The Best of Ottalini #3

(ORIGINAL DISK NAME: BEST OF OTTALINI DISK #3 (1988))

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/// SIG, Washington Apple Pi

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WELCOME!

WAP /// SIG Public Domain Library Disk Category/Number: WAP Articles/ 3INF-14

The third in a series of disks containing the articles of the WAP /// SIG Co-Chairman Dave Ottalini and other selected authors. Articles on this disk are from 1988.

WAP /// SIG PUBLIC DOMAIN LIBRARY

PDS NAME: BEST OF OTTALINI DISK #3 (1988)

DISK ID: 3INF-14

TRAIL.COLUMNS (1988)

WAP.01JANUARY

New products discussed: SOS Driver Optimizer & Graphics card

WAP.02FEBRUARY

New PD disks discussed; Future disks; WPL program "PD.CON"

WAP.03MARCH

D.A. Datasystems puts programs into the public domain

WAP.04APRIL

Has Frank Moore Returned?; More news from Lt. Sykora

WAP.05MAY

More Public Domain Disks; /// SIG's New Helper

WAP.06JUNE

ThreeWorks update; Apple /// News

WAP.07JULY

Sykora Software Update; On Three News; Sun Remarketing

WAP.08AUGUST

Menu.Maker Continued; Menu.Maker Take Two; New PD Disk

WAP.09SEPTEMBER

More On Three News; Sykora Software; July SIG Meeting

WAP.10OCTOBER

Apple /// News; Another Graphics Board; Music MIDI Driver

WAP.11NOVEMBER

Where Do I Find Parts For My Apple ///?

WAP.12DECEMBER

History of the WAP /// SIG; /// SIG Christmas List

OTHER.ARTICLES

The Legacy of Daryl Anderson
Taylor Pohlman on GS Basic (Parts 1 & 2)
Bibliography of On Three for 1987
TAU.PD.CON: WPL program used for PD development

January 1988

HAPPY 1988!

We're off to a new year, /// SIGer's and I think it's going to be an exciting one for us. It's been nearly four years now since our ///s stopped rolling off Apple's assembly lines. Yet the /// continues to do an excellent job for the purpose for which it was intended: a good, basic business machine that can help us write our correspondence, balance our books, and even provide a little fun now and then. The fact that prices for a used /// have basically hit "rock bottom" now means 1) that (if you already own a ///) you can now afford to buy a second machine for back-up purposes and 2) (if you don't own a ///) you can now buy a good starter computer with a large software library and the support to get you started.

Given the fact that you can get //e emulation for about \$200.00, can upgrade to 512K, can use an 800K Unidisk and many hard disks, (not to mention use programs like /// EZ Pieces that have AppleWorks compatibility) still makes our wonderful machine a useful tool THAT MANY OVERLOOK. I think that in too many cases, people give up on the machine before making a real effort to find someone in the /// Community to help. We need to do a better job of getting the word out and of helping!

New Products 1

Perhaps one of the most eagerly-awaited products ever to come out for the Apple /// is reportedly going to make its appearance this month. It's called the SOS Driver Optimizer, a program designed to replace the System Configuration Program. So far, early reports of Beta-testers indicate it will be a must-have product. Originally scheduled for release by Pair Software, the program will now be marketed by On Three.

It was written by Lt. Charles Sykora, whom you will remember wrote the Trackball driver mentioned in last month's column. He recently wrote me and described exactly what the SOS Driver Optimizer will do:

- 1) It allows Driver files up to 60K, rather than the 51K limit of SCP.
- 2) You may directly control the order of your Drivers, if desired, with a 'Move a Driver' command.
- 3) The program will 'Optimize' or sort your Driver Configuration for each of the different Boot Disks you use (it is smart enough to know that re-sorting isn't required if several Boot Disks use the same Interpreter). This minimizes, and, in most cases, completely eliminates the 'hole' in memory that most programs cannot employ usefully.

- 4) An 'Auto-Optimize' option is available that will allow you to insert each of your Boot Disks one after another. The program will read in the SOS.DRIVER file on each disk, optimize it, and write it back out.
- 5) The program automatically updates each Boot Disk to the 512K version of SOS 1.3 (i.e. SOS+). Thus, your disks will work with either a 256K or 512K machine equally well.
- 6) The program allows the installation of the .DESKTOPMANAGER (Trademark of On Three) and its removal, updating the Boot Disk for the special Boot Tracks required for use with Consorti's utilities.
- 7) You can generate compact archival versions of Drivers, Fonts, and Keyboards that take up much less disk space.
- 8) When you remove a Driver from your Desktop, the memory is freed up for use by other Drivers, eliminating one of the primary frustrations with SCP.
- 9) A context-based Help system that occupies 3 full disk sides is constantly available. No program (not even for the Mac II or Big Bad Blues) has such a comprehensive and easy-to-use on-line Help system.
- 10) DCB editing may be done in either Binary, Decimal, Hexadecimal, or Character Modes.
- 11) A Program Environment feature saves the settings you use with the program (FileName prefixes, suffixes, and defaults, for example). A comprehensive Printer setup feature allows you to control printer output with unprecedented precision. Most printers can be selected quite simply from a Menu.
- 12) For those Drivers that require it, you may edit the Device Subtype.
- 13) You may 'Anchor' those positionally-sensitive Drivers such as PowerKeys (trademark of Pair Software), so that they will not be moved by the 'Optimize' function.
- 14) The Optimizer displays much more data than SCP, according to your own defined User Level. System information such as memory size, version of SOS, size of Driver Desktop in both the disk and booted formats, and type of Boot Disk is displayed in a Window. Information on Drivers, such as memory Address, size, and many other items is readily available. All of these Displays may be printed.
- 15) You may read many Drivers onto your Desktop and select those Drivers that you don't wish to include in a particular output file by marking one or more Drivers as 'Destroyed'. Then, when you need them for another Driver arrangement, you may restore them using a simple Menu option.
- 16) The program is written in Pascal and Assembly language and comes on 5 disk sides. It will install easily on Selector and Catalyst. It is not copy-protected. It is infinitely easier to use than SCP and, at the same time, is the most powerful program ever written for the ///. Future programs

for the /// that I develop will use the same Windows-oriented user interface concept as the Optimizer.

There's no word on price yet, but I hope to have more details by the January SIG meeting. Stay tuned!

NEW PRODUCTS TAKE 2

Lt. Sykora and his brother, by the way, are also working on a new graphics card for the /// and GS (yes...the /// AND the GS). Here's how he describes that project:

The design features have been finalized, and, as you read this, we are testing the computer interface circuitry. So far, we have not tried to contact anyone for commercial applications for the board. Rather, we are developing it for the use of the orphaned Apple ///ers out there.

To realize the ultimate capability of the design, while offering a less expensive entry-level option, the C3RGB (as we are currently calling it) project uses two boards, the second of which piggy-backs to the first. The first board contains the computer interface circuits, monitor drivers, and 512K of RAM. The second board, which boosts the resolution capability by a factor of two, includes another 512K of RAM, plus an optional 65C02/65C816 character generator and programmable graphics controller. Although it is still early to make precise predictions, we believe that the basic board would cost \$300-\$400 (plus \$50 for the analog RGB inter-face, if desired), and the second board \$250-\$350 (plus whatever the on-board optional computer costs).

Resolution

The C3RGB uses a family of special purpose chips from Hitachi, the central part of which is the graphics coprocessor itself. The single primary board is capable of 640X480 resolution, with 4 bit (i.e. 16 color) pixels with VGA/PGA quality monitors, such as the Mac II's (trademark Apple) or SR12-P of Princeton Graphics. The board will also be capable of using the IIGS analog RGB monitor at standard resolution with 8 bit (i.e. 256 color) pixels. A color palette RAM on the board allows the colors to be selected from a 4096 color maximum or (optional for about \$20-\$30 extra) 16 million different colors.

Without the analog RGB interface option, only 4 bit pixels can be used, with the resolution depending on the monitor (TTL RGBY monitors only). With the second board, analog RGB monitors can realize the full 640X480 resolution with 8 bit pixels. By using a multiple-synchronizing analog monitor such as the NEC MultiSync or Princeton Graphics UltraSync, the resolution can be extended up to approximately 700X500 with no hardware changes.

Memory

Since the C3RGB board offers 512K (1Meg with the second board), almost two entire screens (three if only 4 bits/pixel are used) with the 512K memory. The extra space could be used to extend the logical screen past the limits of the physical screen, allowing extremely rapid scrolling by using graphics processor commands. Also, the extra memory could be used for non-graphics data, and we are considering providing a .RAM Driver will as part of the new .GRAFIX Driver Module that will support this board. For programs which cannot take direct advantage of the board's graphics capability (which is,

sadly enough, all known /// programs), the memory could be a devoted RamDisk, if nothing else.

Capabilities

The graphics coprocessor, which runs at 6MHz, has built-in commands to handle 98% of typical graphics requirements, including CAD/CAM. The main limitation will be the transfer of data from the computer to the graphics board. Data- minimal tasks (i.e. graphics-intensive) should rival the Mac II in speed, especially scrolling operations and windowing. Text may be placed on the Graphics screen with bit-mapped characters. With the 65C02/65C816-based character generator computer option, direct ASCII characters can be written to and read from a graphics screen, complete with flashing, inverse, halftone, boldface, underline, and overline. Four programmable fonts will be standard, with additional fonts possible, depending on additional memory.

Software

The board will, of course, come with a new .GRAFIX Driver. Hopefully, someone will write a graphics program to use the new board. By using the advanced features of the graphics coprocessor to Zoom, flood fill, etcetera, sophisticated CAD/CAM could be done with comparative ease.

Hard to say when this graphics card may be ready for actually production, but we'll keep you up-to-date on this as well...

NEW PRODUCTS ///

SIG member Ed Gooding told me recently about a contact he's made with a vendor called The Lisa Shop in Minnesota. According to Ed:

(They) will soon be selling 20 and even 40 meg Profiles!!! The 20 meg'ers will be \$800 and the 40 meg'ers will be \$1400. He's also fitting a 3.5" drive INSIDE the /// case to use as the internal drive!! This will cost around \$375, including new case, drive, and new analog card.

I'll have more on this as it becomes available...

BUSINESS BASIC AND GS BASIC

I spoke with GS SIG Chairman Ted Meyer recently to let him know about the similarities of the two Basic languages. I also mentioned to him that there is a Public Domain program called Apple-Con that will convert (up to a point) Applesoft programs into Business Basic. Since the program was written in Pascal, it should be fairly easy to convert and use on the GS. It also needs to be updated a bit, since it will only recognize programs on DOS 3.3 formatted disks. It's not that difficult to move programs from DOS to ProDos or SOS-formatted disks, but an option within Apple-Con would make the program easier and quicker to use (see the GS column this month for more info on this).

I am also interested in a similar project to take the current version of Apple-Con for the /// and upgrade it to read ProDos/SOS as well as DOS 3.3 Applesoft files. Any SIG member willing to take this on, please

give me a call. I am also looking for contributions of programs converted from Applesoft to Business Basic. Specifically, I would want both the Applesoft and the Business Basic programs, so that the two can be compared. Any tips for converting from Applesoft to Business Basic would also be appreciated. These would go into a new /// PD disk offering, with the upgraded Apple-Con on one side and the programs on the other.

Concurrent with this, I am also working on a project to convert the Preschool Gameroom PD offering into Business Basic. Anyone interested in helping should give me a call. I am also starting to gather Business Basic Foto Files and Fonts for PD disks. Any contributions welcome.

A Thank You

I want to once again say thank-you to the WAP Board, and specifically to Bernie and Gena Urban for their support of our SIG this past year. Despite the "orphan" nature of our computer, I have been thrilled at the amount of support and encouragement we have received. I have not always made things easy for the Urbans, but they continue to care and it is very much appreciated.

Finally

If you recently purchased a /// PD disk and discovered Side Two was blank (all our disks save #1002 and 1003 are double-sided) be sure to bring it back to the WAP office for an exchange.

If you have a friend who has a ///, tell them about WAP and our /// SIG. We currently have the largest /// group on the East Coast, and the more members the merrier!

February 1988

NEW PD DISKS!

/// SIGers, I am happy to announce that we have added FOUR new disks to our growing Public Domain offerings. Here's what they include:

THREE.SIG.1013: A3 Diagnostics

This is a double-sided disk that includes the latest version of the Apple /// diagnostics program. Side One has the instructions and is bootable, since it contains our Menu.Maker program. As with other disks, we've included a Text.Dump program so you can print the instructions from BASIC. The SOS.Driver file also contains the .ATTACH Driver that lets you dump what you see on the screen to a printer as well. Side Two has the actual Diagnostics program. You will discover that it is NOT listable but will copy and boot without any problems.

THREE.SIG.1014: BASIC Boot Disk

This two-sided self-booting disk has a number of programs on it. Side One contains the BASIC boot menu and programs as written by /// SIGer Jim Salerno. It's basically the same program found on our Profile at the office. From the BASIC.Boot menu, you can automatically handle a number of utility operations, all from BASIC. For you folks trying to learn how to program, this disk can give you a number of ideas. On Side Two, we have put a number of printer control programs and programs that will make labels for you. Some changes to the programs may have to be made to a particular program so that it will work with your printer (that is, you will have to change the control codes, etc.).

THREE.SIG.1015: Best of ///s Company

Another double-sided disk with a ton of basic information about your Apple /// and how to get the most out of it. This disk is self-booting on Side One and includes tutorials on how to put a battery backup in your ///, install a clock kit, upgrade to 256k, etc. There is additional information on the emulation mode, getting information from a Mac to a /// and back, laser printers, many reviews, etc. These were all downloaded from /// SIG member Ed Gooding's ///'s Company BBS in Richmond, Virginia, the best source of /// information in the US!

THREE.SIG.1016: AppleCon

As mentioned last month, this is the Applesoft to Business BASIC conversion program originally placed into the public domain by Apple in 1981. It will read an Applesoft program from a DOS 3.3 disk, and convert it (to a point) into Business BASIC, saving the result onto a SOS/ProDos disk as an ASCII text file. Both sides are self-booting (Side Two is in Pascal). Side One contains the instruction manual. Yours truly has also included other information designed to help in the conversion process. That includes PEEK-POKE and CALL translations, as well as information about converting other Applesoft Keywords to Business BASIC. Much of that information was taken from the manual for SOSTRAN, a Sun Remarketing product (available but no longer advertised) which has a treasure trove of information about converting from one BASIC to the Other. Efforts are underway to try and convert this program to read ProDos files and as a stand-alone ProDos program (for the GS).

FUTURE DISKS

I have made excellent progress in getting the Taylor Pohlman Solftalk articles on Business BASIC ("The Third Basic") formatted properly, etc. I hope to be able to announce the first release of disks next month. To maintain the sequence, all five Pohlman disks will be released one after the other, as disks 1017-1021. It has also been decided that to conserve space, only 1017, the first disk, will be self-booting. The rest will have the Menu.Maker program resident, so all you have to do is boot the first disk (or any /// SIG self-booting Business BASIC disk) and at the prompt place the proper disk into .D1.

Also in the future, a disk with fonts and one with WPL programs. Former /// SIG member Bart Cable donated a number of programs to the SIG. Bart, by the way has gone over to the MS DOS world (we won't hold that against him) and was the hit of the recent Garage Sale. /// SIGer Trish Babylon was seen gleefully running away from Bart's table with programs bulging out her arms. Bart, who had just made a big sale, was also seen smiling a bit!!

At our SIG meeting in December, by the way, we discussed ways members could contribute to the SIG. One way is to contribute a program or two that you may have written, or adapted in some way, to the PD library. We will collect these and put them onto appropriate future offerings. We are also very much interested in short articles on how you use your machine, how you developed a program, etc. They don't have to be long, but are of interest to all. Anyone interested in giving a program during a SIG meeting would also be welcome.

WPL ON THE MOVE

One of the most powerful features of AppleWriter is WPL, Word Processing Language. The programming language allows you to automate many of the tedious word processing chores, like mail merge, etc. you do on a daily basis. For me, I discovered it could also help with the formatting chores involved with the Taylor Pohlman disks mentioned above. So I wrote a program, called "PD.CON" that I think you'll be able to find very useful.

The first thing you have to do is decide how you want to format the text. For example, to use a text file within the Menu. Maker program, it must be 78 columns long. 79 is too long (it will wrap to the next

line). For readability, it should also be continuous text with no big spaces between pages. The way to do this is set up a Print/Program menu that can be loaded into memory and which will format the text file properly. Here's how mine looks for the PD.CON WPL Program:

```
Print/Program Commands:
Left
       Margin (LM) = 0
Paragraph Margin
                (PM) = 0
Right Margin (RM) = 78
       Margin (TM) = 0
Top
Bottom Margin (BM) = 0
                 (PN) = 1
Page Number
Printed Lines
                (PL) = 66
Page Interval
                (PI) = 66
Line Interval
                 (LI) = 0
Single Page
                (SP) = 0
Print Destination (PD) = .RAM/FILE
                 (CR) = 1
Carriage Return
               (UT) = \
Underline Token
Print Mode (LJ, FJ, CJ, RJ) = FJ
Top Line (TL):
Bottom Line (BL) :
```

Note that the printed lines and page interval lines are the same, that the right margin is set to 78 and the print mode is full justify. For speed, I have set the print destination for a RAM disk with a file name of FILE. You can change the print destination (disk drive or hard disk) to match your system's setup.

Now, with the Print/Program Commands set, let's get to the actual PD.CON program:

```
PD.LOAD P PD.CON by Dave Ottalini; WAP /// SIG
      PND
      QCPD
      P Load the Print/Program file.
START
     PPR
     NY
PD Format Conversion Program
PPR
      S.RAM/FILE
      PIN Load which file?: =$a
      NY
      L $a
      PPR
      PPR Hold on now...I'm working as fast as I can!
      P This is the body of the program. It loads the file, then prints it
      P with the proper settings, as contained in the Print/Program file.
      В
      PNP
      NY
      L.RAM/FILE
      P Now, load the converted file back into memory, clean it up and save
      P it back to the proper location.
```

```
В
        F///A
        S $a
        OE.RAM/FILE
NEW
        Ρ
        PPR
        PIN Another File?: =$C
        P If you want to convert another file, hit "Y" or "y"
        P Otherwise, reload the "startup" values and quit.
        PCS/$C/Y/
        PGO START
        PCS/$C/y/
        PGO START
        PPR
        NY
        PDO.D1/STARTUP
        PPR
QUIT
        PQT
```

This is basically how the program works: It first loads the new print/program commands and then clears memory. The empty file FILE is saved to the RAM disk (since you can't print to disk unless there is a file present first) and you are prompted for the text file you want to format.

Once designated, that file is loaded and the processing begins. It is printed to disk, allowing the file to be formatted properly according to the print/program commands you set up. Memory is cleared and then the newly formatted text file is brought back into memory, cleaned up a bit and automatically saved back to disk for you. Now that's convenience!

At this point, we erase the .Ram/FILE file and ask if you want to format another text file. If you don't, the program automatically re-runs the WPL STARTUP program for my system. If you type "Y" it heads you back to begin the process all over again.

You Apple // AppleWriter users can adapt this program quite easily for your own use. You'll need to change the Clear Screen command (\) and the pathnames for the disks, since the Apple // uses slot, drive designations.

This is one of the programs we'll place on the upcoming WPL disk and would welcome any other contributions you might care to make. WPL is really a great addition to AppleWriter (one reviewer said it made the difference between being a good program and a great program). For more information, you can get our PD disk 1016, which has the 1.41 version of AppleWriter on it, as well as a tutorial on WPL. I would also strongly recommend you get the 2.0 manuals from Sun Systems Recycling, which are excellent (they come with the 2.0 version, the last official /// version of AppleWriter). Sun's number is 1-800-821-3221. Normal cost is \$75.00 but they have sales throughout the year.

FINALLY

Speaking of Sun, they have come out with a new "Apple /// Do-It-Yourself Troubleshooting Guide" you might want to get ahold of. Cost is \$19.95 and it should be available by the time you read this.

March 1988

The BIG NEWS this month /// SIGers is that Daryl Anderson of D.A. Datasystems has decided to place ALL of his excellent set of programs into the public domain! The primary reason...well, let's let him give us the reason, as described on CompuServe recently:

Since my one commercial distributor (!) has gone the way of all flesh (or at least all California /// publisher flesh (!)) I figure all the unpaid royalties constitute at the very least a violation of the terms of our 'exclusivity' agreement and I presume full control over distribution of my stuff. So...

I have decided to release all of the D A DataSystems commercial software to the Public Domain and to upload as much of it as possible to CompuServe over the next few months. This will include the 10 Tools Time Three packages plus Power Keys and the complete set of 17 modules and roughly a dozen other packages that were limited or custom releases or not-quite releases such as PC-COPY, RAM+3, TWO-N-FRO ///, LEGEND++. I will be uploading full user manuals and eventually, where possible, complete source code. I would be delighted to have you modify and improve and pass along to another ///er any of these programs.

Many of you have been friendly correspondents and supporters over the 5 years since I got into the /// biz. 1987 was (as you can imagine) a terrible year professionally but a very positive one personally and I thank you all for the friendly support and for allowing me to be a contributing part of the /// community over the years. For you and the whole new batch of "I got mine for \$200" ///ers this is my legacy - enjoy... -da.

While it saddens me that this had to happen, these programs are a tremendous addition to the Apple /// public domain. As a user of many of Daryl's programs, I can say that /// users have a real treat awaiting them. TAU, the Third Apple Users group, which has sold some of D.A. Datasystem's programs for some time, will add the rest as PD offerings. Sun Systems has also indicated they will offer them. Look for others to follow. Given the great body of programs, the WAP /// SIG PD library will, at this point, offer only some of the programs, probably including Power Keys, the Ram+3 for the Titan cards, Disk Window (a disk editor) and a few others. For more on Daryl Anderson and D.A. Datasystems, see my accompanying article in the Journal.

POHLMAN DISK ONE!

I am pleased to announce that the first Taylor Pohlman disk, **1017** A/B, is now ready and has been placed into the /// SIG PD library. It's a double-sided disk and contains the first five articles and associated programs from the Business Basic series in the old Softalk magazine. Again, this first disk will be self-booting with our Menu.Maker program. Future Pohlman disks (there will be a total of five) will

NOT be self-booting for space reasons. All will have Menu.Maker, however. So all you have to do is boot **1017** (or any other /// SIG PD Basic disk) and at the prompt place the desired disk into .D1, hit "Return" and you're set.

ON THREE NEWS

The New Year brought with it a new editor for On Three magazine. He's Olaf G. Wolff, who has edited a number of other magazines and books, including many auto repair manuals. He replaces Paula Sheppard, who quit to return to Wyoming with her husband. Also lost, On Three's programmer Tim Harrington, who followed his predecessor, Rob Turner to Apple. There are no current plans for a replacement.

As for the long-promised spelling checker, On Three has announced StemSpeller ///, written by the same Australian programmer who wrote the StemWriter word processor. The best part about StemSpeller is that it can check any ASCII, Pascal Text, StemWriter OR Three EZ Pieces file! And it can save the checked file as any other text file type you desire. The Apple // version of this program has been around since 1983 and Consorti says it took the programmer only about a month to convert it over (where was this Australian programmer three years ago??). Price is \$69.95.

On another front, On Three has written a driver for the new Central Point Software disk controller card that allows you to use any two 400 or 800k 3.25 inch Apple-compatible disk drives (Mac, Unidrive, you name it) or 5.25 inch drive! The original controller card was way too big to fit in our ///s, but a redesign made it small enough to work. Cost for the driver is \$50.00. You can get the controller card from Central Point or On Three.

If you haven't subscribed to On Three magazine, by the way, now is the time to do it. Their subscriptions are way down from previous years and they need the support of the /// community to continue. This is the only ///-specific commercial magazine left and we need it. Cost is \$40.00 per year.

Finally, as I mentioned in a previous Trail column, On Three is now carrying Dale Sykora's Trackball (a mouse substitute) and driver (\$89.95), and plans to offer his SOS Driver Optimizer as well. (Hopefully it will be available by the time you read this).

As for Sykora, he continues to work on that new graphics card for the /// and GS and appears to have found a party (not On Three, however) willing to help with its manufacture. Sykora says there may also be opportunities for other projects as well!

MOVING RIGHT ALONG

Bob Cook at Sun Systems had a chance to meet our esteemed Journal Editor Bernie Urban at the recent MacWorld in San Francisco and has apparently agreed to help with upgrades for the Lisas donated to the club. Sun has been very active in the Lisa/Mac XL remarketing effort, and says it now accounts for more business than the /// line does (but /// support remains as strong as ever). Along with HFS for the Lisa (currently available), Cook says a new version of MacWorks will turn the computer into a MAC Plus, enabling it to run HyperCard and other advanced programs (with the appropriate memory).

The latest edition of Sun's Sun Times publication should also be in your hands by the time you read this (call them for a free subscription at 801-752-7631). This will, however, be the last time they can send out a publication under that name. Seems the Chicago Sun Times didn't take too kindly to it and the paper's lawyers wrote a letter requesting a change. Soooooo...next time 'round it'll be something like "Sun Systems Recycling News" or maybe the "ST Gazette-Intelligencer".

Another source for Lisa/Mac XL owners, by the way, is The Lisa Shop, 2438 13th Ave. South, Minneapolis, MN. 55404. Phone number is 612-874-8596 and the owner is Frank Freeman. Among other things, he works on Profiles and can do hard formats (as opposed to a System Utilities "soft" format) on them. He's also the one reportedly interested in a project to exchange an 800K drive for .D1 in our ///s.

Sun continues to have the Titan ///+//e cards for sale, by the way. Cook says Titan makes them in lots of 25 for him as needed. Price has gone back up to \$299.00.

AND AT AIM

The Association of Independent Microdealers has been operating a clearing house for software and hardware for more than a year now. Starting with the ///, the trade group added programs for the //, MAC, IBM PC and Commodore. But with one final mailing, due about now, AIM has decided to call it quits. AIM is a great way to pick up software (and some hardware) at very reasonable prices (especially because they have been more and more willing to dicker of late). If you have a need, call them at 1-800-342-5246. Since they are getting out of the outlet business, prices will be set with one idea in mind...to move merchandise. So this is the time to get that program you always thought you might like, but never really wanted to spend the money on it.

FINALLY

The Apple THREE Group International, a user group based in Norfolk has changed its name and focus a bit. As of January, the club became Apple Users Group International. President Joe Dobrowolski says the name change was to help broaden the membership base to include other Apple users (he's also had problems getting people to re-subscribe). He's already begun adding Apple // disks to his public domain library.

AGUI still offers the largest single Apple /// PD library in the world with more than 160 disks. Call for a free sample of the newsletter, News and Views at 1-804-865-7520. Dobrowolski is the Editor and Publisher as well and always tries to cram a lot of information into five or six double-sided sheets. Membership dues are \$15.00.

April 1988

Has Frank Moore returned? It seems that way, at least to a point. In the mail this past month, many ///ers received a two page flyer from an "assistant" to Moore, the President of Pair Software. The assistant, Byron Schrum, says that the initial reason The Three Magazine ceased publication one year ago was by "over-commitments" on Moore's part, followed by an "unfortunate deterioration" of his health. Schrum says Moore is now back to work on a part-time basis with hopes he'll be back to 100% in March.

The flyer also confirms that Pair went bankrupt, making a continuation of The Three Magazine an impossibility. The flyer says the company is currently under a re-organization plan and "as you are aware, in a bankruptcy the normal payout to creditors in the proceeding is usually small, if anything.

Fortunately for subscribers, Pair Software has decided to provide a credit to the company's software library. Schrum says this plan "would almost certainly be authorized by the court." 2nd class subscribers will receive \$40.00 credit, 1st Class \$50.00 credit and overseas subscribers will get a \$60.00 credit.

The cutback means Pair will no longer be selling hardware items, and has had to discontinue other lines, such as ThreeWorks, GoForth and all the D.A. Datasystems programs (at least as commercial products). To make use of the credit, contact Pair directly by phone (916) 485-6525 or by mail (3201 Murchison Way, Carmichael, CA. 95608).

Pair has also added a new BBS, at (916) 929-4845. The flyer also claims to have a new backup program for hard disks on the way (named after a PC program of the same name, FASTBACK) and a couple of other programs.

As your /// Co-Chairman, I must tell you that I remain very skeptical of Pair and warn you in the strongest possible terms that this company's commitment to the /// Community remains questionable. The /// Community on CompuServe met this newly rejuvenated vendor with a great deal of skepticism (and even derision). As I've said in the past, if there was a problem, it would have been very simple to tell people about it and they would have more than understood. That did not happen and people got burned. They are not likely to forget anytime soon, even with the need for more Apple /// vendors. One individual, in fact, /// SIG member Dr. Al Bloom even wrote his own ASCII to DIF format converter program for the public domain after a similar program was announced in the flyer, and others notified FASTBACK's publisher inquiring about possible copyright infringement.

LET'S MOVE ON

On a happier front, Lt. Charles (Dale) Sykora has just come out with a modification to his Trackball driver which now allows it to work with On Three's Graphics Manager and all other mouse-driven software. He also has patched the driver onto .Console for use specifically with Catalyst (but is also works very well with Selector). These upgrades make the Trackball a much better buy, as it is now usable with essentially ANY Apple /// program. Those folks who bought the Trackball directly from Sykora can get the upgrade from him as well for an additional \$8.00. Check with On Three about the availability of the newly revised drivers if you want to buy it from them. I've also been putting a beta version of the SOS Driver Optimizer through its paces. It still has a few bugs, but I think it will be an excellent addition to your /// library.

NEW PD DISKS

Our /// SIG PD offerings continue to grow. While continuing our work to bring the Pohlman disks together, we've moved ahead to get some of the D.A.Datasystem disks into our library.

This month, we add disks **1022**, **1023** and **1024**. All are double-sided and **1022** and **1023** are self-booting. **1022** contains Basic Extensions and Basic Utilities. Basic XT provides a series of Invokable Modules that allow you to use Call, Peek, Poke and other language add-ons from within Business Basic. Basic Utils provides a version of System Utilities from within Basic. Daryl Anderson wrote the Utility program so that it is self-contained. But you can use the various parts in your own Basic programs if you need to (for example, you could format a disk from within Basic if your program needed that ability.) Complete User Manuals are provided for both Basic XT and Basic Utils.

Disk **1023** contains "The Retriever", a program that will let you undelete deleted files. The User Manual is extensive and easy to use. Finally, disk **1024** has the parallel and serial versions of Power Print ///, a series of device drivers that set aside some of your ///'s memory as a buffer for printing purposes. In this way, you can print a document and continue working without having to wait for your printer to finish. The drivers come in different sizes so you can use only the amount of memory you need. I've been using one of these drives for quite a while now and have found it to be a great time saver.

Due to the size of these programs, disk **1024** is NOT self-booting. But it does contain Menu.Maker and the Text.Dump program. Remember Menu.Maker will make a menu of any disk in .D1 simply by changing the prefix. Hit the (ESCAPE) key and use the left arrow key to erase the old prefix. Then type in the new one and hit (RETURN).

All these disks, by the way, have a newly updated version of our Menu.Maker program which I think you'll find a bit better than the older versions. Among the changes, the top menu bar has been fixed to better reflect the options available to the user. And the program now directly returns you to the menu after reading a text file. If you want to update old versions of the Menu program from earlier disks, all you have to do is copy the new version onto the COPY of your old PD disk. To change the disk name on the bottom Menu bar, simply retype line 260, letting d\$ equal the name of the replacement disk.

Finally, I have also updated the New Member disk to reflect the many changes in the /// Community over the past six months or so. It has the new Menu.Maker program on it, an updated bibliography of

WAP Journal articles about the ///, and an updated A3.Information file.

KEYBOARD LIGHT PROBLEMS

Your Apple ///'s keyboard "ON" light might seem innocuous enough, but it can keep your SARA from booting! If the light is burned out, a circuit is broken and the /// doesn't think the keyboard is hooked into the system. Thus, the machine won't boot.

There are two fixes to this problem. The easy way is to simply hit the RESET key. That will complete the circuit and allow the /// to boot. The second fix is more permanent and involves replacing the light. Your WAP /// SIG has some of these in stock if you need one, or you can get one from Radio Shack. The number is 276-036B. To make the repair follow these basic steps:

- 1) Turn OFF your ///'s power (better yet, unplug the power cord), and remove the disk in .D1.
- 2) Turn your /// over and remove the five screws holding the keyboard to the case.
- 3) Pop out the keyboard.
- 4) Carefully remove the old lamp.
- 5) Mark the positive side of the lead.
- 6) Trim the new lamp's wires to match the old lamp's.
- 7) Insert the new lamp into the socket (it may require a little squeezing) making sure the positive side is aimed towards the #3 key.
- 8) Turn on your ///. If the lamp does not come on, turn off the power and reverse it.
- 9) Replace the keyboard, hook everything else up and you're back in business!

If you have any other questions about how to do something on your ///, please feel free to write me in care of the WAP office, or call me (or Co-Chairman Tom Bartkiewicz). Our numbers are listed at the front of the Journal.

FINALLY

Reports are that On Three's new spelling checker for /// EZ Pieces is not selling well. If you need a spelling checker, this product is, by all reports, excellent and well worth the \$69.95 cost. I'll be getting a copy soon and report back to you on its merits.

May 1988

PUBLIC DOMAIN DOINGS

Our /// SIG PD offerings have grown so fast in the last year or so it's time for a breather of sorts. This month we've taken a look back at some of our older disks and begun the process of updating them a bit. Specifically, we're now looking to replace older versions of Menu.Maker with the newest version, 3.00, which makes its debut this month. Among its new features is a running clock at the main menu level!

While the review process is going on, we've gone ahead with plans to combine Basic Utilities disks **1002** and **1003** into one disk, which now becomes **1002A/B**. It should be available as you read this (see accompanying article on this new disk). As a result, we are also introducing a new PD disk **1003**, called Footnote ///. It's a Pascal program that will allow you to merge text and footnotes into one file. Thanks to /// SIG member John Chapman Jr. for providing this program. It's on a double-sided disk. Side one is self-booting and has our Menu.Maker program and the user manual. Side two is also self-booting (in this case Pascal) and will run the actual program. Look for an article next month describing how to use Footnote ///.

We're also introducing PD disk **1026A/B**, which is another in the Daryl Anderson Tools Times Three series. This program is called Disk Window /// and will allow you to look at and even change the internal code of just about any program you might like (this can be very dangerous...so use carefully!). It has powerful editing features as well. As with other D.A.Datasystem disks, this one has complete documentation (on Side one). Side two contains the actual program, and will return you to Menu.Maker when you are finished.

And at at least one member's suggestion, I will soon be putting together a disk with back Trail columns on it. Watch for its availability in this column.

NEW HELPER

New /// SIG member John Ruffatto has volunteered to help with copying duties for our PD library and is currently cataloging and researching all our disks. That way, we can provide SIG members with hard copy listings at the office, and on disk (it will become number **1000**) that includes information on each PD disk. It will be constantly updated as we add new disks. This should also help ensure that all /// SIG PD disks are of uniform quality, are copied correctly and will work as advertised. We also hope to send some version of the hard copy listing to new members

My thanks also to /// SIG member Jim Salerno who helped upgrade our Menu.Maker program. He's also been working to prepare more PD disks for our library (you'll see some more of his work next month).

AND MORE ON THE PD FRONT

I'm also happy to announce this month that we will soon be getting four new fantastic PD programs in the near future. Three come from Foxware in Salt Lake City. This company offered three excellent programs during the early days of our ///, but discontinued support in 1986, after Apple decided to discontinue production.

Your /// SIG Co-Chairman called them up recently, and for a small consideration fee, was able to get all three programs, with source code and user manuals on disk, placed into the public domain!

The three programs are: Inkwell, a What-You-See-Is-What-You-Get (WYSISYG) word processing program; TerminAll, a telecom program that can emulate a number of computer terminals, and Basic Extensions, a set of Business Basic Invokables that will allow the user greater flexibility when working with our Business Basic. Watch The Trail for an update.

A fourth program, Infonet, is a Bulletin Board program originally sold by Sun Systems. President Bob Cook placed the program into the public domain during the Phase /// Conference last year. But it's been considerably upgraded since then and we'll be placing a copy of that into the library in the near future as well. Our thanks to Bill Roady, a ///er on CompuServe for making the upgraded program available to us.

MOVING ALONG

Lt. Dale Sykora continues to work on a number of projects. Recently on CompuServe, he said he has figured out how to configure Joystick Port A to be used as a serial port! This could have immediate impact, since all it would take is a specific driver and proper cable to hook up a second serial device (printer or modem)...without wasting a precious slot!

A new set of utilities for use with On Three's Desktop Manager are in the works and are already getting rave reviews from its beta testers. Created by Earl Brelje, Disk #3, containing programs you can call up with a few keystrokes from ANY program includes a Block editor, a ruler that allows the user to measure the X and Y position of a character on screen, an Accessory Manager designed to make loading and managing DTM modules very easy, and a new, more powerful Print Screen utility. The disks should be available about the time your read this.

By the way, any of you with GS's should really check into the DTM GS version. It really is excellent and will, like our version, work from within ANY program running on the GS. Other "Background Utility" programs like Pinpoint or TimeOut are restricted to working only from within AppleWorks, a major disadvantage. Recent reviews of DTM missed the mark a bit, complaining that it was not as good as the others because it had been ported over from our /// version. But because SOS and ProDos 16 are in many ways alike, the fact that it was ported over may actually be one of its major strengths.

June 1988

THREEWORKS UPDATE

It's been a year in coming, but the latest version of my Apple /// databases, ThreeWorks should be available by the time you read this column! For those of you who don't know, ThreeWorks is designed to be a tremendous resource for all Apple ///ers. Using Three Easy Pieces (AppleWorks), these databases include bibliographies of more than 15 hundred Apple /// articles going back to 1980. In addition, there's information on everything from Apple /// books, vendors, public domain offerings, tips, repair sources, bulletin boards and clubs, and much more. For you Three Easy Pieces/AppleWorks users, there's a separate data base listing all known books dealing with those wonderful programs, and the vendors list includes sources for templates. Business Basic users will find a complete list of Keywords as well as information about converting programs from Applesoft (something GS Basic users might find worth looking at).

New additions with this update include a data base of programs and information found in the DL7 and DL8 sections of MAUG (The Micronetworked Apple Users Group) on CompuServe. The Glossary DB has been greatly expanded and you'll find information about the chips in your /// (and where to get replacements).

ThreeWorks can currently be obtained from three sources: On Three, TAU (Third Apple Users Group) and Apple Users Group International (check your new member disk or prior TRAIL articles for addresses).

APPLE /// NEWS

More problems for On Three, where magazine editor Olaf Wolff was fired in late March. He had barely come on board. Publisher Bob Consorti will take over those additional editorial duties. On Three is no longer owned outright by Consorti and has been on a cost-cutting binge lately. Although Consorti said on CompuServe that Wolff had been fired for incompetence, his salary will be a savings. In addition, "Doc" Christenson, the On Three tech has been fired as has a bookkeeper and there are no plans to replace Tim Harrington, who recently left to work for Apple. Renewals for On Three Magazine have not been good the past few months, and sales have been lagging, despite attempts to market an excellent GS version of the Desktop Manager and other GS products. Recent flyers have extolled the /// community to purchase products, and to renew subscriptions or face losing On Three as a vendor. I would urge all SIG members to help keep On Three as a viable Apple /// product supplier.

We continue to get flyers from Pair Software, as it works for a come back into the /// market. Your illustrious SIG Co-Chairman gives Frank Moore some credit for keeping at it, but once again warns readers not to expect too much (some SIG members have already found out the hard way).

The Apple Three Users of Northern California has revamped its Public Domain library. As previously mentioned, they decided to bring their library in-line with Joe Dobrowolski's (Apple Users Group International) and have now accomplished that, adding new disks and numbering them according to the AUGI system. Unfortunately, in the process, their excellent selection of printed Apple /// materials (originally given to them by Apple) disappeared. In any case, ATUNC's Newsletter remains a good source of Apple /// information under its new editor, Li Kung Shaw.

Daryl Anderson, whose D.A. Dataystems recently placed all of its programs into the public domain (check the /// SIG PD offerings) has agreed to send the SIG a complete set of his Power Keys background utility and its many modules. We'll be placing those into our library in the next few months.

Daryl says he's working now for a software company in the Buffalo area and still lurks on CompuServe to see how his Apple /// friends are doing. Anderson now owns an Amiga, by the way, and says he loves its color and multi-tasking capabilities (we won't hold that against him!).

A few years ago, a company called Swearingen Software came out with a fun Business Basic game called "Pick That Tune." The program plays the first few notes of a given tune and the player gets points if the guess is correct. There are a number of disks with additional tunes available as well. I recently talked with author Ron Swearingen, to see if he might be interested in placing "Tune" into the public domain. But he indicated there's still the possibility of converting the program into versions for the GS, MAC or other computer. But Swearingen did say he was willing to give readers of the WAP Journal a break if they'd like to order the program directly from him. Originally \$29.95, the program is now available for \$15.95. There are four additional disks with tunes on them (including one with Christmas tunes) available for \$9.95. Order directly from Swearingen Software, P.O. Box 650338, Houston, Texas 77065. When ordering, mention you saw the offer in the WAP Journal.

We also continue looking for other Apple /// programs that can be placed into our PD library. Look for another announcement in an upcoming Trail column!

WAP BOARD ELECTION

Our /// SIG Co-Chairman is once again running for the WAP board. Any and all support greatly appreciated!

APPLE /// CLOCK SPEED

If you're having problems with the speed of your Apple /// clock, it's relatively easy to fix. The clock adjustment "pot" is located on the keyboard chassis, approximately under the "L" key. Remove the keyboard, and, using Business Basic, run this program:

```
10 VPOS=20:HPOS=10:Print TIME$;:GOTO 10
```

This will give you a continuous time print-out on screen, allowing you to adjust the clock potentiometer against a time source of your choosing.

NEW PUBLIC DOMAIN DISKS

New to our PD library this month, we add disk 1018 A/B, the second disk of our Taylor Pohlman Business Basic series from the old Softalk Magazine. This disk contains articles 6-9 and a host of associated programs. This disk is NOT SELF BOOTING as mentioned previously. It does contain Menu.Maker and a utility that will allow you to get hard copies of the articles. To use this disk, boot any disk with Business Basic and (with the new disk in .D1) type "Run .d1/Menu.Maker". Hit return and you're in business.

Also being released this month, Disk **1028A/B**, ASCIDIF, by Dr. Al Bloom. This is a program designed to convert an Apple /// text file to a standard DIF file (used by Visicalc, 3EZ Pieces/AppleWorks and other spreadsheet programs). We will publish an article on how to use this program in next month's WAP Journal. You may notice we've reserved disks **1026** and **1027**, which will contain more D.A. Datasystem programs currently being worked on. Look for an announcement on them in the near future.

EIGHT YEARS LATER

This "Apple Bit" from InCider's June, 1988 issue (page 19) once again indicates how advanced our Apple ///s were/are and how long it's taken the Apple // family to catch up!:

We hear Apple's next version of ProDos for the //GS will be really different. For one thing, it will let you name memory devices, such as hard disk drives and RAM disks, instead of always referring to them by "slot and drive" or the "ProDos pathname."

FINALLY

Please join us at our /// SIG meetings, the fourth Wednesday of each month in the WAP office. We demonstrate programs, help new users and discuss burning questions and news of the Apple /// world. During the May meeting, we'll be discussing the use of a Laptop computer with your /// (I'm writing this column on one right now). And in June, we'll be demonstrating the new update of ThreeWorks for the Apple ///.

Remember too, that the WAP office has a number of Apple /// reference books and texts you can take out or read in-house. There is also a video tape describing how to use the ///, along with a series of tutorial cassettes, which you can take out and use at home.

July 1988

SYKORA SOFTWARE UPDATE

Lt. Dale Sykora has now issued an updated Trackball driver (v 1.31) that takes care of a few lingering bugs, including a separate version for Catalyst users. Here's how Dale describes the update:

First, the TrackBall now works in the cut-and-paste mode of DeskTop Manager; second, it works in the <ESCAPE> cursor mode of BASIC; and, finally, improved button debouncing is employed for both buttons, rather than just the bottom button as before. I believe it also works in the Catalyst Menu, but I have not checked this. This brings the TrackBall to the point that it works with just about every application the ///. It cannot (and I have no plans to make it do any of this) generate the <CONTROL> keypad functions nor any of the Macro keys (closed apple combinations). It still will not generate any interrupts, but I know of no /// software which takes advantage of this mode of the Mouse.

As mentioned previously, the Trackball (by Wico) is a great substitute mouse (much cheaper than a //e mouse). It got a rave review in the May issue of On Three and is available from them for only \$89.95 (includes the Trackball, interface card and new driver)(The Apple //e Mouse and Driver is \$160.00).

Sykora also reports that my earlier column about possibly using Port A as an RS232 Serial port was only partially correct. He IS working to make Port A available for use by the Trackball, so that it does not have to use a slot. But apparently Port A cannot, as such, be used as an RS232 serial port. In any case, if we could use the trackball as a mouse operating out of Port A, ///ers would not only get the convenience of the mouse but save a slot for other things.

Sykora says the connection to Port A would be through a "black box" that would be made available in kit form to keep the cost as low as possible. The Trackball would hook into the black box. No indication if or when such a product might become available (Sykora's working with the Apple Three Users of Northern California on this one).

On other fronts, Dale and his brother continue working on their color graphics card, but the lack of an oscilloscope has hurt progress a bit. Despite hopes the SOS Driver Optimizer would be finished (it was originally to have been ready last January) it remains in beta form and still needs some work. But for anyone interested in working with EPROMs, Dale now has a program available that allows you to program erasable ROM chips using an EPROM programming card from JDR. The card must be "filed" a bit for it to fit, but works very well. For those of you wishing more information, here's how Lt. Sykora describes it:

The EPROM burner card is \$60 from JDR MicroDevices (it is an Apple][card) and will fit into the

/// just fine. With my program and Driver, you can then burn data onto an EPROM (2716, 2732, 2732A, 2764, 27128, including CMOS versions) or use the Pascal Assembler to create 6502 code. The program will handle all necessary relocation of addresses. With the program (PROM-Grammer), you may read, write (burn), verify, erase check, and copy EPROMs. For anyone who wants it, just have them send me two blank disks and \$5.

Here's the address:

Lt. Charles Dale Sykora 39 Ibis Lane Groton, Ct. 06340

ON THREE NEWS

The big news at On Three is, as reported last month, Bob Consorti taking over again as Editor of the magazine. The result (May) was one of the best magazines produced in months. On Three has been cleaned up a bit with a new format and better attempt to meet criticisms about too many On Three ads. There's still a need for more articles and there was a call for more submissions, but On Three appears back on track and that's good news for the /// community.

Speaking of On Three, look for a contest announcement in the next few months that should give you budding /// Business Basic programmers a real workout. The magazine also announced the availability of a new Super Accessories Disk #3 for Desktop Manager. Cost is \$29.95. It includes a new Accessory Manager for customizing your TDM menus, a character ruler to help align text, a powerful new block editor and more. On Three's order line is 1-800-443-8877.

AND OVER AT SUN REMARKETING

Bob Cook and crew have also been busy. Their latest catalog is the best looking yet and contains a number of Apple /// specials. Their list of /// software has also expanded to include such programs as Desktop/PLAN for financial and business planning and VisiSchedule for project scheduling needs. Sun has also agreed to carry ThreeWorks, my set of /// EZ Pieces/AppleWorks data bases full of information about the ///.

For you Lisa/MAC XL owners, Sun continues to expand its offerings and officially announced in this catalog its MacWorks Plus program that allows the Lisa to use Hypercard and newer Mac programs. Sun's Customer Service number is 1-801-752-7631. To order: 1-800-821-3221.

NEW PUBLIC DOMAIN DISKS

Our PD library just keeps on growing! This month I am happy to announce FOUR new disks. **1026** and **1027** are more D.A. DataSystem disks. **1026** is double-sided and self-booting. It includes two programs. On side one is Data Window ///, a utility program that will provide a standard formatted "dump" (that is it will print the information) of Apple /// RAM or of any Apple /// file. On side two is Source Window

///, a powerful reverse assembler (that is, it takes a program and breaks it down to its machine language origins for printing). Both should be used by experienced ///ers.

Disk **1027** is also self-booting and contains a VERY useful utility program on side one called Power Cat that will catalog any number of disks and then sort them. Wondeful for hard disk users or anyone wanting a way to put your disks in some sort of order. Side two contains Basic XRF, another utility program that will produce a sorted cross-reference of all variables in any Business Basic program. Very useful for the Basic programmer.

Disks **1029** and **1030** contain the manual and program disks for Ink Well, the word processing program recently placed into the public domain by FoxWare of Salt Lake City, Utah. Both disks are self-booting and easy to read and use. As I mentioned last month, Ink Well is a "What You See is What You Get" (WYSIWYG) word processing program written in Business Basic. This is the last official release version, although Pair Software sells its own upgrade. If AppleWriter is proving too complicated for you, give Ink Well a try. The price is certainly right!

I also mentioned last month that we were working to get other commercial programs into the public domain. I can tell you this much so far: We have gotten two more programs for the library. One is a great game. The second is a wonderful font generation program. Watch for details in upcoming Trail articles.

Also, to update you on another project, SIG member John Ruffatto has finished initial work on our reference disk **1000**, which will include information on all our disks. Watch this column for its availability.

POPULATION GROWTH

/// SIG member Tim Boquet submitted a great little program this month for all to enjoy. It gives you a running count of the world's population. To run it, you will need the BYTE font (which is in the Character.Sets subdirectory on side two of /// SIG disk 1004 (System Utilities and Data) as well as the Download and Bgraf invokable modules (they are on many of our PD disks). We'll also make this available on a future SIG disk. The program goes like this:

```
10
     REM world population program by TIM BOUQUET
 20
     REM based on facts from the Washington Post
     REM A) World population reached 5 billion in 1986
 40
     REM B) World population will be 6 billion by 2000
 50
     REM AUTHOR grants copy permission to Washington Apple Pi
 70
     REM Author Bouquet retains all other rights 5/22/88
 80
 90
     REM Author wishes to thank WAP for programming ideas!!
100
      REM
110
      HOME
115
      REM Be sure to set your prefix (location of disk with this
116
     REM program on it before running. For example: 117
Prefix$=".d1"
120
     INVOKE"download.inv"
 130
      DIM a\%(511), a\$(20), name\$(20)
```

```
140
      a$="byte":array$="A%"
150
      name = CHR (34) + a + CHR (34)
160
      PERFORM getfont (@name$, @array$)
170
      PERFORM loadfont (@array$)
      CLEAR: PRINT
180
190
      DIM A(12), R$(12)
200
      OPEN#1, ".grafix"
210
      INVOKE"bgraf.inv"
220
      PERFORM fillport
230
      k=0:VPOS=1:HPOS=28
240
      PERFORM moveto (%90, %188)
250
      PRINT#1; "WORLD POPULATION"
260
      PERFORM grafixon
270
      FOR I=1 TO 12:READ A(I):NEXT I
280
      FOR I=1 TO 12:READ R$(I):NEXT I
290
      ON KBD GOTO 740
300
      VPOS=4:HPOS=1
310
      yr$=LEFT$(DATE$,2)
320
      yr=VAL(yr$)
330
      mm$=MID$ (DATE$, 4, 2)
340
      mm=VAL (mm$)
350
      dd$=RIGHT$ (DATE$,2)
360
      dd=VAL (dd$)
370
      d2\$=dd\$+r\$(mm)+"19"+yr\$
380
      HPOS=2
390
      tttt$= TIME$
      REM PRINT d2$," ",Tttt$
400
410
      PERFORM moveto (%90,%140)
420
      PRINT#1;d2$
430
      PERFORM moveto (%120, %120)
440
      PRINT#1; tttt$
450
      REM DATE of the year - JULIAN
460
      jd=0
470
      FOR i=1 TO mm:jd=jd+a(i):NEXT i
480
      jd=jd+dd
490
      REM pop per year day hour min sec
500
      ppy=1000000000/14
510
      ppd=ppy/365
520
      pph=ppd/24
530
      ppm=pph/60
540
      pps=ppm/60
      REM time of day
550
560
      hh$=LEFT$ (Tttt$,2)
570
      hh=VAL(hh$)
580
      mm\$=MID\$(Tttt\$,4,2)
590
      mm=VAL (mm$)
600
      ss$=RIGHT$(Tttt$,2)
610
      ss=VAL(ss$)
620
      REM current population
630
      pd&=CONV&(jd*ppd):ph&=CONV&(pph*hh)
640
      pm&=CONV&(ppm*mm):ps&=CONV&(pps*ss)
650
      dhm&=pm&+ph&+pd&
660
      py&=CONV& (ppy* (yr-86.0)) +CONV& (5.0E+9)
670
      %yq+&mdb=&qqq
680
      HPOS=30
690
      REM PRINT ppp&+ps&
```

```
700
      PERFORM moveto (%100, %170)
 710
      PRINT#1 USING"13&";ppp&+ps&
 720
      IF VPOS>20 THEN VPOS=4
 730
      GOTO 310
 740
      REM: RUN"hello" here if you wish.
 750
 760
      DATA 31,28,31,30,31,30,31,30,31,30,31
      DATA " ** January ** "," ** february ** "," ** MARCH ** "," **
 770
APRIL **"
      DATA " ** MAY ** "," ** June ** "," ** JULY ** "," ** AUGUST **
780
790
      DATA " ** SEPTEMBER ** "," ** OCTOBER ** "," ** NOVEMBER ** ","
*DECEMBER* "
```

Note that once you've run this program, you'll be stuck with the BYTE character set while in Basic (or you could use the Newdownload font utility on disk **1002** to change the font). Booting a new program, by the way, will usually load the Standard Character set.

Tim also had a few wishes for SIG disks including "a version of the Menu.Maker which will run Pascal programs" (Co-Chairman Tom Bartkiewicz has a Pascal program in Beta form now to do that, but you can't run Pascal programs from Basic or Basic from Pascal). Tim would also like to see Menu.Maker be able to display foto files, and change fonts when font files are highlighted. Both are possible, but add to the overhead for the program, since it takes more invokables and disk space (which for SIG disks means less program space).

The neat thing about Menu.Maker however is its adaptability. It would not be that difficult to let it recognize a foto file and display it on the screen (our "Run.Side.Two" program on disk **1012** does that). And you could adapt the Newdownload program to run from within Menu.Maker to change fonts depending on which one was displayed (in fact, you could adapt the font download routine in the above program). By the way, remember we are now up to the 3.0 version of Menu.Maker, which is available on the latest PD disks. We are working to upgrade older disks as well.

FINALLY

Due to recent demand for our "How to Use the Apple ///" video tape, we have added a second copy in the WAP office. Remember there is a \$20.00 deposit required before you can take out the tape.

The summer is once again upon us, and that prompts a reminder that there will be NO August SIG meeting (there will be a Trail article, though). Attendance has been poor of late and hopefully a little breather will be good for the /// soul. Until September, then, have a safe and fun summer!

August 1988

MENU.MAKER (CONTINUED)

Since some of the column got eaten by the printing goblin last month, I thought we might continue our discussion of Menu. Maker this month. As I was discussing, member Tim Boquet asked about using the program to show FOTO files or change fonts automatically. That got me thinking and, after a little research found that it really wouldn't be all that difficult to do.

There are some basic things you have to do within the program to A) let it recognize that a FOTO or FONT file exists, B) Set up an Array to hold the fontfile, C) Have the appropriate Invokable's available and D) Have the appropriate subroutine available.

One way to establish the Array is to do it while the program is setting up the Arrays for Menu.Maker itself (Note the program numbers may not match your version of Menu.Maker but if you list it, it will be obvious where these lines should go, and what the new line numbers should be.):

```
190 DIM A$(1000),B$(1000),C%(511),C$(20),name$(20):VPOS=10:HPOS=0
```

C%, C\$ and name\$ all set aside the proper amount of memory for the FONT file so it may be loaded and executed by the program.

To get Menu.Maker to recognize FONT and FOTO files you add these instructions at the appropriate places:

```
420 A$="FONT 0":GOSUB 130

430 A$="FOTO 0":GOSUB 130

790 IF INSTR(B$(I), "FONT 0") THEN 2000

800 IF INSTR(B$(I), "FOTO 0") THEN 2070
```

And finally, at the very end of the program, you have the subroutines themselves. First, to load the FONT file:

```
2000 INVOKE".D1/download.inv"
2010 C$=MID$(B$(I),16,B)
2020 array$="C%"
2030 name$=CHR$(34)+C$+CHR$(34)
2040 PERFORM getfont(@name$,@array$)
2050 PERFORM loadfont(@array$)
2060 GOTO 120
```

And secondly to load, and display, a FOTO file:

```
OPEN#5,".GRAFIX"
2070
2080
       INVOKE".D1/BGRAF.INV"
2090
       D\$=MID\$(B\$(I),16,B)
       name\$=CHR\$(34)+D\$+CHR\$(34)
2100
2110
       PERFORM GLOAD.D$
2120
       PRINT CHR$ (16); CHR$ (1)
       PERFORM GRAFIXON
2130
2140
       FOR X=1 TO 2000:NEXT X:TEXT
2150
       HOME: PERFORM RELEASE: CLOSE#5
2160
       GOTO 120
```

Note that once you've loaded a different FONT file, you're stuck with it until you load another one (the default FONT is called "Standard"). The Graphics subroutine displays the FOTO file for a short time and then returns you to the menu. The two invokables needed, Download.Inv and Bgraf.Inv are on disk **1002** and other disks. You'll also need to add the Graphics Driver to you SOS.Driver file using the System Configuration Program on your Utilities Disk. That driver is on side B of disk **1004**.

MENU.MAKER TAKE TWO

We continue to fine-tune this useful program and have recently been working to learn more about fonts as a way to "jazz up" the program. You'll be seeing the results in our new disks to be announced this fall. Current projects include the final three Taylor Pohlman disks, Foxware's Basic Extension and TerminALL disks, a wonderful font program, a compendium of this author's columns, Daryl Anderson's PowerKeys background Utility and many more.

Additionally, to honor the one year anniversary of the Phase /// Conference, a transcription of some of the sessions is being worked on. We also hope to add a disk with Apple // Emulation programs. Any other suggestions are welcome!

By the way, a suggestion was recently made to change Menu.Maker's name. So, to have a little fun, we'll try our first-ever /// SIG contest. Send me a new name for this program. The winner will receive the latest copy of my ThreeWorks disks (Version 6-1-88). Send your entry (a postcard would be fine) to me in care of the WAP Office no later than September 19th. Be sure to write "Menu.Maker Contest" on the front. The winner will be announced in the November Journal.

NEW PD DISK!

While we're on the subject, we do have a new PD disk to announce this month. Thanks to the efforts of John Ruffatto (and a little editing by yours truly here and there), we now have PD disk **1000** in stock. It contains a complete catalog of all our disks! There's been a number of requests for this disk and I'm pleased it is finally becoming available. A hard-copy version is also available at the WAP office for you to look at.

PD TAKE TWO

With little fanfare, the cost of 5 1/4 inch PD disks was reduced this past month from \$5.00 to \$3.00. 3 1/2 inch disks remain at \$5.00 each for members. These prices bring WAP more in line with other clubs and for you ///ers out there, makes these disks an even greater value. Most /// SIG disks are double-sided and many are unique to our library. Why not give some a try!

READING APPLEWORKS/3 EZ PIECES TEXTFILES FROM BASIC

This is a tough one for me and I've decided to throw it out to you real "Business Basic Programmers" out there. I was able to find an AppleSoft program that will read AppleWorks or 3 EZP's Word Processing files. These are different from straight ASCII text files because AW/3EZPs adds information at the top of each file. There are plenty of Peeks and Pokes in this one, more than I can handle. So any help in converting this over to Business Basic would be appreciated (You GS Basic folks might want to give it a try as well). The program (with a tiny bit of conversion) looks like this:

```
10 REM Program by William A. Boyd
20 REM Donated to the Public Domain
30 REM Through the Atlanta Apple Users Group.
40 REM All Commercial Rights Reserved
50 REM Copyright (c) 1986
60 REM
70 REM This program demonstrates the logic of reading
80 REM Appleworks wordprocessing files from Basic.System
90 REM
100 ONERR GOTO 20000
200 TEXT : HOME : VPOS= 5
210 PRINT "This program will show you how to work"
220 PRINT "with AppleWorks Word Processing files"
230 PRINT "from Applesoft Basic Programs."
240 PRINT: PRINT "Select a small word processing file"
250 PRINT "and enter the filename here: ";
270 INPUT " ";FL$
300 REM BS= File starting point
310 BS = 8192:HL = 300
320 PRINT CHR$ (4); "Bload"; FL$; ", A"; BS; ", TAWP"
    HOME : SPEED= 70: INVERSE
340 PRINT "DISPLAY FILE: ";FL$: NORMAL : POKE 34,1
345 REM Lines 360-400 form MAIN BODY program
350 START = BS + HL
360 \quad Y = PEEK (START + 1)
370 IF Y > = 208 THEN GOSUB 10000
    IF Y < 208 THEN GOSUB 19000
380
    GOTO 360
10000 REM Sub handles <CR> lines & Command Lines
10010 IF Y = 208 THEN PRINT CHR$ (13): GOTO 11000
10020 IF Y = 223 THEN PRINT "----justify----": GOTO 11000
10030 IF Y = 224 THEN PRINT "---unjustify---": GOTO 11000
10040 IF Y = 225 THEN PRINT "---center---": GOTO 11000
10050 IF Y = 255 THEN POP : SPEED= 255: TEXT : END
10060 IF Y = 230 THEN PRINT "----single space----": GOTO 11000
```

```
10070 IF Y = 231 THEN PRINT "----double space----": GOTO 11000
10080 IF Y = 232 THEN PRINT "----triple space----": GOTO 11000
10090 IF Y = 233 THEN PRINT "---new page ---": GOTO 11000
11000 START = START + 2: RETURN
19000 REM Subroutine handles Standard Text
19010 SL = PEEK (START): REM Length of string
19020 Z = (PEEK (START + 3) > 127)
19030 FOR I = START + 4 TO START + SL + 1
19035 IF PEEK (I) < 31 THEN 19050: REM SPECIAL CHARS
19040 PRINT CHR$ ( PEEK (I));
19050 NEXT
19060 IF Z THEN PRINT
19070 START = START + SL + 2
19080 RETURN
20000 REM Error Handler
20010 SPEED= 255: TEXT : END
```

SYKORA UPDATE

Lt. Dale Sykora reports he (and his brother) are spending all their free time these days on their Apple graphics card for the /// and GS. It appears a major timing problem has been solved and things are moving forward at a quickened pace. We'll keep you informed.

FINALLY

I need some feedback from you Virginia SIG members. I know how difficult it is to get into Bethesda to attend meetings. What would you think of having a SIG meeting on your end of the world every other month like some of the other SIG's do? If this is an idea whose time has come, please let me or Tom Bartkiewicz know. We would obviously need a meeting place and access to someone's ///, so let's hear from you folks!

September 1988

We start our column this month, /// SIGers, with the news that On Three has moved. It may not seem that big a deal, except for the fact that it's another indication that the /// market continues to contract and those still trying to support our wonderful machine are having trouble doing that (which is, of course, an indication we, the users, are NOT supporting the vendors.)

On Three's President, Bob Consorti says in the June issue of On Three Magazine that while this is a "transition", it does not indicate On Three is going away. But he adds that:

Our GS products, which we hoped would start carrying the burden, have not been selling as well as we had hoped. You see, in the Apple /// world, we create a product, advertise it and we get immediate sales - even if they aren't tremendous.

In the Apple][market we create the product and then advertise it in someone else's magazine. We don't have the ability to directly mail to all the Apple][users as we do in the /// market. Because of this and the fact that it's next to impossible to get an honest review within a year of release of a product, our][products have been sporadic at best.

What Consorti is talking about here is the fact that the GS version of Desktop Manager has not been doing all that well. The AppleWorks folks have basically embraced other background utility products, such as the TimeOut series, despite the fact that they are USELESS outside AppleWorks. The beauty of DTM is that it will work with ANY GS application, just as DTM for the /// will work within any /// application.

Frankly, On Three does not have the finances to buy massive advertising like Beagle Brothers and the others can. That's a fact of life and if you can't advertise, you're not going to sell. Reviews, whether good or bad are too few and inbetween to really do much good in the long run.

So, the bottom line here is that On Three is moving, basically to streamline costs. Consorti stresses that there will be no change in service and support. Their full line of products and services continue as before. Here's their new address:

On Three Attn: Bob Consorti 8920 Yolanda Ave. Northridge, CA. 91324

The 800 line for orders remains the same (1-800-443-8877) but it is no longer a direct line to On Three. Instead, you will be getting an operator who will only be able to take your order and not answer any real

questions (the operator is in Washington state). There is a new support line number, however, which is 1-818-701-1355.

Bob also tells me that there is a good chance On Three Magazine will be going to every other month, beginning with the September issue. There are only about 500 subscribers. If you are not getting this magazine, especially all you new /// folks out there, I would urge you to subscribe (currently \$40.00/year). There are a number of excellent articles each month, and lately there's been a super series especially for new users.

Sykora Software

Lt. Dale Sykora keeps improving his Trackball Driver. This latest, and now last, version adds some additional features and cleans up any last-minute bugs. For our new SIG members, the Trackball is an excellent substitute for a mouse if you are interested in using one. The Trackball works from within any application, even Desktop Manager or PowerKeys, and is excellent for graphics programs, like our Sketchpad PD program (1012). It's \$89.95 from On Three complete with Driver and the Trackball itself (that verses \$160.00 for a //e mouse)(which also works in the ///). Uses one slot.

Dale also reports that he is nearly finished with a GS version of the Trackball driver! He has not indicated who will market that for him, but we would also suspect On Three. Watch this column for availability.

JULY SIG MEETING

Our final SIG meeting of the summer was one of the year's best. Certainly the best turnout, with nearly 10 people in attendance, including some new ///ers. Much of the evening was spent answering questions and helping get folks up and running. We also helped one member, Jim Jentzin, get 3EZ Pieces set up properly for his system.

I know how difficult it is to get a system up and running, but I continue to believe that the /// remains an excellent home machine (especially for someone who has never owned a computer before). The cost is certainly right. Whole systems can be had for \$500.00 and less. In many cases, I hear of or talk to people who were able to get a /// from work for free, since it usually is gathering dust in a closet somewhere.

The /// does not deserve the closet. It deserves to be used and the home is the best place for it now (but don't get me wrong, there are still a number of folks, like member Joe Brown, who continue to use it at work.)

SOFTWARE SOURCES

For our newer members who may not know, the best place to start looking for software is right in the WAP library. It can provide the help you are looking for. On the "hard copy" side, the WAP library offers a video tape tutorial for the ///, as well as a set of tutorial cassettes you can use. They may both be

taken out with a deposit. There are also textbooks, like the **McGraw Hill Guide to the Apple ///,** that are an excellent source of basic information. The library even has manuals, technical information, magazines and other information.

On the software side, our PD disks are spectacular buys at \$3.00 each. Most are self-booting and double-sided. Our excellent Menu.Maker program allows you to run any program directly or read any text file directly. And in our latest version, you can even print a file during or after reading that file.

So which PD disks should you begin with? When you become a member, you get one of the best disks around, our New Member Disk. It contains a wealth of information about the Apple /// from a basic description of what it is, to how to set up your SOS.Driver file. Beyond that, here are my recommendations for some initial disks to purchase:

1000: PD Catalog. This contains a detailed list of all our PD offerings and what each disk contains.

1004: System Utilities and Data. If you do not have this disk, it is a must-have. This disk allows you to make copies, format disks, set the time and other functions. It also contains the System Configuration Program needed to set up your SOS.Driver file for your system. Includes additional drivers, character sets and other items.

1005: New Member Disk.

1008: The Best of MAUG. This disk contains a wealth of information from the /// section of CompuServe. Good, basic information.

1009: The Best of The Source. More basic /// information, from the old /// SIG on the Source.

1010: The Best of TAU. Articles and other material from early editions of the Third Apple User's newsletter, TAU Tales.

1015: The Best of ///'s Company. How-tos for hardware and software, and other information from the ///'s Company BBS.

1013: A3 Diagnostics. If your /// has a headache, this disk may help you find out the source.

1014: Basic Boot Disk. Developed by member Jim Salerno. It contains a number of fine utility programs.

For those interested in word processing, we have a couple of offerings:

1006: Word Processing and WPL. This disk contains the 4.1 version of Apple Writer which was never issued by Apple. It includes a set of ///-SIG developed help files and other information.

1029/1030: Ink Well. Ink Well was recently placed into the PD by Foxware and is an excellent Basic-based word processing program. **1029** is the manual and **1030** is the actual program.

That should get you started. The library also contains games, utilities and much, much more. This month, I am happy to report that the final three disks in the Taylor Pohlman series are finished and now

available in our library. This brings the /// PD offerings up to a full 30 disks. Coming next month will be two more Foxware programs and Daryl Anderson's PowerKeys DM+.

We continue our efforts to get other, former commercial programs placed into the PD and can report some luck in the past month or so. Watch The Trail for future announcements!

WAP TCS

I'm happy to announce that we have a new Sysop for our /// SIG board on the WAP TCS. SIG member Jim Suthard has agreed to take over the board's helm and work to get it back up to speed. The TCS is a fantastic resource for members, containing three separate systems of 32 boards each. Our /// SIG board is on System #1. If you haven't joined up, it's only an additional \$6.00 per year and a good way to learn the fun of telecomputing. Remember, you can get a good, cheap 1200 baud modem through the WAP Group Purchase program. The best communications program for the /// is called Com Manager from On Three. Or you can try TerminALL, soon to be in the PD library.

FINALLY

A belated thanks to all of you who voted for me during this last WAP Board election. I came much closer this time than the first go-around. Who knows, maybe by 1992.....

By David Ottalini WAP /// SIG Co-Chairman

October 1988

NEWS AND NOTHING BUT...

Happy Halloween, /// SIGer's! On the Apple /// news front this October, our first stop once again is On Three. Last month, I detailed On Three's move to essentially two locations. While I gave their order line, I neglected to give you their new address for placing orders (if you do not order by phone): 11235 80th Ave., N.E., Kirkland, WA. 98034. Their order line again is 1-800-443-8877. If you only want information about products or help with products already purchased, the number is 1-206-823-0516.

Despite the move, On Three continues to work on new projects for our lovely orphan. One is a native-mode sideways print program for large spreadsheets. Side Print, as it's called will work with all Epson printers (or those that can emulate Epson codes), Okidata, Apple DMP and ImageWriter printers. Others may be included if there's enough interest. The program is Pascal-based and the source code will be included. It's available now for #29.95.

In its September issue, On Three also announced a device driver to be used with a Seikosha parallel interface card and color printer. Graphics Manager also had to be adjusted so it could work with the Seikosha printer. This is an exciting product, since it brings low-cost color printing within reach of many Apple /// users. Total cost for the driver, interface card, printer and special version of the Color Graphics Manager is \$259.00!

Up in Groton, Connecticut, Lt. Dale Sykora headed out for a month of sea trials on a new Trident submarine. He took a new GS with him, to continue work on his hi-res color graphics board. Dale says it will have a 65816 co-processor chip on board and will be able to process both SOS calls and ProDos 16 calls (it's being developed to work in both the /// and the GS).

As for the Trackball, Dale is now converting it for use on the GS under ProDos 16. As such, it would work in addition to the mouse. He plans to work on that project during his stint at sea as well.

Another Graphics Board?

/// user Erik Olbrys says he has developed a driver for an Apple // hires graphics card, and might be willing to put a package together for it with enough interest. Olbrys says he began the project for the /// a few years ago, but problems with his SARA caused a lengthy delay. The hardware is a commercial Apple // product and comes in kit form. It also requires some connection modifications.

To get the card to work with the ///, Olbrys says he had to disassemble the .GRAFIX driver and insert the appropriate Apple /// code. It has 128K of on-board memory and uses an NEC PD 7220 Graphics chip.

On the technical end, the driver, .HIRES v1.2a (as it now stands) can do everything .GRAFIX can do while also allowing for definable line patterns and create what he called a "dithered half-tone" for fillcolors 0 through 15 that approximates a gray scale. User-definable fill patterns are also possible. With the 128K on-board memory, it can provide 8 pages of 640 x 192 graphics resolution; or 4 pages of 640 x 384 resolution. I've seen some printouts from this card and they look great!

The package would include a Basic invokable module, HIGRAF.INV, the .HIRES driver, a Pascal library unit and utilities and cost between \$30.00 and \$60.00. Estimated cost for the hardware will be around \$200.00. Olbrys stresses this will be most useful to ///ers who write their own programs, since store-bought programs, like Draw On Three or Business Graphics wouldn't be able to fill an entire 640 x 384 screen. He also says the video monitor must be able to handle high-frequency bandwidths and interlacing, such as the Monitor /// (which is not a color monitor however).

The caveat here is that, as with other Apple /// products these days, there would have to be enough interest to push this thing along. If you would be willing to spend the money on this, please contact Erik Olbrys on CompuServe. His number is 71236,1245. Or you can write to him directly at: 41 Pepper Ridge Road, Stamford, CT. 06905.

AND FOR YOU MUSIC LOVERS

For Al Lambert and other ///ers who wish there was a way to provide a MIDI interface for your machine, look no longer! The same Erik Olbrys mentioned above has written a .MIDI driver and uploaded it to CompuServe. It needs a Passport compatible MIDI interface card to work. He's also uploaded a Basic program that "converts the MIDI data stream into English words such as NOTE ON/OFF and program and control changes." And there's a second program that "composes chord progressions (riffs) based on a given key."

If there's enough interest, we can download these files and place them on a /// SIG PD music disk, including any other information or music-type files anyone might care to contribute. Any takers?

SPEAKING OF PD DISKS...

We introduce FOUR new disks this month, including the long-awaited Power Keys disk from D.A. Datasystems. A full description is provided for you in a separate article, but let me give you the rundown of what is now available to you in our PD library:

Disk **1031**: Basic Extension contains a number of useful Business Basic utilities placed into the public domain by Foxware, Inc. of Salt Lake City, Utah.

Disk **1032/1033**: TerminALL is a telecommunications program for the ///, also from Foxware. **1032** is the manual, 1033 is the program.

Disk **1034**: PowerKeys DM+ is a background utility much like Sidekick on the PC. Includes all modules and manuals on disk.

In addition, we have updated our PD disk **1000** to reflect these new programs, as well as upcoming offerings to disk **1040**! We are really proud of this PD library. Sales of disks have been good of late and we thank you for your continued support (oh oh...I am starting to sound like that wine cooler commercial....). We've received that great Apple /// game I've been talking about, called CAP'N MAGNETO and am working on it now. Dr. Al Bloom has also sent along another couple of disks full of his programs, so stay tuned!

WORDS OF WISDOM

///er Barry Downes, of New York City recently wrote me to say what a good job your /// SIG is doing. We appreciate that! Mr. Downes (who has six Apple ///s) added these words of encouragement for the /// community that I want to pass along:

...Much of my love continues to be lavished on that brilliantly well designed computer, the Apple ///. I will try when I can squeeze in the time to write some more articles concerning the capacities and possibilities of that machine as well as to cheer up some of those owners who keep worrying they have an "obsolete" computer that most others today have never even heard of.

Obsolete? Hell, talk to the LISA owner, talk to anybody that owns a MAC, today's "new kind of the block" is always tomorrow's hasbeen.

The only important question is "is the machine you currently own doing the job you bought it for?" If the answer is "yes" -- and you can still get it repaired if a problem should arise -- then realize how luck you are and enjoy it for all it can do. It may serve you well for many years to come. All those bells and whistles you hear about are often just that! Add-ons that often do not materially change or improve the kind of word processing, database and spreadsheet work available on a machine such as the Apple ///.

ON THREE CONTEST

At least one SIG member (our own SIG Co-Chairman Tom Bartkiewicz) has indicated plans to enter On Three's Business Basic contest. If you haven't heard, the contest will award prizes to the top three entrants who can develop a Mac-like interface for Business Basic. Apple's Taylor Pohlman, of Softalk Magazine fame, says it can, indeed, be done. And On Three's Bob Consorti even uploaded a program in the Apple /// Data Library on CompuServe to provide some additional help.

The contest's description and rules were all detailed in an article by yours truly in the July issue of On Three. Prizes include \$100.00 in On Three products for first place, \$50.00 in products for second, and \$25.00 in products for third. In addition, the programs will be published and included on a future Disk of the Month. Deadline is December 1st, so you still have time to enter.

APPLE /// TECH NOTES

One of my long-standing projects has been to try and get our SIG a complete set of the Apple /// Tech

Notes. The Tech Notes included information on a wide range of Apple /// hardware and software subjects, included fixes to specific problems, using various pieces of software, etc. An Apple /// club in Colorado printed some of them a few years ago, but there's never been a complete set available.

I understand, however, that there are a total of 42 documents listed by Apple on AppleLink's Technical Information Library. I'm not sure if that's accessible from their new "public" version of AppleLink but I will explore ways to get at that information and then place it onto a PD disk or two for all to use.

NEW BOOKS

Thanks to Dr. Al Bloom, our WAP library now sports some new Apple /// books! They include the two texts by Eddie Adamis: "Basic Keywords for the Apple ///" and "Business Basic for the Apple ///." Dr. Bloom also donated Kenniston Lord's book, "Using Apple Business Computers." All are now available for you to take out or read at the WAP office as you desire. With these additions, our library now holds EVERY book about the Apple /// that was not published by Apple!

OTHER CLUBS

The Third Apple Users Group of Wheaton, Illinois has changed the name of their newsletter. Originally TAU Tales, the publishers have chosen a very wise course and renamed it "The TAU Journal." The publication remains an excellent source of information about the /// as well as the rest of the Apple world. The newsletter is professionally done and TAU has a super Apple /// PD library. For more information, write to them in care of Lavona Rann at xxxx, Wheaton, IL. 60187. Dues are \$30.00/year.

Down the road in Norfolk, Joe Dobrowolski's Apple Users Group International also continues to publish Apple /// articles. Joe may have more time for the club now that his wife and children have moved to Japan! Rumor has it that Joe will spend a year in separation before moving to Japan himself. AUGI has the largest Apple /// PD library available at reasonable cost. Address is Box 913, Langley AFB, VA. 23665. Dues are \$15.00/year.

Out in "La La Land", the Apple Three Users of Northern California remain a strong Apple /// group. Their library is tied in with AUGI's, although they do offer some disks of their own. Their latest newsletter published a listing that includes a reprint service for many Apple /// manuals and technical information (I reported earlier it appeared that had been dropped). ATUNC's address is PO Box 1528, Mill Valley, CA. 94942. Dues are \$20.00 annually.

And over in San Jose, there is a new Apple /// group, called The Apple ///ers Unanimous. President and Founder John Cowman says there are 25 dues-paying members. They publish their own newsletter that is technically oriented, and are working on their own PD library to include 3 EZ Pieces templates and a Pascal-based lottery random-number generator. Dues are \$10.00 per year or \$1.00 per month starting in March. For more information, you can contact Cowman at 732 Timor Court, San Jose CA. 95127. His phone number is 1-408-259-9036.

FINALLY...

Claris's purchase of StyleWare (the producers of GS Works) took a lot of folks by surprise, since many expected Claris to upgrade AppleWorks specifically for the GS. And while it seems that the action indicates a willingness by Claris to be more open to the // community, rumor has it that the purchase had less noble reasons. That is, to provide Claris with an opening into the Mac integrated market! And now that GS Works (to be renamed AppleWorks GS) is apparently finished, programmers are rumored to already be at work converting the program over to the Mac.

By David Ottalini WAP /// SIG Co-Chairman

November 1988

WHERE DO I FIND PARTS FOR MY APPLE ///?

Finding parts is becoming more and more important for the Apple /// community. The reason, of course is that Apple has not made our computers for some time. In fact, some reports say they are actually destroying machines! But don't fear...there are still a number of third party vendors who have everything from whole Apple /// motherboards to memory cards, chips, etc. The list below, with some additional notes, should give you a good idea of where to start looking.

COMPANY/NAME: Computer Service Experts

ADDRESS: Box 70698

CITY/STATE/ZIP: Sunnyvale, CA. 94088

PHONE: 408-338-4339 CONTACT: David Rowe

Computer Service Experts says it has Apple /// ROM chips. Check the Apple /// Service Manual for more information about this chip (in the WAP library). Call for more information and availability. The last information I had indicated they were going for \$5.00 each with quantity discounts.

COMPANY/NAME: Electrovalue Industrial

ADDRESS: P.O. Box 376-CPC

CITY/STATE/ZIP: Morris Plains, NJ. 07950

PHONE: 602-428-4073

These folks say they have "Genuine Apple Parts" so they may also carry parts that will work in your ///.

COMPANY/NAME: Jameco Electronics

ADDRESS: 1355 Shoreway Road CITY/STATE/ZIP: Belmont, CA. 94002

PHONE: 415-592-8097

Jameco is an excellent source of chips for your ///, like the 6502B microprocessor, clock chip, etc. I've ordered a number of things from them and have received excellent service. Prices are good also.

COMPANY/NAME: Morris Horn and Associates

ADDRESS: Box 330876

CITY/STATE/ZIP: Ft. Worth, TX. 76163

PHONE: 817-292-3432 CONTACT: Morris Horn

Last time I talked to them, Morris Horn had lots of Apple /// parts, including motherboards, chips, cases, etc. They had so much stuff, in fact the guy asked if I knew anyone who wanted to take it off his hands!

COMPANY/NAME: N.D.R.C. ADDRESS: 8511 Manderville

CITY/STATE/ZIP: Dallas, TX. 75231

PHONE: 214-750-9889

N.D.R.C. advertises in Computer Shopper and offers a number of /// parts products. That includes motherboards, memory cards, power supplies, etc. Decent prices, in line with what Shreve and others are asking. Call for latest information.

COMPANY/NAME: **On Three** ADDRESS: 8920 Yolanda Avenue

CITY/STATE/ZIP: Northridge, CA. 91324

PHONE: 800-443-8877 CONTACT: Bob Consorti

On Three has been a long-time vendor for the /// community. By way of parts, they offer 65C802 microprocessor chip upgrades (cheaper from Jameco), interlace kits, clock kits and some other items. Check their magazine for the latest offerings and prices.

COMPANY/NAME: Pre-Owned Electronics

ADDRESS: P.O. Box 644

CITY/STATE/ZIP: Lincoln, MA. 01773

PHONE: 617-891-6851

Another Computer Shopper advertiser, Pre-Owned Electronics also offers a wide range of /// parts ranging from /// motherboards, 12 and 5 volt memory boards, even analog disk drive boards. Call or write for more information.

COMPANY/NAME: Shreve Systems

ADDRESS: 845 Lark Ave.

CITY/STATE/ZIP: Shreveport, LA. 71105

PHONE: 1-800-227-3971

I discovered Shreve in the back pages of Computer Shopper as well. Contact them for a complete list of

offerings. Has some software too.

COMPANY/NAME: Sun Remarketing

ADDRESS: Box 4059

CITY/STATE/ZIP: Logan, UT. 84321

PHONE: 800-821-3221 CONTACT: Bob Cook

Sun is another long-time Apple /// vendor that offers parts, including hard-to-find Apple /// chips. They tend to have chips others don't have. Call for latest information. They have a free quarterly publication you can order.

TIMELY PROGRAM

Here's another program with will display the correct time for you if your /// has a time chip (and it has been set properly using System Utils). This particular program will display the time in the upper right hand corner of your screen and could be incorporated into other programs fairly easily.

```
10
    HOME:legal.char$="AaBbCcDdEe"
50 correct.time$= TIME$
60 correct.time%=CONV%(LEFT$(correct.time$,2))
70 IF correct.time%>12 THEN correct.time%=correct.time%-12:
time.of.day$="PM":ELSE time.of.day$="AM"
75 new.time$=CONV$(correct.time%):IF LEN(new.time$)=1 THEN
new.time$="
"+new.time$
80 SUB$ (correct.time$, 1, 2) = new.time$
90 VPOS=1:HPOS=70:PRINT correct.time$;" ";time.of.day$
100 ON KBD OFF KBD:POP:GOTO 120
110 GOTO 50
120 char$=CHR$(KBD):IF NOT INSTR(legal.char$, char$) THEN PRINT
CHR$(7);:GOTO 50
130 END
```

NEW PD DISKS

We are pleased to offer two new PD disks this month. The first is disk **1035** and is called "THE BEST OF BLOOM". It includes Dr. Al Bloom's set of recent articles from TAU Tales explaining how to transfer data from an Apple /// to other computers (and back) in various ways. There's also information about all the articles he's written and where to find them as well as descriptions of all his programs offered by WAP and other Apple groups. They are both provided in ASCII format and 3EZP/AppleWorks Data Base files. As with many of our other disks, this one is self-booting on side one.

Disk **1036** has two more of Daryl Anderson's gems. On side one you'll find RAM+3, a set of VERY USEFUL RAM drivers for those of you with ///+// or ///+//e cards. Side two has 2NFRO, a program designed to let you return to Catalyst or Selector once you've run the ///+//e emulation program. This is a beta version and works...to a point. See Jim Suthard's comments about it in last month's Journal. This disk is

self-booting on side one. Full documentation included for both programs.

Next month, in time for Christmas, we'll be offering the long-promised CustomFONT program, with its associated manual disk AND a double-sided disk full of fonts!

DR. BLOOM STRIKES AGAIN

SIG member Dr. Al Bloom has decided to place more of his great programs into the public domain. Namely, they are his excellent set of utilities of use with Mail List Manager. Any of you who have this program know its limitations. But with these utilities, you'll be able to push MLM to their limit. We will be adding these to our PD library in the next few months, so stay tuned. In the meantime, here's a list of the 7 programs and a short description of what each does:

- 1. **MLMINFO:** consolidates all the important information about an MLM file on a single page -- your file's content, structure, sort fields, and print-control specifications.
- 2. **MLMSORT**: adds the power of a general-purpose sort to your MLM system. It re-sequences a file in any order you desire, using any of the up to 14 data fields in an MLM record.
- MLMLIST: is a flexible and sophisticated list facility for attractive and meaningful display of MLM data. This utility allows you to list any MLM file data items in an informative layout of your own choosing.
- 4. **MLMCNVT:** allows you to respond to changing needs by converting an MLM file into another layout. You may rename and reorganize the data in an MLM record, delete obsolete fields, combine and split fields, and create new fields.
- 5. **MLMERGE:** merges the records of a two-disk MLM file. Duplicate records are not merged into the resulting output file. The result may be combined or equally divided between two output files for easy record insertion.
- 6. **MLMASCI:** converts MLM files to formats that can be loaded into other systems -- AppleWriter, Keystroke, PFS, /// Easy Pieces, etc. MLMASCI has four output formats: Apple Writer mail/merge, ASCII text, Name:Value, and DIF.
- 7. **MLMUPLD:** uploads (creates) MLM files from other systems and programs. MLMUPLD accepts four input formats: ASCII text, Name:Value, DIF, and "comma separated value."

ENDIT

That's all for this month. Have a great Thanksgiving.

By David Ottalini WAP /// SIG Co-Chairman

December 1988

HAPPY HOLIDAYS AND HAPPY BIRTHDAY WAP!

As Washington Apple Pi celebrates its Tenth Anniversary, I'd like to take a little bit of this column to look back at our own roots within the club.

WAP was barely a year and a half old when the Apple /// was introduced at the National Computer Conference in Anaheim in May, 1980. The /// was the first computer to be designed in-house by Apple Computer. It was supposed to be a replacement for the Apple][, which Apple was afraid would not continue to sell well. The /// was specifically designed as a business machine and Apple sold it in "bundles" with software and hardware.

For Washington Apple Pi, the first mention of the Apple /// occurred in February, 1981 when Burton S. Chambers III wrote an article entitled "Flavors: Little Tidbits." Orange was the color of his /// comments. He said that he wanted to wait before making a final decision on the machine until there was more software and the bugs were worked out ("I'm sure it will be a useful machine someday"). /// user Mark Cheren wrote the following month ("Here So Slowly Comes The Apple ///") that he had gone through three Apple ///s (due to early production problems) but still felt the machine had excellent potential. He wrote: "So, have I made a mistake? Frankly, I don't know yet."

The first call for a /// SIG within Washington Apple Pi was made by Charles N. Dow, in the April, 1981 Journal ("The Not-Too-Slow Apple /// Is Great!"). Dow, untainted by the Apple][, was a bit more exuberant over the /// and its possibilities, writing that "the Apple ///, I have confidence, will be a great business asset, developed from the experiences gained from the Apple I, II and all other sources."

It took ten months more, but in February, 1982, Dow (the first "Pro Temp Chairman) gave the official announcement that a /// SIG within WAP had been formed ("Update On the 'Big Apple' ///"):

So herewith we unilaterally establish a group and invite all of the members who are interested in learning more about the newest APPLE and the smallest Users Group (there are six members that I have been in touch with personally).

The June, 1982 Apple /// article came from Ronald Askew. He reported the third meeting of the SIG occurred April 15th at the Walter Reed Army Medical Center, adding that 11 of the 20 ///ers in WAP had attended. Askew also reported that SIG librarian Michael Konvalinka had "collected virtually every important article, ad and publication referencing the Apple /// and relevant hardware and software."

In March, 1983 came the first, and only, complete review of the /// done in the WAP Journal. "A Report Card On The Apple ///: Does It Merit A Passing Grade?" was written by William C. Jacobson. The

bottom line for him was that the (now) two-year-old Apple /// got a "qualified passing grade." He was particularly upset that the /// had such a poor implementation of CP/M and called for an upgraded emulation disk to handle 64K and upper and lower case.

By May of the following year, Bill Hershey had been elevated to SIG Chairman, the first "official" leader of the SIG. In July, Hershey reported that the SIG now had 73 members! He also reported that an Apple Rep assured the members of Apple's "continuing commitment to the ///."

Midway through 1984, the SIG had gained a Co-Chairman in Jerry Chandler. And in January, 1985 Bill Hershey officially made way for Bill Rosenmund as co-chair. Throughout 1985, SIG Secretary Charlene Ryan kept the ///s flame burning in the Journal. She reported in January that despite the bad news about the /// being discontinued, the SIG was alive and well and members felt the /// was still a great computer. Over the course of the year, the club continued to meet, held a few tutorials and even surveyed members by mail. June, 1985 marked the debut of this author in the WAP Journal. Since that time, he has not missed publishing at least one article each month!

By 1986, the author had also taken over for Bill Rosenmund as co-chair and Jerry Chandler quit. Tom Bartkiewitz ultimately agreed to co-chair. In July, 1986 SIG Librarian Al Lambert announced our first four public domain disks. We now have a total of 40! We've also gotten three Apple ///s donated to the club for use by the SIG along with additional hardware and software.

The Apple /// may be an orphaned old lady, but she continues to work just fine, thank you. We continue to gain new members as companies sell their ///s to home users. Providing support is our best opportunity for service and we look forward to working with all /// SIG members in the future, as we have in the past!

/// SIG CHRISTMAS LIST

Since my good friend (and fellow CNN co-worker) Ralph Begleiter offered his holiday gift-guide for the MAC folks last month, I thought it only right to do the same for our /// members this month. The universe of Apple /// products is still large and the prices are excellent compared to what new equipment and software costs today. Here are some of my hardware choices:

- 512K Memory Upgrade (ON THREE). Sold now with options of OK of memory, 256K and 512K. (\$159.95/\$299.95/\$399.00)
- Seikosha Color Printer with Interface Card and Color Graphics Manager (ON THREE). At \$259.95 this is a great buy for ///ers interested in an inexpensive way to print in color.
- Titan ///+//e (SUN REMARKETING). The Titan cards are an excellent investment in the future, allowing you the luxury of running most //e software on your Apple ///. RAM disk software in our PD library makes it even more useful. (\$299.00)
- Hard Disk Drives. Your Apple /// was made to sing with a hard drive. Many are still available, including 5 and 10 MB ProFiles, the Quark QC20, and the Sider 20MB (SUN REMARKETING/ON THREE). Check the papers and the back of Computer Shopper for better deals.

- 800K Disk Drive. If a hard disk is too expensive, how about an 800K drive instead? ON THREE sells both the Apple // UniDisk drive with interface card and software (\$499.00) (or just the driver alone if you want to buy it locally) (\$50.00). A better deal may be the Central Point Software 800K drive and card with software (also ON THREE) that lets you hook up any 2 MAC 800K, 400K or Apple // 140K drives (\$399.00). Card and software alone also available (\$149.00).
- Modem. Any modem now on the market will work with your Apple ///. One that is "Hayes Compatable" would be best. Check the WAP Office for their group sale price for a 2400 baud modem.
- Trackball ///. Developed by Dale Sykora, this is a Mouse substitute that will work within ANY Apple /// application. Great for graphics programs. (ON THREE \$89.95)

On the software side of things, my choices would include:

- Just about any disk from our /// SIG PD library (the best bargain in town at just \$3.00 each!)
- ThreeWorks. This is an encyclopedia of Apple /// information on four double-sided disks. Requires 3EZ Pieces or (on the Apple //) AppleWorks. (ON THREE \$39.95)
- SUN REMARKETING sells a number of commercial Apple /// software products at discount prices. Among them is AppleWriter 2.0 that contains all the excellent manuals for the program. 4.1 version is available in our PD library.
- ON THREE sells a number of excellent programs, including the Desktop Manager background utility, Selector /// for hard disk users, a number of games, Draw On /// and Graphics Manager graphics programs. A new offering is Sideprint, a program that will print spreadsheets sideways. Also, for new users, the Beginners Pack is an excellent buy at \$99.00.

NEW PUBLIC DOMAIN DISKS

Your /// SIG PD library grows by four disks this month. That brings our total offerings up to 40. The additions this month are described in detail in a separate article. But in the meantime, here's what you'll find:

- THREE.SIG.1037 CustomFONT Manual
- THREE.SIG.1038 CUSTOMFONT Program Disk
- THREE.SIG.1039 Font Disk #1
- THREE.SIG.1040 Ottalini Articles Disk#1

All are available now in the WAP office for only \$3.00 each. I think you'll find CustomFONT to be a fun program to use. It will allow you to create custom fonts for your /// and (with specified printers) even print them out. The Font disk will let you see on screen all the different fonts we've included for you. There are two sides full of fonts, including some converted Apple][fonts and a number of foreign language fonts. The **1040** disk includes many of the early articles this author published in the WAP Journal. More compilations will be forthcoming.

Looking to the future, the new year will bring with it CAP'N MAGNETO, a game program that makes heavy use of fonts, some additional disks by Dr. Al Bloom, two Apple // emulation disks, more Basic utilities programs and much, much more. I am also working on a disk with Apple /// repair articles, tips, etc. Any contributions welcome!

///'s COMPANY BBS

Ed Gooding's ///'s Company BBS has been down of late. Ed wanted to upgrade to a 2400 baud modem and change BBS software. But Infonet, the new BBS program, couldn't handle 2400 baud. So, Ed had to do a little hacking to make it work. He says things are back to speed now and you can logon without any problems. It was going to take a bit longer to port (move) all the old ///'s Company files over. That should have been accomplished by the time you read this, however.

BASIC EXTENSION REVISITED

Our PD Disk **1031** contains a number of useful Basic utilities that can help you speed up and improve your Business Basic programs. As relayed on the /// section of MAUG (Micronetworked Apple Users Group) on CompuServe, they are powerful utilities you Basic programers should get to know better.

As an example, Pair Software's Frank Moore says he "set up the MATRW.INV module, which writes BINARY files, to write 100 records to disk, then read them, followed by a WRITE for a data file for 100 records, then READ back in. The results were as follows:

MATRW.INV	DATA File	(WRITE 100 RECORDS)
13 seconds (!!)	47 seconds	
6 seconds	19 seconds.	(READ 100 RECORDS)

The disk also contains a number of other invokables you'll find very useful.

Speaking of Pair Software, the SIG recently received another flyer that indicates continued support for the Apple ///. Pair offers a long list of public domain software (although prices are higher than from other sources) as well as commercial software products. For more information, write Pair Software, 3201 Murchison Way, Carmichael, CA. 95608. Phone number is (916) 485-6525. As I have mentioned in past Trail articles, Pair has had its troubles over the past couple of years. I would appreciate any feedback from SIG members who gain "new" experience with the company.

FINALLY

I want to wish everyone a joyful holiday season and a Happy 1989. The WAP has a number of challenges to face in the coming months. Let's all work to ensure the health and future of our user group!

By David Ottalini WAP /// SIG Co-Chairman

Apple /// users owe a lot to Daryl Anderson, a young man whose interest in our computer never wavered even though Apple discontinued making our wonderful machine. His was one of only a small handful of companies that bothered to continue supporting the ///, and in fact bothered to ADD to the products being offered so that we could keep up with the "newer" machines. He describes his companies early days this way:

1985 was a critical year for the /// and one when, at least early on there seemed to be few contact points for products and support. We tended to step into that gap and arrange with wavering developers and manufacturers to configure and offer their products to the /// market. Working with a few other small companies and supported by a word-of-mouth network, user groups, and the very timely /// Newsletter (which grew up to become the /// Magazine), we all made it thru '85 and expanded the locus of action enough to convince a handful of other better-capitalized companies into or back into the /// market.

Some of the products included a unique way of hooking up an IBM co-processor to the /// using CP/M as the bridge. He became a distributor for the Omnis /// Data Base program and improved its technical help greatly, and he fixed the Legend "S" 1 MB card so that it would work in the Apple ///.

Daryl is also a master programmer whose software programs (see below) include Power Keys, and the Tools Times Three productivity tools. He even came up with a way to improve the Titan ///+// and //e Ram drives and was working on a way to let you enter the //e Em mode from Selector or Catalyst.

As family and other pressures mounted (including a decision to return to school), Daryl decided to sell many of his software products though Pair Software (Frank Moore) as well as through TAU, the Third Apple Users Group. But when Pair went bankrupt in early 1987 (the last issue of The Three Magazine came out in February, 1987), Anderson was left without any major royalties (Pair continues selling its products even now despite numerous business problems but has NOT paid royalties to its developers in more than a year, including this one). That led to Daryl's decision last month to place all his software programs into the public domain.

What are some of the products that will soon be going into the public domain? Here's a list, with edited descriptions by the developer himself:

POWER KEYS

Power Keys DM+ is a program which runs in conjunction with ANY other Apple /// program and allows you to substitute single keystroke shorthand or 'macro' commands for more lengthy sequences of frequently typed characters such as product names, programming keywords, or anything you waste half your day typing over and over and over and...

In addition Power Keys DM+ itself can manage a growing collection of 'desktop utility' modules which put additional and useful functions at your fingertips while running any other program. These modules currently include **NotePad**, **QuikDial**, **QuikCat**, **ShowTime**, **PrintMgr**, **AsciTbl**, **QuikScrn** and **DiskMgr**. See the individual files in the subdirectory named PWRKEYS.MODULES for details.

POWERKEYS MODULES

All are available as "background desktop utilities" at the touch of a key while running any Apple /// Program and they include (this is a partial list):

Module	Description
NotePad	edit, load, save, alter and view small "scratchpad" files at any time
QuikDial	allows modem owners to dial a telephone directly from the keyboard or from a
	number displayed on the screen by their program
QuikScrn	print a copy of the current text screen on your printer or send it to a disk file
QuikCat	list the directory of files on a disk or other subdirectory at any time
PrintMgr	send complex 'setup' codes to your printer at any time
DiskMgr	format floppy disks and copy files right in the middle of any other program
ShowTime	display current system date & time at the touch of a key
AsciTbl	shows a table of ASCII character values as well as current system font
Dialer	phone dialer
QuikCalc	calculator
FontLoad	font switcher
Moduload	dynamic module loader
QuikCrpt	file encryptor/encoder
FileScan	file viewer
FileDump	file hex dumper
TypeRite	printer/typewriter
LockOut	prevents computer use by non-authorized person

TOOLS TIMES THREE

All these programs run under Business Basic!

Program	Description
The Retriever	Deleted file recovery utility
Power Cat	Disk and file librarian
Power Print	Software printer buffer
Basic GTO	Partial compiler and program accelerator
Basic XRF	Program variable cross-referencer
Basic Utils	System Utilities in Basic
Basic XT	Language extensions including QuikSort
Source Window	Full-featured disassembler
Disk Window	Disk block editor
Data Window	File examiner

Anderson also plans to put many other programs into the Public Domain including:

Program	Description
PC-COPY	IBM/Apple file xfer (req. hardware)
RAM+3	Enhanced Titan ///+II RAMdisks
PCPI++	Allows running PCPI CP/M from Catalyst
LEGEND++	Autoboot 1 Meg RAMdisk for Legend card
TWO-N-FRO ///	Run ///+II emulation from Selector/Catalyst
Kache+3	Disk caching speedup via RAMdisk
Remote ///	Control /// via remote dialup

As I mentioned in the Trail article, these programs will be uploaded to MAUG on CompuServe using the XMODEM/Binary 2 protocol and will also be available in the future from TAU, SUN Systems, Apple Users Group International and probably a few other groups as well. We will also offer some of the programs, but given the great number, will be more selective. Let me or Tom know which ones you would be most interested in seeing. If any of you have any of these programs and would like to donate a copy for the PD and our back-up program library, please also let me know.

I'm not sure what impact this action will have on another /// vendor, On Three, which offers the Desktop Manager, a product similar to Power Keys. DTM is a more sophisticated program that has a more professional on-screen look than Power Keys. But for many /// users, it will be hard not to resist at least trying Power Keys to get a feel for what a desktop utility is and how much more productive it can make the ///.

If you would like to write to Daryl, his address is: xxxx, Hamburg, NY 14075.

APPLE'S TAYLOR POHLMAN ON GS BASIC: Part 1

Transcribed by John Lomartire Edited by Dave Ottalini

(The following transcription is taken from a seminar given by Taylor Pohlman at the October, 1987 Phase /// Conference in Chicago. This seminar, along with others given during Phase /// will soon be issued as a WAP /// SIG PD disk).

We believe that GS BASIC is going to provide an environment to do any sort of software you want in a GS environment. Everything from converting your Applesoft and Apple /// Business Basic programs over pretty much straight as they are through utilizing the full facilities of the system. There are no real limitations to the ToolKit and the tools that you can get to, in the GS. Everything from SoundManager to you-name-it, and new tools as they appear, are ready to interface.

Let me give you a little background about GS BASIC. First, I left Apple for a while back in the Fall of 1982. I started a couple of companies and had a lot of fun. Then (Apple's) Dan Cochrane (came to me and) said Apple needed a manager of languages and utilities parts management. He told me about the new Apple //GS.

Cocrane said there were a couple of guys who still remembered assembly language but everybody was really hot on C. There's not going to be a Pascal apparently for the machine. Nobody is going to do BASIC, except Applesoft would be put in ROM so that the old programs could go on. I said, "You're kidding!" Pardon me for offending anybody, but in 1979 when I first joined Apple and looked at Applesoft after having programmed on an HP and other kinds of mainframes, I refused to write code in that language until they fixed it. When Business Basic came out, I had a language I could write programs in, and that's what I did.

I said to Dan, "No way does that make any sense." So Dan said he'd work something out. (What he worked out was) he gave me the source code to Business Basic (to convert over) and said once I got it going, he'd help figure out how to get the thing out the door. I thought that sounded like a pretty neat idea. How many people here have programmed in assembly language? OK. How many people didn't raise your hand because you really do know how but you're afraid someone might ask you to? I'm kind of in that second category. I sort of know how, and have sort of done it but that's the last thing I'd do for a living, so I said, "I've got to get someone who knows what they're doing."

Once upon a time, a long time ago (in 1979), a guy named John Arkleys used to work for me at Apple. John was now doing some consulting, working with FORTH company. He had put out some wonderful programs pretty much on his own in a garage behind his house. I managed to find John. John actually worked on a lot of the early Business Basic stuff. I dragged John out of the garage and I told him we've got a chance from Cochrane to get the source to Business Basic and convert it. He liked the idea, so I put him together with my partner at the time, Dan Winslow, who was Apple's old lawyer that did the patent trade mark stuff, fought the Franklin and Comb wars, and all that stuff. The three of us got together and went off to do it.

It became pretty apparent when we got into it that we could do it. In fact we did a port pretty quickly.

We started in July and by September we were actually demonstrating Business Basic programs running on the GS with a little bit of extension like larger memory and so forth. But it was clear that although that was interesting and useful, it really wasn't what the machine wanted. I'm a firm believer that languages are only good if they let you at the machine. So we sat down and really started thinking. At that point we started working very heavily with Apple Product Management.

That's how David Ives became the sort of quasi product manager working for Cochrane on the project. We all sat down and said, "Now what kind of BASIC do we really want for the GS, given the fact that we want to be sure that we've got backwards compatibility. We want Business Basic programs by and large to run unchanged and to tap all of that market and tap all of those people who have that kind of expertise, but on the other hand we want to let them at the machine so they can do applications." We cooked up a language specification...(and) we came up with, we think...an outstanding version of the language.

I'm happy to say today that the beta-4 version of that is now in APDA's hands, they are shipping it. I brought some data sheets along with me today, and for 50 dollars, you can actually have one of your very own. What Apple will exactly do in shipping this product, if it is ever actually shipped officially from Apple, I don't know. We are committed at least to do one more beta version through Apple which is going to make some internal changes as soon as it comes up. But the language as it stands right now is set. We know what it does and that's really what I want to spend some time with you about today.

What is this new language and what kind of impact will it have on people who want to develop things for the GS, either quickly or spend a little bit of time doing something really fancy? And also, those of you that program in assembly language, I want to talk a little bit about how GS BASIC, for me, presents one of the finest platforms in assembly language development that's around. Those of you who did assembly on the Apple ///, let's say, using the invokable module will find an incredibly similar but far more powerful annotation of assembly language in GS BASIC and therefore we think it's the right place to turn this stuff loose in that system.

If you want to do the easy part in BASIC, the hard part in assembly, it's an ideal environment. Besides, the invokable module interface, if you remember from the ///, presented product opportunities for assembly language programmers to fill routines that were useful to a large body of programmers. The way we've done the interface to assembly in this product will also give you more of an opportunity to do high quality invokables for the GS with this product. This product is even better.

Next month: GS Basic Internals

APPLE'S TAYLOR POHLMAN ON GS BASIC: Part 2

Transcribed by John Lomartire Edited by Dave Ottalini

(This is the second of two articles detailing GS Basic by one of its developers at Apple Computer, Taylor Pohlman. His comments were made during a session at the Phase /// Conference (October, 1987) in Chicago.)

GS BASICS

We tried our best to be backwards compatible with Apple /// Business Basic. In that regard we support all the key features of that language including the data file structures (as well as the) INVOKE and PERFORM interface. We support .CONSOLE, .PRINTER, and all sorts of character-oriented IO devices so you can do the redirection you know and love. That way, you are able to go to printer or go to disk, within the limits of ProDos at least.

We built an interface up so it looks a lot more like SOS in ProDos from the standpoint of usage. We added a lot of new features in the command language, for example a COPY command, a built-in RENUMBER, a number of other utilities that make the command line interpreter in GS BASIC a very friendly way to work the operating system. Much nicer than standard ProDos usage. The language is also fully compatible with the FINDER so we can launch BASIC applications. By clicking on the program file it will automatically launch the interpreter for you and boot the application.

In fact, at this time we don't even have the standard HELLO-type program interface. But we revamped the Business Basic EXEC capabilities and a lot of these features. You can now also have an EXEC startup as well as an HELLO startup. It's possible to start up an EXEC file at boot time which is pretty handy if you're doing serious business applications.

There are a lot of commands and a lot of language features that parallel Business Basic. We continue to support 64 bit integer type, for instance, scale function and all the rest of the stuff for math. We've considerably enhanced the numerics environment by putting in a number of new data types. We support, for instance, a 32 bit integer type which enables you to deal with pointers directly and makes a much nicer interface to the rest of the system, not to mention the fact that a lot of arithmetic, integer arithmetic, now works.

We also integrated the math in such a way that you don't have to worry about real-long integer types being compatible. Now complete mixed mode operations work. The MOD function works everywhere. We built the whole numerics environment on top of SANE. I think it was done in a very clever way. In expression evaluation now, in the language, we maintain a concept called the "type of the expression". That means that if you're doing integer expression with just small numbers, say small scale constants, it's going in the integer math pack in the GS. It's extremely quick. We also tokenize this function now at entry time, so constants don't have to slow the machine down.

In fact, you get a real payoff in this machine for using the integer type. For/Next loops execute six times faster if they are integer than if they're floating point. That makes a significant difference compared to the performance on the /// in that mode.

In fact, on the /// you paid a performance penalty for using integer, although not a lot of people knew that because the system first converted the integer to floating point and then did the calculation and converted it back to an integer. In this expression evaluator we don't drop into 32 bit integer or in floating point until we have to. So any complex expression will be evaluated at the lowest common denominator or arithmetic until it's time to pump up. We actually started calling that degenerative arithmetic but it's sort of the opposite. Actually it's sort of a smart expression evaluator.

The other thing we've done is data types. I already said we implemented the different integer types. We implemented 32 bit floating point arithmetic. We have a 64 bit floating point type so you get the accuracy. You deal with this basically with all the same tools inside the GS. We also, internally at least, support the full 80 bit extended type. So you can store and restore that in expressions and do comparisons (but there's not an extended type in the language). In addition, there's one other data type in the language you assembly guys will enjoy and actually almost anybody else, too, which is a concept called "structure" that is basically an unsigned byte array.

One of the important things about arrays in GS BASIC is we've removed some of the old Apple /// limits. Arrays can now be 4 megabytes in size. You can have as many of these as you have memory. That's handy because with block file access to the disk you can then have a COPY command. You can write about a five line program which sucks an entire disk into memory and spits it out on another one. You can structure arrays. It's kind of cute. This is pretty fast too. The idea of the structured data type and a command called SET you have like the old GET and PUT in Microsoft BASIC, basically allows you to store any kind of structure including strings or numeric type into structured arrays in various spots. It gives you a general idea, like bit maps for instance, because you can declare a structured array to enter into the memory. We have an extended PEEK which basically lets you (instead of PEEKing one byte at a time you can) PEEK a type or you can PEEK a structure. Your ability in BASIC itself begets you other kinds of data and manipulates them a lot nicer.

PEEK and POKE are back in the language. Actually you can assassinate me for that. I had PEEKs and POKEs ripped out of Business BASIC on the theory that the first invokables that anyone would write would be PEEK and POKE invokables. Sure enough that is what you did. The second thing was I really wanted to encourage --- the Apple /// and the GS like it --- are very complex machines. You kid yourself if you think you can PEEK something and expect that value to be worth anything, except maybe at zero page, for any length of time. In particular in GS BASIC implements, it's very comfortable within the memory management structure of GS. That means, for example, there's a program segment, several data segments, anything else it uses, memory segments, as opposed to grabbing the machine like Business BASIC did. That means for example, when there's an ability to run multiple applications in memory, we can mix. In fact, it enables us to run multiple COPY's in GS BASIC.

So we had to cooperate with the memory manager. That means that there's no way to predict where a particular program is going to be because it can get moved around. So we have this giant disclaimer in the thing that says, well you can do PEEKs and POKEs if you like it but don't believe anything you hear. Particularly don't use any value more than a few microseconds at a time. Yea, there's PEEK and POKE in the language.

Particularly there's also support for C strings, Pascal strings, and other kinds of string-based structures. In using the structure type we can basically map onto other kinds of string structures. That means you can CALL the ROMs like they ought to be CALLed using automatic interface. In fact, invokables now are truly string quantities, which you can handle using a string parameter. To do that, we do all the fix-up between what the ROM knows about strings and what we know about strings and what BASIC knows about strings. There's quite a bit of work in there to make sure that all that, sort of fuses. Anyway, I think you will enjoy the "Structure" type and it does give a nice interface to some of the other capabilities.

We did not expand the string pool. It's still 64K, maximum number of strings available, but there are structures for storing string-like arrays if you want to do that construct and quickly convert back and forth. And for people who need access to the system (if you remember Business BASIC had a few short hooks that let you get out from assembly language and find some things that you needed), GS BASIC has a complete set of entry points and a well-documented zero page. You can call the floating point accumulator, call the math pack, you can do the kind of invokable, for example, from matrix arithmetic that people really wanted to do with Business BASIC but couldn't.

In fact, you can even call the interpreter, ask it to find a particular line number for you and execute that line and then go back to the assembly language routine. That's fairly good control back and forth. In fact, this is one of the ways Taskmaster works. I'll talk about that in a minute when I get to access to the ROMs and tools. Basically we've taken Business BASIC and in the area of data type and access to memory and so forth, extended it significantly. By building a sort of SOS-like character file interface on top of it, we've been able to convert programs a lot easier than you would if they had to say, "Oh my gosh, now I have to deal with ProDos" which is sort of a different animal, as we are all aware.

We mentioned just a minute ago access to the ToolBox and ROM. Basically what we've done there is extended the concept of PERFORM which was the old way to get to results of the module, through a new service called CALL. And CALL can be either spelled out or simply underlined. So if you want to write programs that actually look like you see them in the ToolBox reference, you can do that. We support parameter passing and there is a mechanism through something called the TDF file, which is a new concept we introduced in this language. TDF file, or ToolBox Definition File, enables BASIC to know what the structure of a CALLing mechanism is for Tools. And there are TDF files available for all the currently available tools.

What that does is allow BASIC to know what the parameter list looks like, what the types are, so it can check your CALLs to the ToolBox and it can also fix up the parameters in such a way that the ToolBox gets the proper stuff it is expecting. And that interface, basically, allows us to support any tool as it comes out with proper tools and direct ROM. And we CALL the Tools Locator and do all the right stuff so we're compatible in that environment. We use that same mechanism in the capabilities of the H & W Assembler to extend INVOKE/PERFORM in such a way that PERFORM can now do the same type of thing (parameter type checking and so forth). So that, your odds as a programmer using somebody else's invokable incorrectly and not being able to figure out what's going on, are greatly reduced.

The other thing that we've done to the language that will help people use it in more friendly ways is to really rebuild the syntax checking completely. I know those of you who have typed in a line noticed that GS BASIC really doesn't care where you put tokens. [Tokens are the so-called "reserved words" in BASIC like PRINT, LOAD, LIST, etc. --- J.L.] You can just throw them anywhere. If you use the right word it

doesn't matter what the order is.

We've completely redone the interface. Now we have a concept of nouns, verbs, and adverbs in terms of the way the syntax of the language is used. And if you screw up the language it will tell you how. (Going to the GS Now) I think this will work. OK, good old familiar prompt. For those of you who have been around we didn't change that. We thought you'd feel happy, besides we couldn't come up with anything we liked any better. Worst decision of a Product Manager or other to bring up is, "What shall we use for a command prompt?" "I don't know. What do you think?" OK, something you'll like.

We've got an edit line now that is actually three lines long, can edit three full BASIC lines, and guess what, all the insert stuff works, and when I decide what I want to do with this I just hit RETURN and it accepts that line as entered. So you have complete add-line capability built into this. You can even do multiple edits, you can do auto-renumber, and you can enter lines like that. You edit back and the line is returned.

Notice the little caret. We drop the err message down one line and we put a caret where the syntax scanner finds the problem. For those of you who are jocks that helps a little bit, but for people who use the language like students and so forth, they're going to find that a lot more friendly. And because we do adverb, noun, and verb kind of checking, we know where things are out of sequence. You will catch a lot more syntax errors than were ever caught before.

Notice the "Library" command. That's our way of loading into memory the ToolBox Definition File. Libraries allow you generalized access to interface definitions for external tools. Once a library is loaded in, the TDF file by the way of APPEND continues to build a giant library of all these entry points. Once those entry points to tools are defined (notice the "Dispose All Desks", "Start Up Window", "Start Up and Refresh Desktop"), you use those names. The names are present in the TDF files, and how to CALL that tool, all that information is in TDF. So once we do that you can begin to use those ToolBox CALLs as if they were just new parts of the BASIC syntax.

The GS Tool Members Guide is an indispensable tool honestly in writing this kind of stuff, because we don't document it in the BASIC manual. We just tell you that this stuff exists and go there to find out the definitions. All these things are available.

In fact, notice another thing too. ON-BREAK/NO TRACE can go to shutdown. Couple of things you might be interested in, in that light. One is, ON-BREAK is the CONTROL-C disabler. You can build exceptions on BREAK and you can do BREAK-ON and BREAK-OFF. CONTROL-C now interrupts an input statement without your having to press the carriage return and all that other nonsense you never can remember to do. Notice it goes to shutdown.

We implemented LABELS, that can be used anywhere a line number can be used, in any jump statement. In fact, you can write your program in such a way that no line number references are used at all. In fact, Tom Leonard of TML Systems, of whom you may have heard, has actually demonstrated a prototype compiler already.

Now that this syntax is set we can think seriously about doing a compiler for this language. And I think that's pretty neat too. The point is we built, in effect, LIST options that allow you to list out without line numbers then you can pass it by the compilers. We also eliminated a number of features from the

language so the compiler could be portable. For example, there's more Delete Lines on the fly. It takes an immediate mode command. I argued with them back in 1979. That should have been taken out then. It's a pretty terrible idea. There's a number of other minor things like that that we've eliminated that would fit the immediate mode command but you could also do them in deferred mode, that will enable the compiler to make sense of what is going on. It's a little tough to tell a compiler to read a number of lines of code for itself and merge a few more in from a file and so forth. A lot of thought has gone into this to make sure it would be reasonable to build a compiler. We made a run-time system as well. So we would be able to create programs and ship pre-labelled ones. In fact, a run-time system will do two things.

The first thing it will do is pack the program and replace all of the references, line number and LABEL references, with absolute addresses. Excuse me, I should have said relative addresses, anyway, offset. So it makes it a little tough for people to figure out what's going on. It also makes it EXECUTE significantly faster. There's a token there for an absolute jump as opposed to a line number/label reference. We do a lot of pre-scanning too, on LABELS especially, certain kinds of LABELS.

In addition to implementing the CALL mechanism through the library, we still need to INVOKE and PERFORM as I said before. We have a couple of new mechanisms that make structured programming handy.

First there's a real PROCEDURE capability. A PROC with multiple arguments, a multi-line procedure including multi-variables and you can use global variables, of course by not declaring them Local in the procedure. All arrays are global throughout the entire program, so it's very easy to do argument passing, set values, and so forth. Multi-line procedures are very handy. Finally there's always been a classic problem with GOSUBs, or whatever. How to give people interesting things to use without them screwing them up very much. Well now you can do three reasonable kinds of procedures. These procedures can CALL functions and CALL other procedures in a recursive way. It can CALL itself too for that matter. So we do support recursions essentially at any level.

In addition to procedures, we have multi-line FUNCTIONS with argument passing. An external function interface, the old EXFN interface in Business BASIC, has been beefed up significantly so that external functions can now be typed and used almost in any environment. In fact they can return strings, for instance. They can return any data type.

So there's a lot of stuff that enables structured programs from a procedure-oriented standpoint. The other thing we've done that really helps with structured programming is implement DO/WHILE and UNTIL. So you have a full capability there to impact decisions. You can do DO, DO/WHILE, WHILE logic expressions and UNTIL logic expressions in relatively any combination of those. In addition we are supporting in a limited way, multi-line IF/THEN/ELSE.

As long as a follow up line starts with a THEN or ELSE you can NEXT any logical level. It's explained fairly well in the manual. The old Business BASIC would let you NEXT IF/THEN/ELSE statements but after about 150 characters or so you sort of lost track of which was which and so forth. This will allow you to build things so they will look nice in the program. We've really tried to modernize the syntax of the language, bring it up to (the present). (Business BASIC at the time was one of the most advanced BASICs on any micro, I'd say. I liked it a lot better than Microsoft BASIC A for a number of reasons.)

So we tried to do the same product response in 1987. What did this BASIC have that wasn't there before? In a way it's pretty familiar. The old standard implementation. People who have used other BASICs will notice these things work kind of like you expect them to. IF and ELSE isn't quite as nice as it could be but it's a lot better than it was and it's really straightforward to implement.

BASIC by the way, has grown. Those of you who are used to the old 25K assembler file --- interpreter file --- will now discover Business BASIC is right at 60K at this point and growing ever so slightly with every beta version.

In terms of beta release Apple has it now. It's pretty stable. We haven't really seen a major crash, bug, or anything like that in some time. And so, for development purposes, just as long as you sort of judiciously save, chintzing is no serious problem. ToolBox interface looks pretty solid too. The only thing we can do for this is work with it.

I think I mentioned in talking about the ToolBox and ROMs, structured programming and such, that one of the most important parts of being able to give the kind of program I just showed you with reals and so forth is our interface to TaskMaster. And the way TaskMaster works, once you've set up your window definitions, your menu definitions and basically your environment, then it manages the events for you and interrupts you only when certain things happen. Now what we've done is built an interface, GSMaster, that allows you to put BASIC line numbers or LABELS into an array. And so when TaskMaster has something for you that your program needs to deal with, it will appropriately jump to the right part of your BASIC program, makes it do a GOSUB or a CALL to do effectively a GOSUB to whatever routine you provide to link into that key development.

Let's say, for example, in the case I showed you, I have on one of the menus Windows #1, #2, #3, #4. Now there are routines that basically handle that message. So they bring to TOP --- the Window command can be issued by picking up the menu pick and then dispatching again the appropriate Tool CALL. In that way we've enabled a very fast, clean interface to TaskMaster while leaving most of the tricky stuff in the interface behind. Otherwise there would be no way to really do it in an interpreted language like BASIC. On the other hand if you judiciously use the capabilities, it's really pretty straightforward.

We've also implemented the idea of a GRAPH port in BASIC, what we call a Window File. You can OPEN a window as a file and do PRINT number statements to that file as you would use to do in the old .CONSOLE. In fact, you can also OPEN .CONSOLE and do the same thing but .CONSOLE is the text screen to play around the right text in the improved fonts, whatever, since you can switch fonts on the fly in a position using the QuickDraw CALL. In all respects whatever QuickDraw condition CALL you gave it, in the right text, you can print number functions at that particular spot. It's really straightforward to do stuff in the GRAPHIC environment. In fact it's trivial to do that kind --- you just clear one of the windows, clear the port, and start printing stuff in the GRAPHICS.

Of course the clipping boundaries and scrolling and so forth are easy to support too. We really tried to make it pretty easy. This is a fun application even when just hacking around. In this particular example shipped with the disk so you can basically use that as a starting point for how to get this cranked up. It's simple enough so that all you have to do is eliminate some windows and not load the PICS and you can do anything else you want basically in the GS environment. It is pretty tricky to do ToolBox programming. Sequence of events, startups, dealing with all the pointers, building a window data

structure, you still have to deal with all that stuff to initialize, but there's enough examples in here, I think, to get you going and if you're used to dealing with the ToolBox documentation this is going to be a pleasure compared probably to what you're going to be doing in other environments.

By David Ottalini WAP /// SIG Co-Chairman

1987 was, in many ways, a benchmark year for On Three. It became the only monthly commercial magazine (in fact, the only commercial magazine period) devoted exclusively to the Apple /// computer and the only company that still continued to sponsor major programming efforts on behalf of the ///. On Three also ported over its most successful product, the Desktop Manger to the //GS, a move that will accelerate with other products in the future.

Despite suffering through reduced renewals and a change in editors (Lynn Denicola left and was replaced by Paula Sheppard) (and as we entered 1988, Sheppard left to be replaced by Olaf G. Wolff), On Three continued to offer its readers a wide range of articles by a number of authors. And, for the most part, the articles published in the magazine were excellent. The continuing series of columns by Richard and Lavona Rann remain my favorites. And their series for new Business Basic programmers was excellent as well. Al Bloom, Ed Gooding, Earl Brelje and many others, listed below, all made important contributions. I especially enjoyed those articles by some guy in Maryland named Ottalini...

1987's listing, like previous listings, is sorted based on subject. This bibliography will be part of an update to my ThreeWorks disks expected later this year.

Subject	Title	Author	Issue	Month	Pages
Basic and Pascal	From BASIC to Pascal	Bloom	3	Mar	21-23
Basic Program	Text File Manager	Soling	4	Apr	11-13
Basic Program	Recipe for a Menu	Barton	7	Jul	23-26
Basic Word Processor	Kidword ///	Ottalini	11	Nov	9-10
BB Game	Magic	Smith	2	Feb	14-15
BB Programs 01	Two Shorts – Fini!	Barland	1	Jan	11+
BB Programs 02	Three Shorts – Fini!	Puckett	2	Feb	18-19
BB Programs 03	Two Shorts – Fini!	Gauger	8	Aug	31
BB Programs 04	Two Shorts – Fini!	Ottalini	12	Dec	9-10
Beginner Basics 01	The Beginning ///	Rann/Rann	1	Jan	13-14
Beginner Basics 02	The Beginning ///	Rann/Rann	2	Feb	17-13
Beginner Basics 03	The Beginning ///	Rann/Rann	3	Mar	11-15
Beginner Basics 04	The Beginning ///	Rann/Rann	4	Apr	5-8+
Beginner Basics 05	The Beginning ///	Rann/Rann	5	May	5-10
Beginner Basics 06	The Beginning ///	Rann/Rann	6	Jun	5-10
Beginner Basics 07	The Beginning ///	Rann/Rann	7	Jul	7-11+
Beginner Basics 08	The Beginning ///	Rann/Rann	8	Aug	5-8
Beginner Basics 09	The Beginning ///	Rann/Rann	9	Sep	5-8+
Bibliography	An On Three Bibliography	Ottalini	1	Jan	4-6
Column CH01	Ask Doc Christenson	Christenson	12	Dec	27-28

Column C01	Block_Write	Consorti	2	Feb	4+
Column D01	Apple.Sauce	Denicola	1	Jan	3+
Column D02	Apple.Sauce	Denicola	2	Feb	3+
Column D03	Apple.Sauce	Denicola	3	Mar	3
Column D04	Apple.Sauce	Denicola	4	Apr	3
Column R01	Ranntings	Rann/Rann	1	Jan	15
Column R02	Ranntings	Rann/Rann	2	Feb	31
Column R03	Ranntings	Rann/Rann	3	Mar	19-20
Column R04	Ranntings	Rann/Rann	4	Apr	23-24
Column R05	Ranntings	Rann/Rann	5	May	17-18
Column R06	Ranntings	Rann/Rann	6	Jun	17-18
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Column R09	Ranntings	Rann/Rann	9	Sep	17-19
Column R10	Ranntings	Rann/Rann	10	Oct	17-19
Column R11	Ranntings	Rann/Rann	11	Nov	17-19+
Column R12	Ranntings	Rann/Rann	12	Dec	17-19
Column S01	Apple.Sauce	Sheppard	5	May	3-4
Column S02	Apple.Sauce	Sheppard	6	Jun	3
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Column S07	Apple.Sauce	Sheppard	12	Dec	3
Copyright	Copyright Protection	Cortopassi	5	May	11-13
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Desktop Toolkit	Toolkit	Brelje	11	Nov	11-15
Drivers	Driver Versions	Ottalini	11	Nov	21-22
DTM Module	Warning	Brelje	3	Mar	7-10
DTM Module	PKASO/U Command Module	Brelje	4	Apr	18-21
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Glossary 02	Glossary of Terms	Thompson	8	Aug	13-15
Glossary 03	Glossary of Terms	Thompson	9	Sep	25+
Letters 01	One, Two, /// Forum	Denicola	1	Jan	26

Letters 02	One, Two, /// Forum	Denicola	2	Feb	25-30
Letters 03	One, Two, /// Forum	Denicola	3	Mar	25-32
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News S03	Apple.Slices	Sheppard	9	Sep	24
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Programmers Q&A 01	Programmers' Paradise	Consorti	10	Oct	21-22
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Review	Super Desktop	Brelje	8	Aug	9-12
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Review 01	TCM, XModem Unveiled	Gooding	9	Sep	11-13
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Review DC01	Data Capture ///	Gooding	5	May	19-22
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Review DTM01	The Desktop Manager	Gooding	1	Jan	19-24
Review DTM02	The Desktop Manager	Gooding	2	Feb	20-24
Sort Program	An Improved Sort	Teel	1	Jan	10+
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Tutorial	256K RAM Upgrade	Gooding	7	Jul	19-21
Tutorial	Joystick ///	Gooding	8	Aug	21-22
Versions	Program Version Update	Ottalini	10	Oct	23-24
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By David Ottalini WAP /// SIG Co-Chairman

The Washington Apple Pi /// SIG's Menu.Maker program (included on all of our PD disks) can, among other things read ASCII text files and send them to the monitor for the user to read. The fact that it does it using Business Basic is no surprise. But preparing the text files to begin with, so that Menu.Maker can read them properly can create big headaches. To work properly, each line can be no longer than 77 columns and must have a <RETURN> character at the end (for a total of 78).

Since most folks typing articles, manuals, etc. DON'T care to hit the <RETURN> key after typing in each line (or keep track of how many columns are used), it becomes a real pain to edit these pieces for use on the SIG's PD disks. The answer? Trusty old Word Processing Language (WPL) and AppleWriter. WPL gives me, as the editor, a quick and easy ability to load and format an ASCII text file automatically, so that it can be displayed properly by Menu.Maker.

I am not a hacker or heavy programmer type, but was able to write this program (called PD.CON) in only a few hours (off and on over a week's time or so). It is fairly straightforward and will automatically load a file, format it properly, print it to disk, then save it back to the original file before resetting the system. The program makes use of a RAM disk for speed, but could easily be used with any Apple /// drive. It also has a rather dangerous feature, allowing the user to strip all control characters first before formatting. This is useful in some cases for me, but you may want to delete it. The end result can be rather surprising if you are not careful!

I would also suggest you try this out on a copy of your file (at least at first), to see how things turn out (again, sometimes there are surprises if the Print/Program file isn't set up quite right at first). It's also a good way to compare the "Before" and "After" results PD.CON produces.

The program itself looks like this:

```
L $a
        PPR
        P You may wish to delete the following 5 lines and STRIP at the end!
        PIN Do you wish to strip control characters first?: =$b
        PCS /$b/Y/
        PGO STRIP
        PCS /$b/y/
        PGO STRIP
START2
       PPR
        PPR Hold on now...I'm working as fast as I can!
        P This is the body of the program. It loads the file, then prints it
        P with the proper settings, as contained in the Print/Program file.
        В
        PNP
        NY
        L.RAM/FILE
        P Now, load the converted file back into memory, clean it up and save
        P it back to the proper location.
        В
        F///A
        S $a
        P Delete the FILE in RAM.
        OE.RAM/FILE
NEW
        PPR\square
        PIN Another File?: =$C
        P If you want to convert another file, hit "Y" or "y"
        P Otherwise, reload the system "startup" values and quit.
        PCS/$C//
        PGO NEW
        PCS/$C/Y/
        PGO START
        PCS/$C/y/
        PGO START1
        PPR
        NY
        OCSYS
        PDO.D1/STARTUP
        PPR
OUIT
        POT
STRIP
        PPR
        P STRIP those control characters, NOW!
        F#%##A
        PGO START2
```

The key to PD.CON is that it prints the file to disk, thus placing the proper control character at the end of each line. A special Print/Program file, called PD is automatically loaded when the program begins to provide the formating and print information. It looks like this:

```
Left Margin (LM) = 0
Paragraph Margin (PM) = 0
```

```
(RM) = 77
Right
         Margin
Top
         Margin
                   (TM) = 1
Bottom
       Margin
                   (BM) = 1
Page Number
                   (PN) = 1
Printed Lines
                   (PL) = 66
Page Interval
                   (PI) = 66
Line Interval
                   (LI) = 0
                   (SP) = 0
Single Page
Print Destination
                   (PD) = .RAM/FILE
Carriage Return
                   (CR) = 1
                   (UT) = \
Underline Token
Print Mode (LJ, FJ, CJ, RJ) = FJ
Top Line
             (TL) :
Bottom Line
           (BL) :
```

As you can see, when the file is printed, it is sent to .RAM/FILE and is full justified. The printed line is set to 77 (the control character takes up the 78th column). The Printed Lines and Page Interval designations are set the same. Top and bottom margins are set to 1. This can obviously be changed according to your own needs. Also note that with only a few changes, this WPL program will work just as easily with the Apple // version of Apple Writer.

PD.CON is one more good example of how important WPL remains for us Apple /// users. I work with /// EZ Pieces a great deal, but find AppleWriter to still be my primary word processing program, one which WPL makes particularly useful!