut high resolution printing by up to one-third. I hope that claim turns out to be true.

Speaking of MacCharlie, it got a lot of attention. Their booth was one of the best. Ethel Barboroka, Communications Manager, was kind enough to arrange a demonstration and an interview with Dayna Communications President Bill Sadler.

We will have a product evaluation, hopefully, in the next Journal. Sadler's observations were very interesting. It was like, "They laughed when we sat down at the piano. But now they take us seriously." MacCharlie is just coming into its own. At Spring Comdex it received little attention and demonstrations were done on prototypes.

Sadler says that they are shipping as many as they can produce. His market strategy is a sort of guerrilla warfare in corporate America. In essence, it is a way to slip a Mac into an office with large MS-DOS files and investment in MS-DOS software. Dayna claims virtually complete compatibility with the IBM (there I said it) world. Also, there is a trend towards government contracts specifying MS-DOS (which I vigorously oppose, but that could be the subject of an entire column). Sadler noted that John Sculley (President of Apple) and other top officials had just received a unit and were "impressed". Comments were heard such as: "MacCharlie makes the Mac look like a real machine", or "I understand that Apple is a third party developer for MacCharlie."

### Conclusion - MacExpo

I can't leave MacExpo without relating a story. According to Jean Louis Gasee (Apple's Director of New Products), Guy Kawasaki (Apple's "Software Czar") received a call from Hewlett Packard. It seems that the Dreams of the Phoenix

contd.

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## Specifications:

### CAPACITY:

12.75 mb unformatted  
10 mb formatted

### DISK DRIVE SEEK TIMES:

Adjacent track . . . . . 18 ms  
Average . . . . . 85 ms  
Maximum . . . . . 180 ms

### ROTATIONAL SPEED:

3600 RPM

### POWER REQUIREMENTS:

110/220 Volts AC, 50/60hz,  
50 watts max.

### DIMENSIONS:

Height . . . . . 5.5 inches  
Width . . . . . 3.5 inches  
Depth . . . . . 10.8 inches

### WEIGHT:

Approx. 5 lbs.

### INTERFACE:

Connects to your MAC via the modem or printer port. Printer connector and integral print spooler provided on MAC-10.

\*See retailer for details.

Trademarks: Paradise, MAC 10—Paradise Systems, Inc. Macintosh, MAC, Apple—Apple Computer, Inc. Paradise Systems Inc. reserves the right to change specifications without notice.

# PARADISE

S Y S T E M S , I N C

folks were working on a desktop calculator emulating the HP12C, but had beta software showing it as an AP12C in an effort not to irritate HP. HP demanded the name of the developer. Kawasaki asked why. "Because we want to insist that they put our label on the calculator." MacAdvertising for HP, that's great!

### Other News and Views

**Reviewers.** In the August "Review Corner" I had asked for volunteer reviewers. So far, I have gotten only a few responses. Many of you are doing reviews on your own. This is great. The only problem is that, after much hard work, your article might not get published because someone else may have turned in a review. Therefore, David Morganstein and I are trying to coordinate reviews to avoid such wasted effort. If you want to write a review or are writing one on your own, please let either of us know. We are assembling a database of reviewers and products to be reviewed. We encourage you to get in touch with us.

**Living Video Text (ThinkTank)** announced a change in their software copy protection policy. Both the 512K and 128K versions of their programs are copy protected, requiring the use of "key disk" insertion for use on a hard disk. This is inconvenient. For \$40, a registered user can obtain an unprotected version of the popular program. New purchasers will have a choice between a free back-up disk or sending in \$40 for the unprotected version. LVT said that this was in response to customer demand (this is part of the feedback we gave Scott Love from LVT when he demo'd 512K ThinkTank). Echoing my sentiments, David Winer (LVT President) said "The market has changed. The users are more sophisticated and they are using more sophisticated hardware, particularly hard disks. Copy protection can make a software product substantially less useful."

**Integration.** More folks than I can count have asked me whether they should buy Jazz or continue with Word (or Write) and wait for Excel and Switcher. My own views could be the subject for a whole column. Instead, anyone interested should read Jerry Pournelle's excellent column in the September 1985 Byte, "Computing at Chaos Manor" (p. 347). (Yes, he's written negative stuff about Mac, but as the hardware and software comes around so does Dr. Pournelle). His opinion of integration closely matches mine (he wrote the column after attending a Microsoft Excel press conference). That is, one cannot find the best of certain applications, especially database management and word processing. Therefore, being locked into one set of integrated applications may not be advisable.

Ideally, a set of programs should: (1) match your needs (especially databases), (2) have common conventions (I do make exceptions - LVT's "hot area" scroll bars), (3) allow quick movement between applications (compatibility with Switcher) and (4) transfer of data painlessly. Thus, I'll wait for Excel (although non-"power users" may want to look at Crunch) and put it, Word, ThinkTank 512, a good data base and a draft/paint on Switcher (and a terminal program if Andy Hertzfeld can every make that work). How, you ask? Simple on my 2 megabyte RAM XLisa at work. At home, I guess I'll have to suffer with some sort of hard drive interface and

only two programs at a time on switcher until a large memory upgrade on the Mac makes sense.

### PRODUCTS RECEIVED:

Unless otherwise indicated, the products are for the Mac and the price, if indicated is the suggested retail price.

### HARDWARE-

Dayna Communications, 50 South Main Street, Salt Lake City, UT 84144. **MacCharlie.** \$1795. Hardware and software product that permits the Mac to run IBM software and use IBM peripherals, also acts as a printer buffer and numeric keypad for the Mac.

### SOFTWARE-

Apropos Software, Inc., 64 Hillview Avenue, Los Altos, CA 94022. **MoneyWorks™.** Personal financial planning tools for AppleWorks for the Apple //e or //c. Includes Stock Planner, Real Estate Planner, Loan Planner, and five other financial programs.

Hayden Software. **Inca and The Holy Grail,** two all-text adventure games, played in real time, for the Apple // with 128K.

Hippopotamus Software, Inc., 985 University Ave., Los Gatos, CA 95030. **Hippo Computer Almanac™.** \$34.95. Demonstrates the tantalizing potential of "artificial intelligence," it answers plain English questions using a 35,000 fact database - currency, sports, history, distances, calories, time zones and more.

Kette Group, Inc., 13895 Industrial Park Blvd., Minneapolis, MN 55441. **LaserBase.** Information management system.

Mindscape. **Balance of Power,** a strategic game of global conflict where, as the USA or Russia, your goal is to enhance your prestige through varied foreign policies, all the while keeping the world from the brink of nuclear war. This is the first Mac effort by Chris Crawford, the renowned Atari programmer and game designer of Eastern Front, Legionnaire and Excalibur. **Deja Vue,** a graphic adventure game set in the "Raymond Chandler" era, which makes the most use yet of the Mac's ease in an adventure gaming environment.

New Canaan MicroCode, 136 Beech Rd., New Canaan, CT 06840. **MacDisk Catalog.** \$39.95. Reads volumes and file names, and associated directory information from floppy and hard disks and stores into a data base, allows grouping up to 16 categories, and can print reports as well as diskette labels and 3x5 cards.

ProVUE Development Corporation, 222 22nd Street, Huntington Beach, CA 92648. **OverVUE 2.0.** Second, more powerful relational data base offering with charts, macros, equations, and much more.

Simon & Schuster, Inc., 1230 Avenue of the Americas, New York, NY 10020. **The Mac Art Dept.** by Tom Christopher. \$39.95. 96 page hardcover book with 150 MacPaint Graphics on a disk. Book is full of information, suggestions and tips on MacPaint, along with lessons in transforming and improving the Graphics supplied.

SMB Development Associates, P.O. Box 3082, Chatsworth, CA 91311. **MacMate!™.** Print Spooler and Ramdisk written completely in machine language.

Topexpress Limited, 13/14 Round Church Street, Cambridge, UK CB5 8AD. **MacBCPL.** \$150. A complete programming language development system, including

cont'd.



compiler. Can be run on a 128K Mac.

### INFORMATION RECEIVED:

#### HARDWARE -

Clipper Computer Accessories, 400 N. High St., Box 170, Columbus, OH 43215. Sharp Tracer. \$10. Plastic cover for the mouse with a 2X magnifier for tracing.

DataSpace Corporation, 205 Riviera Drive, Markham, Ontario Canada L3R 2L6. DS 800. \$549. 800K drive for the Mac. MAX \$549. 256K print buffer for the Mac, expandable to 1 Megabyte, claims to reduce print time for a test MacWrite document with fancy fonts and graphics from 109 to 30 seconds. (Wait to buy until you read reviews for both products, announced but not released).

General Computer Corporation, Cambridge, MA. Hyperdrive 20. From the folks that brought us the speedy internal 10 Megabyte harddisk drive, 20 million bytes "no waiting".

Micro-Design, 6301 Manchaca Road, Austin, TX 78745. The Keeper™. AppleTalk File server with 68008 processor, 10-30Megabytes fixed plus 5 Megabyte removable harddisk drives, printer spooler, supports 1-31 Macs and access to disk volumes through a Desk Accessory.

Microtech International Inc., 29 Business Park, Branford, CT 06405. (Distributor for Dai-Ichi Shoji Co.). BAL. 3.5" Disk drives. SS or DS with or without digital track counter.

Western Automation Labs, Inc., 1700 North 55th St., Boulder, CO 80301. DASCH (disk acceleration/storage control hardware). 500K - \$495, 1Meg. \$795, & 2Meg. \$1295. RAMdisk for the Mac, uses printer port in between it and the printer.

#### SOFTWARE -

Blue Chip Software, 6740 Eton Avenue, Canoga Park, CA 91303. Baron. A real estate simulation game. Trial disk available.

Creighton Development, Inc., 16 Hughes Street, Irvine, CA 92714. MacSpell+. Spell checker that doesn't force you to quit the word processor, 75K words plus room for 2.5K of your own, contains a Thesaurus and word hyphenator.

GDT Softworks Inc., 2800 Douglas Rd., Burnaby, B.C. Canada V5C 5B7. The Print-Link™. \$84.95. Printer Driver to work with all flavors of Mac and, at least, seven dot matrix and three Daisywheel printers; being tested with a number of other printers, should work with any application following the Mac printing standard; has been tested with the "most popular printers."

Layered, 85 Merrimac Street, Boston, MA 02114. Insight™. Standard accounting package: Accounts Receivable and Billing, Accounts Payable and General Ledger with "expert reports" with "interpretation, analysis and recommendation."

Micromax Systems, Inc., 6868 Nancy Ridge Drive, San Diego, CA 92121. gallery™. Finance package - \$795. Accounting and business management system based on the one-write system includes: General Ledger, Accounts Receivable, Accounts Payable and Cash Disbursement. Eleven additional modules are planned. Trial disks available.

Microsoft Corporation, 10700 Northup Way, Box 97200, Bellevue, WA 98009. Art Manager™. Art indexing

system, handles up to 10K images, its retriever works as a desk accessory to pick and paste graphics into word processors. Typographer™. \$195. Microsoft's answer to Aldus' Pagemaker "desktop publisher." [Pagemaker is used to "set" the Journal.]

PBI Software, Inc., 1111 Triton, Foster City, CA 94404. Strategic Conquest. \$49.95. Tactics II expanded to the Mac environment over two billion configurations!), one of the first war games for the Mac. Will run on 128K Mac.

Paladin Software Corporation, 3255 Scott Blvd., Santa Clara, CA 95054. Crunch™. \$295. (\$100 discount when you send in original or backup Multiplan disk with official label). High power spreadsheet, claims to be faster than Lotus 1-2-3 with more capacity, Icon bar that shortcuts applying functions from normal menu bars. Trial size available.

Sabaki Corporation, 63-36 98th Place, Rego Park, NY 11374. MacPoly. \$29.95. One hundred jigsaw puzzles ranging from easy to near impossible.


Softstyle, Inc., 7195 Kalanianohe Highway, Honolulu, Hawaii 96825. DecisionMap. \$145. Graphics based decision modeling software.

Topexpress Limited, (see above). Express Mail. \$250 for up to 6 users, \$100 for each additional 6 users. A central server (for use with a file server) and individual desk accessories for storing and forwarding memos. ☞

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| C2. 512K Mac into 1024K Mac |  | \$549 |

| KITS                        |  |       |
|-----------------------------|--|-------|
| K1. 128K Mac into 1024K Mac |  | \$699 |
| K2. 512K Mac into 1024K Mac |  | \$399 |

| ROM ENHANCEMENT     |  |       |
|---------------------|--|-------|
| RE. Rom Enhancement |  | \$149 |



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# MACADVANTAGE - PART II: Using Units

by Robert C. Platt

This column is the second in a series exploring MacAdvantage - SofTech Microsystem's implementation of its Pascal p-System on the Mac. (See Steve Hyland's review of the p-System and MacAdvantage, Feb '85 WAP Journal at 34.)

Last time, (Aug '85 WAP Journal at 46) I illustrated procedure calls to the Mac's ROMs with a short program that presented the OldFileName window. This column will illustrate the use of units by combining that routine with two others in a form that can be incorporated into any Pascal program. The resulting unit that is listed at the end of this article will be helpful in converting Apple ][ Pascal programs to MacAdvantage.

A unit is one or more procedures or functions that is compiled separately for incorporation later in other programs. This feature permits programs to be developed from building blocks, so that the entire program does not have to be compiled each time the different pieces are being debugged or modified. Units also permit common routines to be shared between programs. Units are explained at page 111 of Clark & Koehler, The UCSD Pascal Handbook. They are also covered by Kevin Nealon in Chapter 1 of Perfect Pascal Programs.

The sample unit at the end of this article contains three procedures for use by other programs. OldFileName was covered last time. Procedure *NewFileName* presents the familiar window that prompts for a new file, the window that appears when you select SAVE AS from MacWrite. Finally, Procedure *PageClr* will erase the text from the standard MacAdvantage window. This is equivalent to a *page(output)* command in Apple Pascal.

**MacAdvantage Version 1.1.** Before getting into the guts of the unit, a brief commercial for the new update to MacAdvantage. It is definitely worth the \$25 fee. Version 1.1 offers a Mac-like interface to the Compiler and Librarian. It also corrects numerous (and unspecified) bugs in 1.0. Desk Accessories are now available from the Executive. The procedure termination code ( *\*\*\*;* ) is now available in any procedure. Being spared the burden of memorizing file names when invoking the compiler is well worth the upgrade fee.

**Unit structure.** A Pascal unit consists of the following parts:

```
unit name;
interface
{declarations known to your programs}
Procedure A;
Procedure B;
implementation
{declarations hidden from your programs}
Procedure A
begin
end; {A}
Procedure B
begin
```

```
end; {B}
begin
{initialization instructions - executed before first call to A
or B}
***;
{termination instructions - executed after exit from A or
B}
end;
```

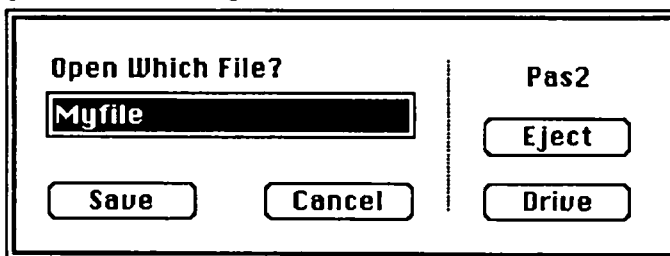
The above example featured a unit with two procedures *A* and *B* that can be exported to your program. It is legal, and frequently convenient for a procedure to declare variables and even procedures that are hidden from your programs. Such declarations appear after the keyword *implementation* instead of appearing in the interface.

Turning to our example, the three procedures described above are exported. The interface also declares a new type *str255*. This type must be used to pass strings to *OldFileName* and *NewFileName*.

The implementation declarations define data structures common to both of these procedures. Most of these definitions were covered in the last column. Procedure *SFPuFile* is a new call to the Mac ROM. It displays the standard Save As Window. Note that its ROM address -22038 is the same as *SFGetFile*. Although the same ROM routine is used to display both the Save As and Open File windows, the calling sequence and parameters of the two procedures are different. Of particular importance is the last parameter which is a secret code number to distinguish the two routines. If the code number is 1, then the ROMs will recognize an *SFGetFile* call, if the last parameter equals 2, then the ROMs will execute a *SFPuFile* call.

**Gimme a New File.** Procedure *NewFileName* takes three parameters. (These appear in the interface section and are not repeated (except as a comment) in the implementation section.) The first parameter is a prompt to be displayed above the file name blank in the window. Use something meaningful, like "Open Which File?" The next parameter is a default name to appear in the file name blank of the window, for example "Myfile." The user can edit this default value using the usual MacWrite conventions. The third parameter is a string that will return the name of the file that was selected by the user. See Inside Macintosh Packages section for greater details. For example, the Pascal statement:

*NewFileName('Open Which File?','Myfile',s);* would produce the following screen window:



contd.

cedure body for *NewFileName* is very similar to *OldFileName* presented last time. The location of the window (100 dots down, and 100 dots to the right) is placed in *corner*. *NilPtr* is set to 0 to indicate that it does not point to any window-customizing Procedure, and the result flag *good* is cleared to 0. *SFPuFile* calls the ROMs with the secret code number of 1 to display the Save As window. Finally, the name of the file is retrieved from the Reply record variable *r*.

Erasing the screen. The third procedure in unit *FilePack* is called *PageClr*. *PageClr* selects the front most window (which is usually the default window for WriteLn messages) erases it and homes the cursor so that the next WriteLn message will appear at the upper left corner.

Because *PageClr* makes use of the QuickDraw ROM routines even more data types must be defined. (Of course, you could save the typing time by placing a *uses {SU #2:Mac Interface} MacCore, QDTypes, MacData, QuickDraw (MoveTo, EraseRec), WindowMgr(FrontWindow);* at the start of your program, but copying only the necessary definitions is faster and eliminates the need to have the Mac Interface file on line.)

The most cryptic declaration is that of *WindowRecord*.

Each window has information about its status saved in RAM memory. This includes the title and whether it has a close box in the corner of the title bar, etc. Whenever windows must be redrawn on the desktop, the Window Manager routines in the Mac ROMs use this information to draw each window. The first part of each window record is a *grafport* record, and within this part are the coordinates of the upper left and lower right corners of the rectangle that the window occupies. Since this information is the only data needed by *PageClr*, instead of copying the entire definition of *WindowRecord* from Appendix A.27 of the *MacAdvantage Manual*, I used an array of integers to fill in the remaining length of the record. You would think that *WindowPtr* should be defined as *WindowRecord*, but that would generate a 16 bit p-machine pointer. Instead, *WindowPtr* is the data type that will hold a 32-bit 68000 pointer to window records.

*PageClr* uses three ROM routines. *Moveto* controls the screen position of the next WriteLn. *Moveto(0,16)* will home the cursor. *EraseRec* will fill in the area of the screen whose corners are passed to it as a parameter. The pattern used to fill the screen is determined from the currently active *grafport* (e.g. window) record. Finally, *FrontWindow* is a function that returns a Macintosh 32-bit pointer to the window record of whatever window is active (e.g. on top of the desktop).

The procedure body of *PageClr* is deceptively simple. First, *Moveto* homes the cursor. Next, *FrontWindow* returns a 32-bit pointer to the current window. However, the window record is probably outside the memory reserved for the p-machine's data variables and therefore cannot be accessed using Pascal pointers. If it could, then we would be able to write *EraseRec(ptr^.port.portrec);* but the variable *ptr* is a 32-bit pointer not a 16 bit Pascal pointer. Instead, the program uses the built-in *absmove* procedure to make a copy of the window record in the p-machine's data area. The first parameter to *absmove* gives the 32-bit pointer to the source data to be copied (*ptr*, our window). The second parameter is the 32-bit pointer of the destination in memory (*locate(wr)* give the 32-bit address of our Pascal variable *wr*.) The third parameter is the number of bytes to be copied. Once copied,

the copy can be passed to *EraseRec* to clear the screen. Many thanks to Dave Neumann for his help on this point.

Glueing it into your program. Once you type Listing 1, you can compile it into a code file called "FilePack.Code". Next consider Listing 2, which is a sample program that uses the *FilePack* unit. The comment {SU FilePack.Code} is a compiler directive to take information from the interface section of *FilePack* when compiling your program. It is absolutely essential that no spaces appear between the word Code and the closing bracket! Once you compile Listing 2, run the Set Options utility program and select the name of your code file (say "Tester.Code"). Make sure that the RunTime and p-Machine files are set to the correct disk. Next, in the first empty box labelled Library Files, type "FilePack.Code". This will cause the implementation part of unit *FilePack* to be added to your program whenever it is run. To execute Listing 2, double click on the Tester.Code icon, not the FilePack.Code icon.

Next time, I will cover converting an Apple[[ Pascal program to MacAdvantage by making use of *FilePack*. contd.



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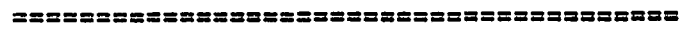
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# Listing 1

Unit FilePack;

(\* MacAdvantage version of OldFileName - RC Platt June 3, 1985 \*)  
 (\* See page 9-26 of MacPascal Manual, page 13 of Packages section of Inside Macintosh, page A-49 of MacAdvantage Manual. \*)

interface

```
type str255 = string[255];
Procedure NewFileName(prompt:str255; defaultNm:str255;
  VAR result:str255); {dialog box for saving new files}
Procedure OldFileName(VAR result:str255); {dialog box for existing files}
Procedure PageClr; {like page(output)}
```

implementation {following declarations are hidden from user}

type

```
LongInt = integer2;
Handle = integer2;
Point = Record case integer of
  0: (v: integer; h: integer);
  1: (vh: array[0..1] of integer);
  2: (param: LongInt);
end;
Rect = record
topLeft: Point;
  botRight: Point;
end;
FPoint = LongInt;
StringPtr = integer2;
ProcPtr = integer2;
MacPtr = integer2;
PtrSFReply = MacPtr;
SmallBool = 0..255;
OSType = Record case boolean of
  True: (c: packed array [1..4] of char);
  False: (p: integer2);
end;
PtrSFTypeList = MacPtr;
SFReply = Packed Record
  copy: SmallBool;
  good: SmallBool;
  ftype: OSType;
  vRefNum: integer; {which disk volume has file}
  version: integer;
  fname: String[63];
end;
```

```
Procedure SFGetFile(where: FPoint; prmpt:StringPtr; fileFilter:ProcPtr;
  numTypes:integer; typeList: PtrSFTypeList; digHook:ProcPtr;
  reply:PtrSFReply; RSFGetFile:integer);
external(-22038); {A9EA}
```

```
Procedure SFPutFile(where: FPoint; prmpt:StringPtr; origName:StringPtr;
  digHook:ProcPtr; reply:PtrSFReply; RSFPutFile:integer);
external(-22038); {A9EA}
```

```
Procedure NewFileName{prompt:str255; defaultNm:str255;
  VAR result:str255}; {dialog box for saving new files}
```

var

```
r: SFReply;
corner :point;
NilPtr : ProcPtr;
```

begin {NewFileName}

```
corner.v:=100; (* set upper corner of dialog box *)
corner.h:=100;
NilPtr:=0; (* dummy of type ProcPtr *)
r.good:=0;
SFPutFile(corner.param,locate(prompt),locate(defaultNm),
  NilPtr,locate(r),1);
if r.good<>0
  then
    result:=r.fname
  else
    result="";
end; {NewFileName}
```

```
Procedure OldFileName{VAR result:str255}; {dialog box for existing files}
```

var

```
r: SFReply;
types : OSType;
corner :point;
NilPtr : ProcPtr;
```

begin {OldFileName}

```
corner.v:=100; (* set upper corner of dialog box *)
corner.h:=100;
NilPtr:=0; (* dummy of type ProcPtr *)
types.c:= 'TEXT'; {supress non-Text files }
r.good:=0;
SFGetFile(corner.param,NilPtr,NilPtr,1,locate(types),NilPtr,
  locate(r),2);
if r.good<>0
  then
    result:=r.fname
  else
    result="";
end; {OldFileName}
```

```
Procedure PageClr; {like page(output)} {declarations for PageClr}
```

contd. on pg 57

# Softviews

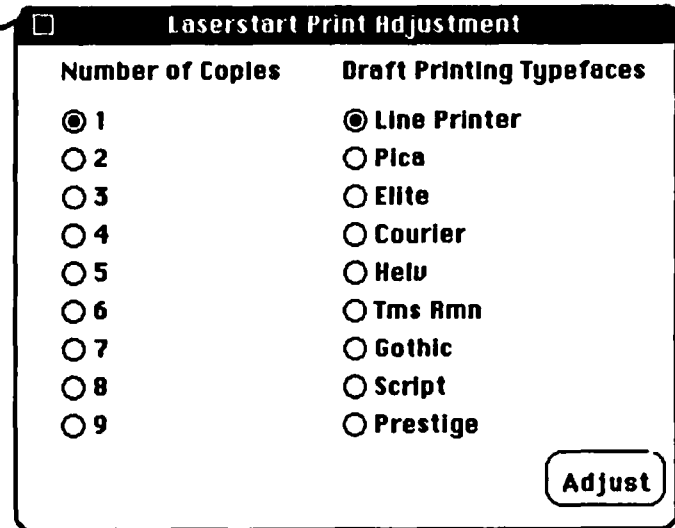
## by David Morganstein



Next month this column will contain a comparison of six Apple ][ spreadsheets: MagicCalc, AppleWorks, FlashCalc, MouseCalc, Multiplan and SuperCalc 3a.

**Laserstart.** Our ABBS has been abuzz with discussion of the use of the Hewlett Packard laser printer with a Macintosh. I can report that the connection with the HP is a good one and, when the necessary printer driver is installed, it is as easy to use as the Imagewriter. The street cost of a Hewlett Packard is down to around \$2200. While the current version contains only 56K of RAM memory, a new plus version is expected shortly that will contain about a half a megabyte. The version Westat has provides approximately 75 dots to the inch (where Apple's Laserwriter gives you about 300 dots to the inch).

The printer driver I have used came from Softstyle at a price of \$95.00, which included the 9-pin Mac to 25-pin HP cable. When booted, the Laserstart disk allows you to configure the Mac port (printer or modem) and the baud rate (up to 19200) to match the HP. When you have made these decisions, the program will modify your System disk in two ways. First, you get a new printing resource (your Imagewriter file is replaced with a LaserJet file). Second you get a new Desk Accessory (see below), Print Adjustment for use in draft mode to direct the HP.



When printing, everything works as usual. The speed and the quality of the HP depends upon several things. Lets discuss speed first. Printed paper exits most quickly when you select draft mode and let the HP print from one of its own internal fonts; however, this will only work for text, no graphics. To print graphics, you must select standard or high quality. This, as with the Imagewriter, produces "what you see is what you get" output. When graphics are embedded in text (or when you print from MacPaint), the HP is at its slowest, perhaps 40-50 seconds for a full page.

As to quality, you can not expect the resolution of the Apple LaserWriter. Using fonts with high point sizes

available helps considerably. If you want to print in 12 point, make sure you have 24 point on the disk for the best results. (This advice applies to printing in any font, as well.)

Softstyle, Inc., 7192 Kalaniana'ole Hwy., Suite 205, Honolulu Hawaii, 96825. (800) 367-5600. Price \$95.00.

**NWA Statpak.** In this review, a description of the Macintosh adaptation is given. Supplied on two disks, this extensive collection of 57 separate BASIC programs is now connected by a menu system (In the CP/M version, you had to determine which program you wanted and then run it). If you have a hard disk, moving the programs onto it will make use of the many NWA programs smoother. NWA performs more operations and computes more statistics than any other package I have seen for the Mac. Besides simple descriptive statistics, multiple regression, up to three-way analyses of variance, multi-way contingency tables and non-parametrics, NWA computes probabilities for a host of distributions and can be used to conduct time series analyses. Also, it can perform a step-wise multiple regression. The time series functions include: de-seasonalizing data, lag and lead transformations, auto and cross correlations and fourier analysis. Practically all of the analyses read the data from disk, eliminating any ceiling on the number of cases it can process. Unfortunately, MS BASIC runs slowly on the Mac and its input/output is even worse. Thus, working with a large number of cases can be time consuming.

To use NWA, you must enter data into a file using either the NWA file edit utility or a separate text processor such as Apple's MacWrite or Edit programs. Most of the statistical routines do not directly accept keyboard entry of data. I recommend using MacWrite since I found NWA's edit utility to be difficult to use and much like line editors found on personal computers several years ago.

NWA on the Mac is, unfortunately, almost identical to earlier versions developed on the CP/M system. That is, it is not very "Mac-like". It makes no use of pull-down menus, although MS BASIC version 2 provides for them. You can not cut and paste data or graphics between applications although you can output the results to a BASIC data file which can be converted for use in a word processor. As you can see below from a sample histogram, its graphics are of the text variety and make little use of the Mac's ability to draw high resolution graphics. NWA has essentially moved their BASIC programs into the Macintosh environment.

```
LOW LIMIT { DX = 3000 SCALE = 1:1 }
60000 |==== <25.0%>
63000 |===== <50.0%>
66000 |=====+----- <81.2%>
69000 |=====+-----+----- <100.0%>
72000 |-----+-----+----- <100.0%>
```

Output: S(screen), P(rinter), F(ile), or Q(uit)?

NWA Statpak Histogram

contd.

The accompanying manual is quite lengthy and contains examples of output from just about every routine. It begins with an explanation of system operations, file utilities and frequently asked questions. Each program is described in its own section accompanied by sample print-outs. I found the manual fairly easy to use. It had both a table of contents and an index. The manual is the same one which accompanies the program when it is supplied to an IBM PC or CP/M user. Although brief, a Macintosh oriented addendum is included.

I was most disappointed about NWA's error handling. On several occasions I was caught in a loop and had no way, short of stopping the program, to exit. One problem occurred when NWA could not find a program (which in fact was there) to jump to. Another surfaced when I gave it a data file name which did not exist. I had loaded one of its two diskettes onto a hard disk and left the other in the disk drive. NWA kept giving the message that it could not find the program on any volume, even though the micro-diskette containing the program was in the micro-diskette drive. In both cases, there was no way of escaping back to the previous step and my only recourse was to break out of the program.

The major reason for considering NWA over other more Mac-ish programs would be your need to perform analyses which are not available elsewhere. Among the most commonly used of these would be stepwise regression, time series analyses or the computation of probabilities for specified distributions.

Northwest Analytical, Inc., 520 NW Davis, Portland, OR 97209. (503) 224-7727. Price: about \$275.00.

**Mouse Calc.** Apple // owners with 128K and an 80-column display can now Mouse around on spreadsheets just like those using the "computer for the rest of us". (If your Apple is not equipped with a Mouse, you will need to use a different package...) Imported from France, MC offers a 254 rows by 63 columns spreadsheet and an integrated graphics package which can display bar and line charts. Several series can be displayed in a bar chart with a 3- dimensional appearance.

If you have seen a Macintosh screen, you will recognize the pull-down menu approach taken with MC. The main menu items are: File, Edit, Print, Function, Format, Graph, Calculate, Link, and Info. File allows you to load and save files, format disks and examine their directories. Edit gives access to cutting, copying and pasting entries, changing column width and inserting rows or columns. The Print menu provides hard copy while the Format menu is your tool for establishing the appearance of the data (justification, number of decimals, etc.). Cells can be protected or their formulas displayed. The Function menu makes insertion of formulas as easy as clicking the Mouse button. When a graphic display is desired, you merely select a range of cells and give them a name. After opening a second window, use the Graph menu to indicate your choice of line or bar chart. The Calculate menu allows you to select manual or automatic re-calculation as well as the row vs. column order of computation. DIF files can be read or written and Mouse Write files merged using the Link menu.

Documentation. The manual is divided into a 65-page tutorial and a 100-page reference section. The tutorial is well-

written and keyed to sample files provided with the disk. The reference section matches the menu headings and delves into the options under each offering. The manual contains a table of contents and a pair of indices one of which is the usual alphabetical one and the second of which displays the menu options with their reference pages.

**Strong Points.** I am a believer that the pull-down menu mouse-driven cursor is an easier way to tell a computer what you want. These people have done Apple // owners a favor by offering an easy-to-use spreadsheet package. Merging some, albeit limited, graphics capability adds to the worth of the program. However, I must point out that only three printers are supported for the output of graphics: the Imagewriter, Epson and Apple Daisy Wheel. Although I have neither used "Mouse Write" nor tried to merge MC spreadsheet data with its text, the ability certainly strengthens both packages. One option MC offers which is missing in competing products is the ability to name a cell or group of cells and to use the name in references. As with Macintosh spreadsheets, you can Cut or Copy data or formulas from one place to another. Pasting can be done using the exact cell references or by adjustment to a new location. MC offers on-line help for each menu item. The help consists of a multi-screen sequence of paragraphs describing the sub-options under each main menu option. A more direct method would display the paragraph description for the sub-option without having to page through a multi-page mini-tutorial. If you have data in another spreadsheet, you can import it into MC using the almost universal DIF file format.

**Weak Points.** MC is fairly limited in the functions it supplies. While the standard algebraic functions are provided, as well as, several statistical ones, there are no economic or trigonometric functions whatsoever. Logical functions and look-up are permitted but the useful Table function is absent. Files can not be linked to permit automatic consolidating. That is, you can not create four quarterly files which add automatically to a fifth annual file whenever any quarter is changed. MC does allow you to merge a file with the current one, adding or subtracting the individual cells. Unfortunately, MC does not offer a sort capability. As is the case with many commercial programs, it is copy-protected but does come with a back-up disk.

Version Soft, 910 W. Maude Ave., Sunnyvale, CA. 94086. contd.

NOTE: Change in location of 4th Saturday meeting for October and November. See "Event Queue" for details.



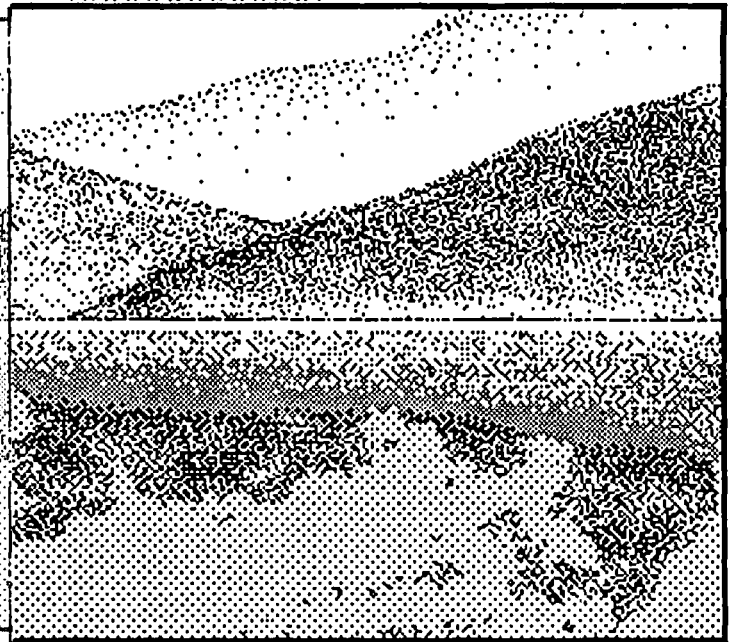
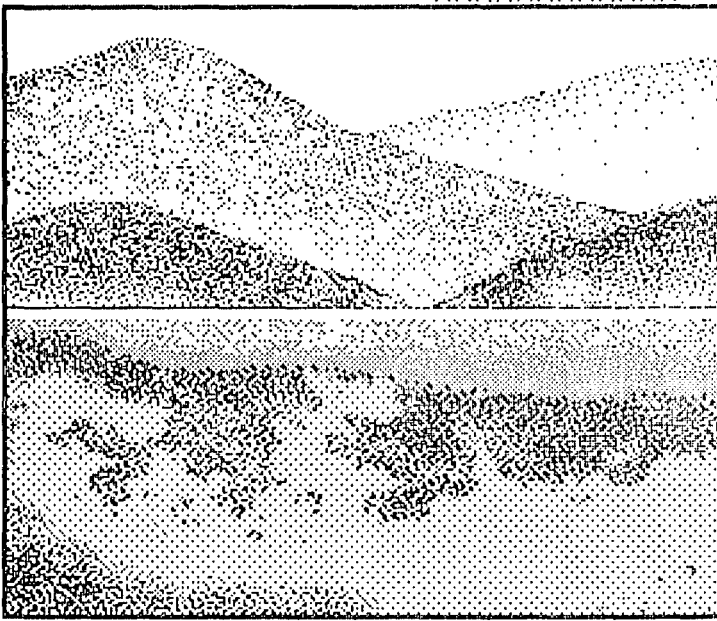
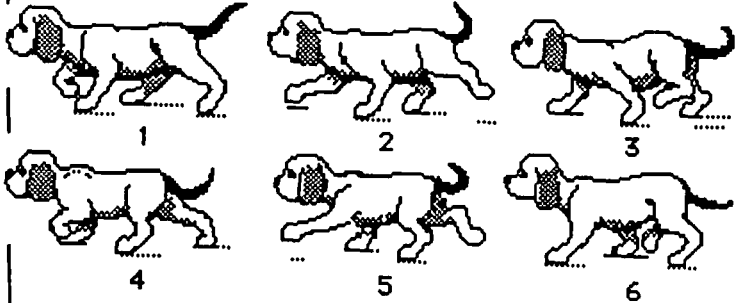
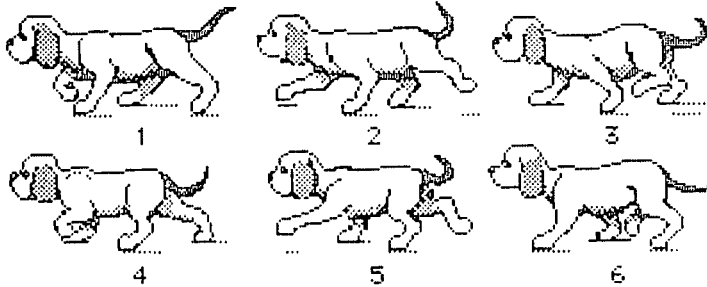
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This is Geneva 12 point  
This is Geneva 14 point  
This is Geneva 12 point, bold  
This is Geneva 14 point, bold  
This is New York 12 point  
This is New York 14 point

This is Geneva 12 point  
This is Geneva 14 point  
**This is Geneva 12 point, bold**  
**This is Geneva 14 point, bold**  
This is New York 12 point  
This is New York 14 point  
**This is New York 12 point, bold**  
**This is New York 14 point, bold**

**HP Laser Printer**

**Apple LaserWriter**

# WAP GOES TO THE MACWORLD EXPO

by Tom Warrick

Many Washington Apple Pi members saw first-hand how the Mac market has matured, during the MacWorld Exposition at the Bayside Convention Center in Boston on August 21-23. Not only has the number of titles of Mac software increased greatly, the software has also become much more sophisticated and much better. The "ported" programs derived from other systems were virtually absent from this show, in contrast to the first one in San Francisco last winter. And the show was not virtually all software--a number of interesting hardware vendors were there, offering hard disks, memory upgrades, color monitors and add-on boxes.


Your users group was also there in force. WAP had a small booth in the corner of the Bayside Convention Center, but most of the time it was really hopping. Bill Atkinson, creator of the QuickDraw routines and MacPaint, gave a presentation to about 100 show attendees on how to get the most out of MacPaint. At the end of it, he offered to make available free to everyone an interesting utility called "Paint Mover" (the name may have to be changed as there is another program around with the same name) and an updated "Rolodex" program now called "Quick File," version 0.5.

Few people have yet discovered the power of Paint Mover, for which there is no formally released documentation. Among the many things you can do with Paint Mover is to select and transfer a portion of a MacPaint document - up to the entire page, not just a screenful - from one file to another while at the same time rotating, inverting or enlarging the new version of the image. Paint Mover can also enlarge a MacPaint image to poster size, and Bill has incorporated into the program the ability to smooth some of the rough edges in the enlarged image. It is also possible to take a dark image and lighten it up by "thinning" it. Such power comes not without limitations; Paint Mover works only on 512K Macs.

Bill wanted to give these programs to anyone who wanted them, but he obviously couldn't make copies for everyone at the show. WAP volunteered to help. That night, a number of us went back to Steve Hunt's 27-foot motor home parked outside the convention center and made a number of copies for other users groups. The next day all of the groups made copies of the program for anyone who wanted one. Excitement increased when Andy Hertzfeld made available version 4.4 of Switcher, which fixed an obscure bug in version 4.3 that occurs most notably (as it was explained to this writer) when using the Edit program of the Macintosh 68000 Development System. Steve Hunt estimates that WAP alone must have put almost 400 copies of these three programs in the hands of people at the show. To Bill and Andy, thanks!

Many WAP members (and at least one non-member) helped out at the WAP booth at the Expo. To all of you, we say thank you. Particular mention should be made of the people who worked a half-day or more: Bill Brucato, Dick and Nancy Byrd, Steve Hunt, Allen Knapp, Ann and John Loikow, Rochelle Stern, Tony Taylor, Bernie Urban, and

Shirley Weaver. (If you worked a half-day or more and did not get mentioned, please let me know at 656-4389 - we have a little something for you.) In addition, Jim Burger prowled the floor with media kits pointing out to potential advertisers the benefits of advertising in the Washington Apple Pi Journal.

The next MacWorld Expo is currently scheduled for San Francisco on January 16-18, 1986, and WAP plans to attend. The first planning meeting was held on Thursday, September 12, and it was agreed to try to be a bit more ambitious this time and to show off both WAP and the Washington area as places where exciting things happen in the Apple computer world. If you are interested in going, particularly if you would like to share in some of the fun and excitement of the WAP booth, please call Steve Hunt at 262-9080. There is talk about getting discount air fares if we book as a group in advance. Even if you are not going to attend, you can be of service to the group if you have a portable color video camera we can use during the next month or two to make a short tape of WAP meetings to show at the Expo. 

## IS IT MY TURN YET? by Jeff Peterson

For years, I pined for a computer. I had wanted one for the longest time, especially for those 1,000 pages worth of term papers I had to type and retype and retype while I was in seminary. But, as with most paupers who have chosen education over income, I had no money. Finally, in May of 1984, upon my graduation from seminary, I received as a gift, money to put towards my heart's desire. But it was not quite enough. So, for the next several months I did research, research, research, weighing the pros and cons of this brand vs. that brand, the //c vs. the Mac. All I did was talk, talk, talk computers. In short, I drove my wife nuts. I would go through all the arguments with her, over and over again. And she really didn't give a hoot! (She just didn't understand computer mania. To her it was just a needless expense, especially for someone who didn't even have a job.) Though I desired a Mac, it was a little out of my reach financially, and besides (here comes parental guilt), *"I really ought to get something the whole family can use. I mean the Mac had no educational software at all, and promised to have none in the near future. And my oldest son ought to be able to have the advantage of a computer so he can get ahead and go to college and all that ... It would be really selfish of me to get a computer just for myself!"* Even though I really did have a legitimate business use for it. I mean, every minister needs a word processor for sermons and all, doesn't he? Even though I didn't have a church of my own yet, as my wife was all too willing to point out. Aaah, she just didn't understand!

Needless to say, selfishness and greed won out. Actually,  
contd. on pg 72



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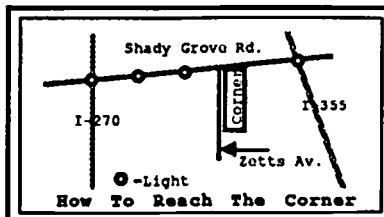
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| s |                          |       |

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We want to thank Lisa owners who have made MacCorner one of their premier sources of HW & SW. We shall continue to support the XL & Lisa and keep you informed of new product introductions!

XL SERVE (Dynamic Partitioning, printer spooling, Appletalk network, smart backup,) 174.95  
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 \*Pending release PRICES ABOVE FOR APPLE & MEMBERS ONLY

# FINANCIAL COOKBOOK: A Review

by Ellen L. Bouwkamp

Let me start out by saying that I am a math person ... I love to play with numbers ... so perhaps it was my continuing fascination with the way computers ease mathematical calculations that prompted me to buy Financial Cookbook by Stan Trost and Electronic Arts. And perhaps it is that same fascination which finds me both pleased and disappointed in this set of automated financial "what if's".

Financial Cookbook has 32 separate financial calculations ("Recipes"), from "Understanding your Marginal Tax Rate", to showing you how your money will grow in IRA and in savings accounts, to finding how long your money will last at stated rates when you withdraw from those accounts, to whether you should buy or rent a car or house. It can be used with a 128K, one disk drive system, and an operational mouse is required. The documentation is generally clear and complete, but the author does provide a slightly muddled explanation of how to calculate your marginal tax rates. Examples would have helped visualize this calculation. More technical explanations are in the back of the booklet to satisfy the mathematically inclined.

A "Financial Profile" option allows you to set figures (inflation rate, for example) which automatically show as the default figures in the 32 Recipes. These figures can be changed within the Recipes to provide as many "what if" situations as your mind can configure. Each Recipe requires you to provide specific figures, when you click on "Compute", and a second screen appears with the results of your calculations. You can SAVE either or both screens. If you want to compare a series of "what if's", you must manually change the desired parameters, conduct another "Compute", and set the two result screens side by side. Alternatively, you could SAVE each "what if" and then print them out later.

Is It My Turn Yet? contd. from pg 70

I got a used Mac that was about the same price as a //c with all the extras. And for the next seven months, I was in *Heaven!* Just me and my Mac and my prayers. Complete peace and quiet! Solitude. Ah...it was beautiful. No one else used the machine. Oh, sure, the kids played with the paint brush some for the first month or two, but that soon wore off, and I carefully weaned them with less and less time; and my wife had no real use for it except to write a letter or two now and then. And even she eventually stopped using it and went back to writing letters by hand. *Yeah!*

So I would sit in my office for hours, typing sermons (The Lord finally called me to a church), typing letters, playing the puzzle, anything I wanted - and no interruptions. The children could mangle each other upstairs, but in my office it was peace and quiet. I even turned off the sound on my Mac, so that all I could hear was the gentle hum of an obedient, polite, and responsive Machine.

And then, about two weeks ago, my son's birthday was coming up, and those old guilt feelings returned. "Really, a computer is so expensive; it really should be for the whole family to use." Besides, he was having a little trouble in

In my opinion, one must have some familiarity with financial and accounting concepts, such as marginal tax rate, depreciation, rate of return, and future and present value, in order to get the most out of the Financial Cookbook. (But one of the Recipes, "Energy Saving Devices", is a refreshing find in an otherwise traditional set of calculations). One's subjectivity or wishful thinking can easily override the intended objectivity of the programs, by setting the inflation rate to 50% for example, and that brings elements of fun to what could be a very dry program!

Some features I would like to have seen:

- A method of determining, given a fixed figure, the interest/mortgage length/mortgage amount relationships. For instance, given I want to spend \$900 in principal and interest payments, what combinations of interest, mortgage length, and mortgage will cost me this \$900?

- It appears that the assumption is made that one will invest the difference between a rental payment and a principal/interest payment in an interest-bearing account. There are two weaknesses with this assumption: few people I know would actually do this consistently for the entire length of mortgage, and over time the interest rate for the increasing amounts of money will change (a savings account bearing less interest than a \$10,000 certificate of deposit for five years, for example). I would like to have seen a choice point which would take these factors into account in the rent/buy decision. (Am I asking too much, accountants/financial planners??).

Though there is no Recipe to calculate the rate of return on this \$27 investment, I find my copy of Financial Cookbook useful for "quick and dirty" calculations ... and for a little bit of fun playing with my millions! ☞

school with his math, and I heard that some good educational programs had finally come out for his age group. So we called up a program store, and voila! - here in three days. That's what I call service. It is also the most abominable thing I ever did. Now, don't get me wrong. The program is excellent. But now, where there was peace, I have sown discord. Where there was quiet harmony and serenity of the soul in communion with a higher power, now there is monumental competition. My two oldest, Sarah and Jonathan, have transported their sibling rivalry to my office and have turned my MacPeace into a MacBattleground. Each of these spiritual infants are fighting over turns, banging each other over the head with the Mouse. "Nooo, Jonathan, it's my turn!" "No, Sarah! You've already had your turn! Daddy! Sarah's not sharing!"

What am I going to do? Do I have to buy two Macs? Will a //c keep them happy now that they have tasted the childlike simplicity of the Mac? Alas, both solutions are beyond my means. I am indulging in wishful thinking. What will I do? Oh, to return to that peace and solitude. What I would give! Hey...

"Hey, Jonathan and Sarah, go away! No, not now, I'm not finished. Hey, no! Hey! It's my turn. No, it's still my turn. No, I started at 3, and my fifteen minutes aren't up yet..." ☞

# THE BEST OF THE MAC ABBS

by Regina Litman

From WP4621 to ALL 06/29 Ultima III

This monster "big bang for buck" fantasy role-playing game is now out for the Macintosh. I attended Origins XI (National Adventure Gaming Show) in Balto. yesterday. For those of you with other Apples, Richard Garriott, aka Lord British, personally gave me a 1-hour demo of Ultima IV, which has been anxiously awaited for two years. Ron W.

From WP4621 to:WP5572 06/29 Congratulations

Richard, I assume that was you winning the second prize in the Filevision contest published in the Spring issue of Filevision Magazine. If so, go to subject line of message.

From WP5572 to:WP4621 06/30 Thank You

Thanks, Ron. Besides shipping me an Apple 1200 modem, Filevision paid me to write that article for their magazine, and in printing it they inadvertently publicized my recent science fiction novel, SARABAND OF LOST TIME. Actually I'm doing the same thing now, though less subtly. By the way, your "I've been gone a few days" message on Terry's board was a riot. -- Richard Grant

From WAP538 to ALL 06/29 WAP Board

Of the 15 people on the WAP board of directors, I think 10 own Macintoshes. A smaller number own II's. Tom Warrick

From WP6861 to ALL 07/01 Red Ryder 6 Beta

Does Red Ryder 6 support VT-100 emulation? Most of my comms are to where a VAX resides and VT-100 is a must. Thanks, Dave.

From WP5099 to:WP6861 07/02 RR 6 & VT-100

Yes. I've never used that mode, so don't know if the RR 6 implementation is any good, but it looks as if Scott put a lot of effort into it.

From WP4621 to ALL 07/02 SigMac in Magazine

The August issue of Computer Entertainment, in an article on public domain software, and giving the Mac as an example about users' groups, states: "Washington Apple Pi, of Bethesda, MD, one of the largest Apple groups, now supports a Macintosh Special Interest Group with its own newsletter and hotline." One out of 2 isn't bad. Ron Wartow

From WP6861 to ALL 07/03 My Opinion

I think APPLE is withholding the official release of their programming languages until the new ROM is at 99%. The existing ROM has so many patches that the ROM calls in MacBasic and the new MacPascal can't be fully supported. I also think this is the cause of the delay in the release of MacTerminal 2.x. My Prediction is that once the ROM is done we will see a full assortment of great software out of APPLE. Of course, they are not stating this because they don't want to halt the supply of other Macintosh software. Dave.

From WP5416 to:WP6861 07/06 Withholding Software

MacTerminal 2.X is still out for Beta testing and is certainly not being withheld. Microsoft Basic 2.0 took most of the potential thunder out of MacBasic. Apple which professes to be a hardware company and not a software company, looks to Microsoft for favors and support. Perhaps there is a friendly "understanding" on the subject. (MS Basic saved Apple's behind.)

From WP4985 to ALL 07/03 MS Excel

Saw a demo of EXCEL last night at a chaotic CAPMAC meeting. I haven't been this excited about a piece of software since MS WORD. It's really very impressive: 256 cols by 16,000+ rows. Uses Rum coding schema. Compatible with IBM PC Lotus 1-2-3 and IBM PC. (Imports same.) Very fast, etc. It will blow away Jazz and other integrated software I have seen. If you do not have an upgrade option, I recommend that you seriously consider trying to get a WAP group purchase of Excel. It will be the standard, in my opinion, for spreadsheet stuff. (Has macros and Chart integration.)

From WP5099 to:WP4985 07/05 Excel

I'm looking forward to Excel, too. Jazz is a BIG disappointment ... In particular, I'm still recovering from the realization that Jazz doesn't support 2-way transfer with 1-2-3! I can't believe it! I can't be the only person around with a Mac at home and a PC at the office ...

From WP4985 to:WP7034 07/05 Excel

Excel, like most Microsoft products, appears well polished, integrates with PC-like versions of materials (via Syk and DIP transfers). It can contain much more data than Jazz and, because it is a more limited function piece of integrated software (Spreadsheets + Graphs), can be more efficient. When used with Switcher, WORD and Red Ryder, Excel will exceed Jazz in all ways.

From WP4985 to ALL 07/08 DOTP

Apparently all - or most - of us agree that Dreams of the Phoenix produces some nifty disks, and that they are not too sharp in (1) not having an 800 number and (2) not having a number of outlets in the DC area. SUGGESTION: Why not try to have WAP serve as a vendor of DOTP disks? I recommend Q&D Vol I in my New Mac Owner Tutorials, and others use it. How about it WAP?

From WP4985 to:WAP141 07/09 Q&D, Vol I

This disk contains some of the neatest DA's you'll ever see. Permanent timer or mouse locator in upper right hand corner. Plus a great cataloger program, font adjuster, etc. It's simply outstanding in almost all of its dimensions. Try it! You'll love it.

From WP5566 to:WP6933 07/13 C

The April 1985 Computer Language magazine has a comparison of 5 C's for the Mac. It is somewhat behind the times as to Consulair (e.g., floating point is now available) but a good review overall. There also may be a review of Mac C's in The C Journal, but I haven't received that publication, yet.

From WP3181 to:WP6933 07/22 Mac C's

Ed, The C Journal for Spring 85 contains a comparison of: Aztec C68K-C, Hippo C (level 1), Mac C, Megamax C, Softworks C, all for the MAC. The article is written by Michael Connick. Other comparisons are in the mags as well. Bob M.

From WP4893 to:WP4621 07/13 MacGames for Kids

I am 5 years old. My Dad told me to ask you what good games are available for kids. I like Megaroids. Mouse Stampede is boring. My Dad says I would like Chipwits and could beat you at it if I tried. What do you think? Matthew Voglewede, Son of WP4893

contd.

From WP6729 to ALL 07/15 MacAdvantage Pascal

The magazine ads for Softech's MacAdvantage UCSD Pascal imply to the casual reader that this compiler-based language will produce 'clickable' programs that run under the Mac operating system. I read the manual today before buying the program and noted that the 'clickable' files can be produced, the user must have two Softech proprietary programs on the disk before the application will execute. Moral: you can't write stand-alone applications for use by people who don't also have MacAdvantage. Also you can't provide either the run-time support programs or your application to another user without getting an "economical license" from Softech. Am not implying there is anything wrong with this; just clarifying a point.

From WP3432 to ALL 07/19 Color Mac

From InfoWorld, John Dvorak column 7/22. Apple will announce a color Mac at its January stockholders' meeting. It will be able to display 32 colors at once. What 68000 chip to be used is not known at this time. Joe Chelena

From WP6861 to:WP3432 07/19 Color Mac

On Sunday night Andy Hertzfeld held a forum on CompuServe, and when questioned about a color Mac he said not until late 1986. If you are a Maug member I highly recommend downloading the transcript of his discussion. There were plenty of news items including: the new 128K ROM, Switcher 4.0, MacBasic, double sided disk drives, 20 MB hard drives, and more. The transcript is located in the Users Forum (PCS-23), Data Library 6 (DL6), the file is ANDYCO.TXT. Download it, find a copy of it, it's great stuff. -Dave

From WP3432 to:WP5566 07/22 Color Mac

I'll go with the market. With the new Atari and Commodore computers due out soon the Mac will need color to stay in the technological limelight. I saw the new Commodore at the COMDEX computer show last November, awesome is the word. Joe Chelena

From WP4985 to:WP3432 07/23 Color Mac

Andy Hertzfeld says that the color Mac will not be out until 1987. He also indicated that larger screen Macs would be available and that the two-sided internal disk drive will be available when the new 128K ROM stuff is available. Probably September, or - in the finest Apple tradition - "in the next two weeks" which can mean -- whenever.

From WP3432 to:WP4985 07/23 Color Mac

Martin, I read Hertzfeld interview on CSI. He should know what is going on at Apple but remember that market pressure caused the 512K Mac to be released early. Also it was reported some time back that Apple was asking software houses to produce color versions of Mac software. Joe Chelena

From WP3181 to:WP3432 08/02 Re: Need Color Mac?

Joe, market forces WILL NOT force Apple to market a color Mac unless there is some price-break-thru on the costs of higher color. The supposed reason it is B&W now is that for the same price a color version would have come with much lower resolution. Apple decided that since over 90% of all business use (the intended Mac market) only requires B&W that that was the way to go. Eventually a color Mac makes sense, but only those who NEED the color for special uses like Cartography, Presentation graphics, etc. will cough up the extra \$1000 in cost difference. I have seen text in color, and it is ALWAYS not as easily read as the same-size letters on a B&W display - when I owned an apple II I used a monochrome screen, figuring that losing the ability to play one or two games where the designer was too careless to make sure the game-screen was still legible even without color was

more than made up by the lack of eyestrain. Bob M.

From WP6558 to:WP4985 07/30 Two-sided Drive

I've heard all the "news" about the internal two-sided drive. Does anyone know if there will be a plan to upgrade the external drive? I can't think of anything that would drive me crazy faster than one 800K drive and one 400K drive. --Rick--

From WP5317 to:WP6558 07/30 DS Disk Drives

As far as I know, Apple's upgrade will apply to the external drive as well as to the internal. Probably they will just hand you a new drive in exchange for the old (and the upgrade \$\$). Nothing seems to be set in concrete just yet, so you may want to drop the folks in Cupertino a line . . . -- Chris

From WP7034 to ALL 07/24 MAC for Education

Is anyone using MAC for educational purposes? Or, do you have any MAC educational software? I've been asked to ask on the BBS, since I seem to be the lone MAC member of EDSIG at this point. We will begin meeting again on 4th Thursdays come September (Sept. 26). We're calling schools now to get ideas as to their use and encourage them to join Pi if they haven't. If you are a MAC ED'er (an ED MAC'er???), please respond on the BBS or call 544-3441 evenings. --Pat Kirby

From WP4893 to:WP7034 07/24 Educational Software

Try MATH-BLASTER by Davidson, SPELLER BEE by FirstByte, VOCABULARY ADVENTURE by Queue, ATLAS by Concepts Computerized, MIND OVER MAC and MAC EDGE by Think Educational.

From WP6223 to:WP7034 07/29 R\*\*2 EDMAC

Well, I have two kids, 4.75 and 9.25, both going on 21 or so, and I'm generally interested, although I feel no COMPULSION to buy. Also, I know of someone who is trying to market good educational s/w to interested families. Although she is focussing on the II family, I thought I'd pass on anything I learned. Andy Gallant

From WP3181 to:WP6223 08/02 Kids

Andy, do I understand you to say one of your kids is version 4.75 and the other is version 9.25? Do you know what the most current version# is? Bob M.

From WP6223 to:WP3181 08/04 Kids

Actually, organic units are in a process of continuing upgrades (let's be optimistic), so I attempted a discrete approximation to a continuous (if not catastrophic) process. Additionally, I was tracking the temporal scale in this frame of reference - observation indicates wide variation in interpretation (as in 4 going on 24). More later, or maybe not.

- E. Other important DOS commands  
LOAD, RUN, LOCK, UNLOCK, DELETE,  
BRUN
- F. Making copies of disks  
using the ProDOS formatter, DOS COPYA  
what are copy protected disks

## Session 2. How To Use Your Apple Software

- A. Initializing a disk - what it does  
143 Kbytes of information  
different versions of DOS - 3.2, 3.3, ProDOS
- B. Introduction to ProDOS  
pathnames, - (smart run), CONVERT

# NEW APPLE PRODUCT RELEASES:

## A Brief Note by Adrien Youell

A package from Apple Inc. mailed to Tom Warrick and postmarked September 16, '85 contains exciting paperwork - so exciting that Bernie has held the deadline for me to abstract some aspects, extremely briefly. This package of releases has been mailed to all dealers. We hope that some of these new products will be demonstrated at the October 26th meeting; they are for Apple // and Mac.

For Apple // the 3.5" drive has spawned a barrage of releases, and I can only list House and product names; the 'enhanced' //e (new ROM chips and 65C02, new character set are implied). Some also support the Apple Memory Expansion Card, 1 mb. Contact telephone numbers are for the principals given in the release, which are unnamed here.

- Meca (203) 222-1000: Managing Your Money.
- Baudville (616) 957-3036: Take 1, Blazing Paddles, Prince.
- Brøderbund (415) 479-1170: Dazzle Draw and Fantavision.
- Sorcim (408) 942-1727: Enhanced Supercalc 3a (with Sideways print program).
- MouseSeries (408) 292-2944: Mouse Calc, Mouse Word (for ImageWriter II, color monitor and Apple Personal Modem - more below).
- Intuit (415) 322-0573: Quicken, for AppleWorks.
- Pinpoint (415) 530-1729: Desktop Accessory Program, works with AppleWorks.
- The Learning Company (415) 328-5410: Robot Odessey I and Magic Spells.
- Manzanita (916) 781-3880: BusinessWorks.
- Mezahaus (619) 450-1230: ReportWorks.

- Mindscape (312) 480-7667: Coloreme, The Computer Coloring Kit.
- Monogram (213) 215-0355: Dollars and Sense.
- Roger Wagner (619) 562 3221: MouseWrite.
- Scarborough (914) 332-4545: MasterType's Writer.
- Sensible Software (313) 258-5566: Bookends and Sensible Speller.
- Street (805) 684-4593: BusinessCard, AlphaBits, LiveWire, EchoWords.
- United Software (213) 556-2211: ASCII Express Pro.

For really BIG news, remember Apple®!  
Prices are Suggested Retail Prices. Contact #: Linda Merrill (408) 973-2042.

**Apple Personal Modem.** 0-110 and 300/1200 baud - plugs into electric outlet, for //, /// and Mac, and Mac XL (\$399); cables required; Hayes compatible; you supply terminal program; serial card required for Apple //s. Bell 212A; Auto-Everything; internal speaker!

**Apple Hard Disk 20.** 20 Meg for Macintosh 512K (\$1,499). Fits neatly under Mac footprint; connects to disk drive port.

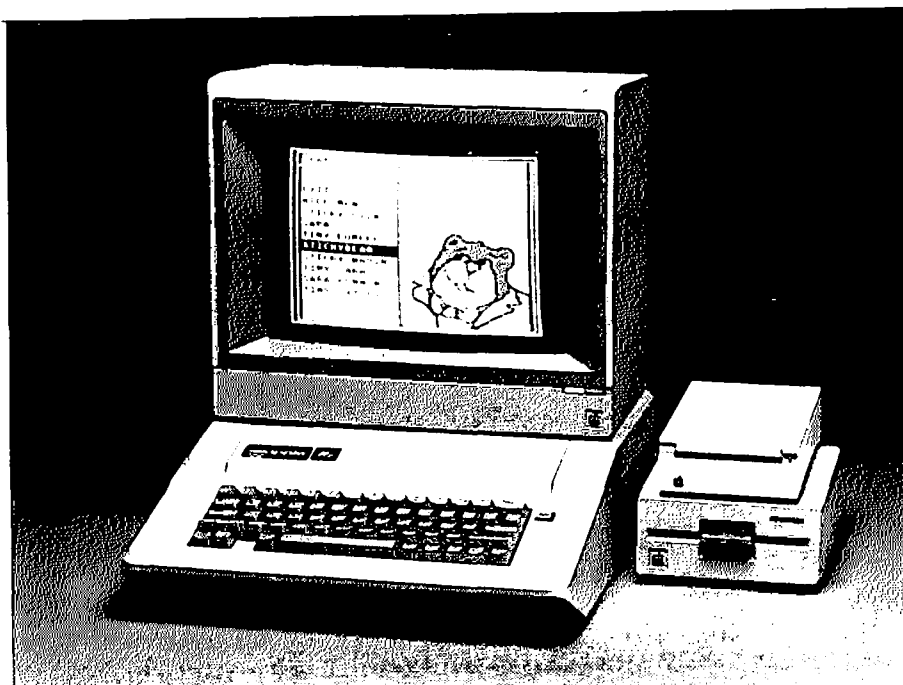
**Imagewriter II.** NLQ at 45 cps, top speed 250 cps; (\$595). Color capability for Apple //; for Mac a 'super' ImageWriter.

**UniDisk 3.5.** Apple // (\$499); ProDOS only - modification req'd for //c; works with 5.25 drives.

**Apple // Memory Expansion Card.** 1mb - no price or shipping date.

**ColorMonitor //e, and //c** \$399; composite color monitor.

So much to tell, so much to see, so little time. Pester your dealer! Come to the October 26 meeting. ☞



# APPLE // BEGINNERS' TUTORIALS

by Bruce F. Field

Our series of monthly tutorials for beginners will be changing starting in October. We are emphasizing basic skills with the computer and will not include any programming. (Additional tutorials in BASIC language programming will be held three or four times a year and will be announced shortly.) Our monthly beginners tutorials are held on Tuesday evenings at the office from 7:30 to 9:00 pm. If you bring your computer, please arrive 15 minutes early to allow for setup. The cost is \$10 per tutorial if you bring a computer, \$15 without.

The first tutorial is designed to familiarize you with common computer terms and help you feel comfortable with your Apple. If you bring your computer please bring your New Members disk to this session. Session 2 will help you explore the utility programs that came with your computer. Please bring the Master diskette that came with your computer (or a copy of it) and a blank disk. (Recent purchasers will have received a ProDOS Utilities Diskette, earlier purchasers will have a DOS 3.3 System Master Diskette.) Session 3 will demonstrate four popular applications for Apple computers and help you get started using them. AppleWorks will be used for part of the demonstration. If you have a copy please bring it; however the session will be useful for anyone contemplating using such application programs whatever the brand of software.

## Session 1. Welcome to the World of Apple

- A. Overview of a Computer
  - CPU, memory, input and output
- B. Using floppy disks
  - care and handling
- C. Running an Application Program
  - booting a disk, Ctrl-Open Apple-Reset
- D. CATALOG - what's on this disk
  - the file name
  - locked or unlocked?
  - file types - A, I, B, T
  - file size

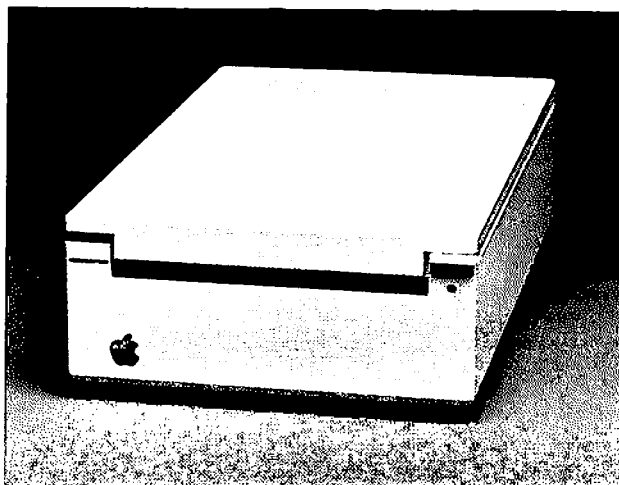
- E. Other important DOS commands
  - LOAD, RUN, LOCK, UNLOCK, DELETE, BRUN
- F. Making copies of disks
  - using the ProDOS formatter, DOS COPYA
  - what are copy protected disks

## Session 2. How To Use Your Apple Software

- A. Initializing a disk - what it does
  - 143 Kbytes of information
  - different versions of DOS - 3.2, 3.3, ProDOS
- B. Introduction to ProDOS
  - pathnames, - (smart run), CONVERT
- C. Using ProDOS Filer and DOS FID to copy files
- D. Disk recovery programs
- E. Selected programs from the New Members Disk

## Session 3. Popular Applications for Your Apple

- A. Word processing (using Appleworks)
  - entering and correcting text
  - search and replace
  - using special printer features
    - underline, boldface, condensed, etc.
  - how a spelling checker works
- B. Spreadsheets
  - entering numbers, text, and formulas
  - compound interest - a simple example
  - using the Clipboard
- C. Data base management- Filing programs
  - setting up a mailing list
- D. Communications
  - hardware requirements - modems
  - software requirements
  - Bulletin board systems - BBS
- E. What is BASIC or why should I become a programmer? ⌘



# DISKETERIA DISPATCH

## by Jim Little

Three more game disks and one graphics-plotting disk have been added to the DOS 3.3 library. We are also adding three disks to the SigMac library. The Disketeria staff is working on other disks for the coming months. Look for us as the holidays approach. More new / recycled programs next month.

(Ed. Note: Too late for this month's Officers and Staff masthead - Disketeria helpers: Richard Langston III and Nancy Little.)

### WAP DISK 161: Wizard Worker

This disk, by Rich Mlodoch, contains programs useful for editing wizardry characters. With these programs you can change class, alignment, race and other attributes of your characters. Gold and experience levels may be changed and possessions may be added or dropped. Healing is not provided, but gold may be added to a member of the party for use in the Temple of Cant. This utility works on all three scenarios. Use your backup disk, not your scenario disk. It is recommended that you use a secondary backup rather than your main backup. Wizardry is a trademark of Sir-Tech Software, Inc.

### WAP DISK 162: Games E

Disk 162 is compiled from several disks of the same group. Richard Langston put this one together. These are graphic games, some using the keyboard, and the rest a joystick/paddle.

Hopper puts a green amphibian at the bottom edge of a screen with a busy road and a canal to cross before reaching safety at the top of the screen.

Invader (deka vader) is an adaption of the old arcade game, and plays reasonably well. Power rays from space still will smash you if they hit, and the shelters don't last long under the battle scene.

Kong is a lo-resolution version, in basic, of another arcade machine. It is keyboard-based, unless you care to modify the inputs, and it is a challenge.

Lo-Res Fantasies generate a series of screen patterns in color. An Apple Kalidescope!

Ultra block is a version of little brick out, with a difference. Instructions are in Japanese! Only one chance in the game, unless you change the program to allow for more. Try it, the language is not that much of a barrier, and paddle 1 and button 1 do everything except quit.

Pinocchio rewards the capture of white blocks on the screen with a longer "nose", the only part of the anatomy shown of the poor wooden fellow. Again a keyboard commands the movement and like the commercial product if you hit any thing it's curtains.

We included a paddle joystick test as a bonus. See if they're working correctly, if they center, if the buttons fire etc.

Jack-o-lantern is a high resolution display for the season. Written in basic, modifications of the shapes of the face may be made at will.

The final program is Graphics Games, a dynamic

display which creates hi-res pictures for your enjoyment. Your input controls exactly what you see. New data makes new patterns.

### WAP DISK 163: Graphs and Displays

Disk number 163 is an exchange from the Big Apple Club of New York City. The introduction screen and selections are neat; therefore they have been left intact. One program group is a set of plotting routines that create line, pie, and bar graphs from your data. Choose how the data is to be displayed and go to it. If it is not as desired, replot. Lots of flexibility in creating the display.

The second program manipulates hi-res screen displays to replace one picture with another in a controlled process. An overlay of the new picture moves from any edge of the frame to the opposite side in a smooth motion. You choose which way and the program takes it from there. Any screen that can be displayed from a file is available to this program.

### WAP DISK 164: Games F

Disk 164 is another games disk, this one from exchange disks of Big Red Apple Club of Nebraska. Included in this disk are some unusual programs.

Ratmaze puts you in the inside of a maze, and the clues you have are the presence or absence of walls. Again some mapping will aid your escape. See if you can beat the odds of escape. At the end, the path out is displayed from the top. It's fun and a bit different.

Hoover Dam places you at the controls of the mighty powerhouse in Nevada. How you handle the job determines the financial profits of the company (artistic license, the dam is government owned). However it's not just profits you are after - the dam can break, generators fail, valves close at the wrong place. A clock display reminds you that this is a real time simulation. Several screens show the dam, power generators, capacitors, status panel and financial report. Try it a while. You may wish to tinker with the program which is written in Basic. My preference is that the quit command is not one that can accidentally be hit while trying an adjacent key. This is a public version of some of the 3-mile Island action, without radioactivity.

Skywriter trails smoke from a plane flown by you. Set messages, trace the planes path or whatever. Snoopy would be proud of you.

Space Gorn is a text adventure series aboard a space ship. The Gorn is a combination of alligator and dinosaur. Defeat or be dessert. Trace your way through the compartments finding artifacts to aid the conquest.

Star Wars IV puts you in a fighter protecting civilization. Fire at the rascals and still more arrive.

Black Jack is the game with doubling down, splits, insurance bets and all. Bet without a trip to Atlantic city. No risk to the pocketbook. This and the slots are part of the ca-

contd.

sino. Check the index for the rest of the games on other disks. Finally a Lunar Lander. Hit the target, but not too hard. Success is measured in terms of feet per second at touchdown.

The following new disks have been added to the SigMac Library. Disk descriptions have been supplied by Tony Anderson and Dave Weikert:

### SigMac Disk 23: Fonts III

This is the third SigMac disk devoted strictly to type fonts. The disk is a condensation of 6 months' accumulation of disks and downloads. It has so much material on it that we had to leave off MacWrite and MacPaint - and the SigMac startup screen as well.

On this disk there are 34 fonts of 18 different type faces. (Face = the letterform design; Font = the set of characters for a point size of a type face.) All but two of the faces are in the public domain; many have been created by members of the New York Mac Users Group (NYMUG). The fonts have been sorted into folders according to style and use.

Two items on this disk are MacPaint documents. One is a keyboard map for all the extra characters in the Boston fonts. The other is a sampler of the display and cursive faces on the disk.

The remaining file on this disk is called All Characters, a MacWrite document designed by Jason Kanter of NYMUG, who also designed this type face (Vancouver 12). This document will show all possible characters of a given font. Merely convert the document to the font you wish to see, by highlighting the whole thing and selecting the new font.

To install these fonts on any disk, of course, you will have to use a Font Mover, preferably the new Font/DA Mover, since you don't have to move the Mover to the disk you're working on, even on a one-drive system.

### SigMac Disk 24: Telecom I

#### On the DESKTOP:

BinHex 5.0 (by Yves Lempereur) is a newer version of the BinHex program distributed on SigMac #9. It is written in assembly and runs very quickly and implements a new compressed format. It will also process files created by earlier versions of BinHex.

FreeTerm 1.7 (by William Bond) - This terminal program is simple enough for almost anyone to use. But it's not short on features. Features such as up to 2400 bits per second operation, xmodem protocol, and ASCII file transfers.

#### In the APL folder:

APL Document (by Mike O'Connor) - A special MacTerminal document to be used with a patched version of MacTerminal.

APL MacTerminal (by Mike O'Connor) - The APL terminal document, combined with a copy of the MacTerminal application that has a special patch installed, allows you to use the Macintosh as an APL terminal.

#### In the AutoDial folder:

AutoDialRsrc (by Scott Zimmerman) - Contains auto dial. Must be installed in MacTerminal as explained in docu-

mentation.

#### AutoDial Documentation

##### In the Kermit folder:

#### CKMKEY Documentation

CKMKEY (distributed by Columbia University) - This allows you to customize the keyboard for Kermit use.

#### Kermit Documentation

Kermit (distributed by Columbia University) is a virtual terminal and file transfer program. It can send files between two microcomputers, or a micro and main frame when there is a version running on both ends. The documentation files are standard Columbia material "Mac-ized" with MacWrite.

#### Kermit Bugs - What, a bug list already?

##### In the KEYPAD folder:

Customizing MacTerminal (by Jonathan E. Hardis and Larry Rosenstein) - How to customize the keyboard in MacTerminal.

Keypad - Simulate numeric keypad with command keys.

### SigMac Disk 25: Utilities II (Switcher)

This is it! Switcher version 4.4.

#### On the DESKTOP:

RamStart (by George A. Nelson) is a Ram Disk program. It is one of the best we have seen. It's at least as good as the commercially available products. RamStart allows you to set up what files are to be placed on the ramdisk at startup.

##### In the Font Librarian folder:

Font Librarian Documentation (by Proper Software) - A short note about Font Librarian. Most documentation is in the application itself.

Font Librarian (by Proper Software) - The Font Librarian is a replacement for the Font Mover. It makes working with fonts, such as the public domain fonts on users group disks, much easier and more predictable. The Font Librarian lets you see fonts before moving them, lets you keep many windows open at once, and gives you many other capabilities that the Font Mover does not. Since The Font Librarian is a shareware program, you may make copies for your friends. The \$20 registration fee is detailed in the startup and help screens of the program.

##### In the Painter's Helper folder:

P.H.#1 Hints 1 (by Reas'nable Software) - A help screen for Painter's Helper.

PH#1 Hints 2 (by Reas'nable Software) - Another help screen for Painter's Helper.

Painter's Helper #1 (by Reas'nable Software) - This application helps you create better MacPaint drawings. It allows you to create curves and other shapes as when using MacDraw. Then save your creation in a MacPaint document.

##### In the Switcher folder:

SWITCHER Program Hints (by Andy Hertzfeld) - Notes on programming with the switcher in mind. Based on the 2.0 version.

SWITCHER Documentation (by Andy Hertzfeld) - There is no documentation for 4.4 yet. This is for 2.0 but should be functionally equivalent.

SWITCHER 4.4 (by Andy Hertzfeld) - This is the final final release version. At least until Andy finds another bug. ☹



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Note: DOS 3.2 disks (Volumes 1 - 40) have been discontinued. The office will maintain an "archival" copies.

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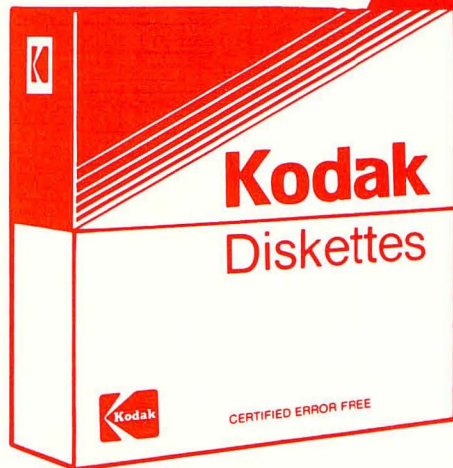
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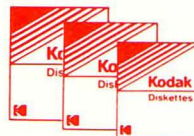
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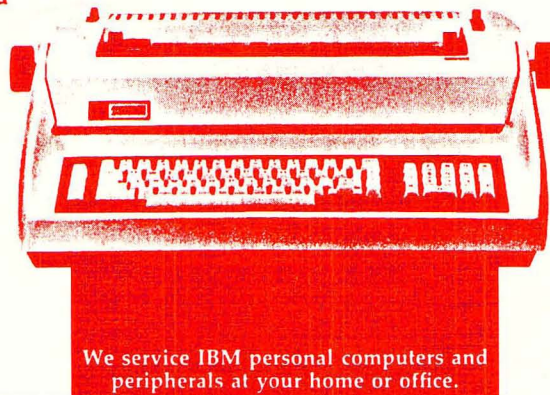
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