

# The Best of Ottalini #9

(ORIGINAL DISK NAME: THE BEST OF OTTALINI – 1994)

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**/// SIG, Washington Apple Pi**

**12022 Parklawn Drive**

**Rockville, MD. 20852**

**(301)-984-0300**

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This is the 1994 edition of WAP /// SIG Co-Chair Dave Ottalini's articles from the WAP Journal. Also includes articles from other authors and information about PD library additions. We hope you enjoy it and encourage your submission of programs to our PD library.

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Paul's News: The Latest Adventures of Co-Chair Paul Campbell

*By David Ottalini  
Apple /// SIG Co-Chairman*

*January 1994*

### **BOS3**

Having to write this so early, I will not be able to report to you on how well our sale of BOS3 went last month. I hope you got your copy! IF there are any left, it is available at the regular price of \$49.95 from the WAP office.

If you have purchased BOS3, how about letting us know how you like it? Drop me a note in the mail, hardcopy or disk, or better yet - leave a message on the TCS or on the WAP-///s Co. BBS at 301-593-0024 (it's free to use). And thank you! By supporting our efforts you will help us produce even more new software for the /// in the future.

Remember that IF we have sold out, you will still be able to get your copy of BOS3 from On Three. See the address below.

We're also interested in hearing from you about what our next project should be. During our discussions last year, the consensus seemed to be that we should look at an upgrade to Communications Manager. I'm also very interested in having a compression program like Shrinkit developed for us. Please let us know your thoughts on this!

### **HONOR ROLL II**

I did forget to mention one donor to our SDF last time - Tad Lesczcar. Thanks Tad - and everyone for supporting our efforts! We will continue to accept donations to the fund for as long as there's interest, so if you haven't been able to before, we hope you'll make that one of your New Year's Resolutions!

### **TCS**

We now have TWO areas on the TCS download area for you to use - Apple /// programs and Apple /// Information. We're already got some material in there and hope to start uploading the ///s Co. material soon - if it hasn't already happened. We'd love for you to contribute to - if you have a program or anything else you might like to contribute, we'd love to have it!

## SILENT BASIC

Our good Canadian friend, Martin Davidson, is always tinkering with Business Basic - and recently came up with this gem:

***When the Business Basic interpreter is ready to function, it announces its presence with a loud BEEP and shows a copyright line across the top of the screen. If, like some of us, you hack away in the middle of the night your loved ones may find this interrupts their sleep and may offer to trash your computer to quiet it once and for all. The following is a fairly simple fix which will end this problem and restore peace in the home:***

***With almost any Block Editor (eg Disk Window ///, DTM's Block Edit module or reasonable facsimile thereof) seek out Block 41, Byte \$1D1 of Basic 1.1's SOS.INTERP or Block 5, Byte \$1AD of Basic 1.23's. It contains \$07 (hexadecimal for 'BEEP'). Replace it with \$00 (hexadecimal for silence).***

***Thereafter, whenever you boot up a Basic interpreter, you will see the copyright line and you (but nobody else within earshot) will know that it is there.***

## PAUL CAMPBELL UPDATE

We can never go too long without getting an update from our Co-Chair Paul working away for our SARA in Detroit. Recently he relayed another of his continuing experiences with folks on the job who just can't believe a 10 year old computer has much life in her:

It's been an interesting past few weeks here in Detroit. Those of you who have been active on the BBS's may have noticed my absence. This has been due to some changes at work, and a number of changes at home as well. We have a new supervisor who likes paper, even said so himself. He also likes MS-DOS, so that makes two steps backwards for our Computer Field Support department (grin). The trusty Apple /// has been de-installed from the medical center once again because it "does not comply with our corporate standard".

Unfortunately, our supervisor's claim that the corporation is "nothing but IBM" has one thing going against it; Reality. There are several Apples scattered throughout the Detroit Medical Center which are not documented by the computer support departments. This is because few people bother to call a service technician to plug a Mac into a wall and turn it on. But the number of Apple computers are growing, and the company will be forced to acknowledge their presence eventually. One of the things that may help things along is that one of the new departments which is being opened got their new computer systems and printers delivered to the loading dock for attachment to our LAN. Every box that came in had the Apple logo on it!

Getting back to the Apple ///, this system was given one last task of performing the database updates for the computer device listings. This was because everyone realized that doing the same task using Dbase on an IBM would be too slow and cumbersome. So, the Apple was chosen to finish the job, and

completed the project 3 HOURS ahead of schedule. If that was not enough of a finale, there was a lead systems analyst in the same office as the Apple. He was using the IBM compatible which shared the same desk, and started laughing when he was told that someone was planning to purchase the ///. He laughed even harder when he was told that the Apple could easily out run his 386 in more ways than one.

Since I'm not the type to leave a response like that unanswered, I setup duplicate files on both the 386 and the Apple after he had stepped out of the office. This particular Apple was not a loaded system either, it had the base 256k memory, no clock or video interlace, and one of the slowest hard drives in existence (180ms access time). The systems analyst was invited back into the office and told that both computers were now going to perform the exact same task using identical routines and duplicate files. The ENTER keys were pressed, and both computers started working on the task. The Apple finished first. We were still waiting on the 386, so I had the Apple perform the function a second time,... then a third time,... then a fourth time while the other computer was still working on round one.

The systems analyst was no longer laughing at this point, and started making apologies after I started to play a game of Sandman on the /// while the "WAIT" message was still flashing on the 386.

The Apple /// still had to go home that day, but it certainly was not due to lack of ability.

### WOZ ON THE APPLE ///

Back in December 1983, Softalk magazine printed some comments made by Steve Wozniak (one of the founders of Apple Computer) on Cupertino's closed-machine policy as it applied to the Apple /// (comments made originally on CompuServe):

***One of the downfalls was that we were too smart. We knew the proper ways to do all sorts of things and we didn't allow hackers to do things their own random ways. I feel we were wrong to believe in our 'religion.' Users should only use a good product (like SOS) if it's better for their application, not because the company feels only one way is right. It's a good lesson to learn.***

### TROUBLESHOOTING

No matter how hard you try (or in some cases, how little!) your SARA is going to get sick at some point. What to do? First off, be sure you have a set of our repair disks from the PD library - they have some great tips and programs that can help you diagnose many problems you may be happening.

There may also be some initial symptoms that, if you know what they are, can help point you in the right direction. IF you don't feel comfortable doing some of the suggested actions below, let us know and we'll try to help. I have access to many replacement chips.

**SYMPTOM:** Black screen on Monitor, drive does not boot.

**ACTION:** Replace RAM chips b10-b17 one at a time; replace non-RAM chips at locations d2 and e2.

**SYMPTOM:** Monitor screen contains garbage, drive may try to boot.

**ACTION:** Replace RAM chips b2-b9 one at a time, replace the non-RAM chips at locations d2 and e2.

**SYMPTOM:** Confidence program loads into memory, displays menu, but will not run.

**ACTION:** Replace non-RAM chips at locations d2 and e2, replace RAM chips b2-b17 one at a time.

**SYMPTOM:** Memory test runs, displays ram error message at the bottom of the screen.

**ACTION:** Replace failed RAM chip.

**SYMPTOM:** Memory test runs, sections of the memory map are missing.

**ACTION:** Determine which section of the memory board contains the failed RAM. Replace chips one at a time in that section, replace non-RAM chips at location d2 and e2.

**SYMPTOM:** Trouble with your Serial Port

**ACTION:** Replace the 1488, 1489 and 6551 chips on your motherboard.

#### WORD JUGGLER TIP

Here's a tip you Word Juggler users may find useful - from ///er Barry Downes:

*What's an easy way to look through a long Word Juggler document for all occasions of a given word, etc.? Rather than using the Find command (numeric keypad-1) and having to retype what you are looking for each time, use the Change command (numeric keypad-3) and when the "SEARCH FOR" instruction is shown on the bottom of the screen enter what you are trying to find, now when you hit RETURN and are asked for "REPLACE WITH" just retype the same information. Now you can go through the document easily hitting a return each time to see all occasions of the word.*

#### FINALLY

Apple's announcement in mid-November that it had finally discontinued the Apple // production line brings the Apple // family to an "official" close. We mourn its passing - yet we SARAsaurs know what our friends on this side of the Apple family are going through. We hope the efforts made by the ///ers of

the world can serve as a small example of what can be done to continue the usefulness of a machine long beyond its "official" death.

As I have said many, many times in the past - a computer remains useful so long as it has something useful to do. The // family - //+, //e, //c, //gs and our beloved /// - still has many, many years of life left if we are creative enough to use them in the proper perspective. In a lot of ways, our Apples are more than just machines. They represent a part of us that has learned to work and play in so many more ways because they provided the tools to show us the way.

I hope the //ers will look on this final event as a challenge, just as the ///ers have over these many years. Get the most out of your machines, your Apple computers - let them continue to work for you, to be even more productive and to have more fun. Keep the religion - Apple // and /// forever!

### **APPLE /// RESOURCES**

Bob Consorti  
xxxxxx.  
Brookline, MA. 02148  
(617) xxx-xxxx

On Three c/o Joe Consorti  
1174 Hickory Ave.  
Tehachapi, CA. 93561  
(805)-822-8580

Sun Remarketing  
(800) 821-3221

The Lisa Shop  
(916) 668-5637

Tom Linders  
(408) 741-1001

Apple User Group Connection  
(800) 538-9696, ext. 500

Apple User Assistance  
(800) 767-2775



*By David Ottalini  
Apple /// SIG Co-Chairman*

*February 1994*

### **THE GARAGE SALE**

... was GREAT! Especially since it was the official roll-out of BOS3, 'Bob's Operating System', for our SARA. On Three's Bob Consorti (who actually did the programming) took the long drive down to Washington to be part of the festivities. Paul and Anita Campbell and their kids also made the trek from Detroit. OK, so we didn't pop any champagne. But it was with a feeling of victory that we all watched over Dave Jernigan as he had the honor of being the first SIG member to "officially" load BOS into his /// -It was even recorded for posterity on video tape! We sold six copies of BOS3 during the day, while preparing the other 24 copies for sale. Thanks to WAP Office Manager Beth Medlin for all her assistance with this project!

Afterwards SIG members got Bob so filled with pizza he didn't eat again until lunch the next day! Yup-it was heaven for us SARAsaurs-the culmination of more than a year's worth of work. But I'd like to look on this as the beginning and not the end. We still have a lot of things to do, projects to accomplish. Many of you, through your continued interest and financial support, will make that possible (and yes, we're still taking donations to the SDF!)

As previously mentioned, once our 30 copies of BOS3 are sold, we'll move on to develop a new version of Communications Manager. I had a long talk with Bob about that and he's already started to think about it. We need your input on what you'd like to see. Right now, though, we're talking about a complete rewrite that will provide Zmodem capabilities, page scrolling, off-line text editing, VT 100 emulation (& possibly others),the ability to use higher speed modems and a much more friendly user interface. Some macro capability would also be nice. Now is the time to make your feelings known, as we'll discuss this at the SIG meeting next month (March 12th at 10am). Hopefully, by that time, we'll have all the BOS3 disks sold and can make a commitment to go forward with the new project.

### **PAUL'S TURN**

It didn't take Co-Chair Paul Campbell long after returning to Detroit to make his own comments about the Garage Sale, as he related on the TCS:

Well it was an interesting trip this time. I bring stuff to the garage sale and end up leaving with two MORE computers. Had lots of fun anyway, it was great seeing every one and meeting Bob face to face for the first time. One disappointment was the lack of a scheduled or organized demonstration time for BOS, we need to think of some way to get the word spread that does not cost big \$\$\$\$.

The BOS installation of serial number WAP02 went smoothly and its operation has been flawless. I never

did find out why my copy of Access /// did not load under BOS, it may have been a bad Access /// interp file. I got around it by using the invokable Interp module which is several times faster anyway, which means that those who use their Apple IIIs to access IBM Mainframe applications which require DEC VT-100 emulation with IBM function keys are all set to fly under BOS.

### **BOB 'DARS' TO DO IT AGAIN**

Bob Consorti is one driven man. Not only did he continue to work on improvements to BOS3 right up to the point of leaving for DC from Massachusetts, he also had time to write an entirely new program! Called "DAR" for Disk Archival and Retrieval, it essentially creates a 'disk mirror' binary II single-file image of a 5.25" disk side. The purpose is to make it very much easier to upload and download numbers of files on the TCS, CompuServe, even computer to computer.

DAR is a first for Bob - shareware. He's asking for a \$20.00 fee in return for using the program. We've already placed it into the WAP /// SIG PD and also on the ///s Company, WAP BBS as well as CompuServe. Dr. Al Bloom has also uploaded it to the Apple /// Internet address. Our PD version comes complete with a manual-on-disk (put together by yours truly) and the self-booting program. Be sure to see the DAR review from Dr. Al Bloom in the Journal. In the meantime, I couldn't resist giving you a taste:

*I am properly impressed with DAR as is. It is dead solid perfect for distributing, my old freeware that invariably came on a Pascal boot disk (mostly two-stage, even) with all kinds of files. Without DAR, there'd be no way to put my toys on a BBS or an ftp site. With it, and with a hexification scheme, the job can be done easily. Thanks for DAR, Bob.*

It's great to have Dr. Bloom back in print. His reviews, articles and other Apple /// offerings (they are all in our PD) provide users with a wealth of information unmatched elsewhere.

### **THE APPLE /// AND THE INTERNET**

It had to happen-and now it has! The Apple /// is part of the Internet -courtesy of long-time/// user Jeff Fritz at West Virginia University (now we just need to get him to become a member of WAP). Thanks to Dave Jernigan, Bob Consorti, Paul Campbell and I have been officially added to the "Apple///Discussion Group.' His Internet address is

**xxxxxx@WVNVM.BITNET**

While the group is located at

**LISTSERV@WVNVM.WVNET.EDU**

The latest problem? What type of cable do you need to hookup a /// and a Mac to transfer files. One respondent put it this way:

***A standard cable is fine, but you'll want to use a modem eliminator (or get a cable that does that for you)-they're pretty easy to find, and some folks might just let you borrow one if you're just going to do a one-time-only hookup. Be sure to up your baud rate in Access ///and your Mactelcom program-no sense in doing this at 2400 baud!***

We are thrilled to be able to have another source to spread the news about the Apple /// and WAP. Watch for more news about the /// SIG and Internet in the months to come.

### **///s COMPANY-WAP**

By the time you read this, we hope to have had our 20 MB hard disk up and running for more than a month! As you may remember, Ed donated the drive for use with ///s Company when he transferred it to WAP. But software problems prevented us from getting it to operate properly. Sooooo.. we're running the BBS off a 5MB Profile for a few months until we could find a solution.

It came, once again, in the form of Bob Consorti. He took the drive home with him to Harvard along with the offending software. Two days later, he had it all figured out and had rewritten the software to take care of the problem. With that figured out, we now have the ability to offer you all of the original ///s Company files along with a number of WAP files too. Thanks to the donation of another 20MB drive by Frank Freeman at Sleepy Hollow Corporation, we look forward to bringing another 20 MBs into operation for use with the BBS (actually, Sara can only see disks up to 16 MBs in size, so this one would also have to be partitioned). A little reworking of the software will also be required to make this happen.

Next month, I hope to offer you a separate article on ///s Company - what it offers and how to use it. It really is a great resource that you should try to take advantage of if you have a modem (and shame on you if you don't!). The number again is (301) 593-0024, and it's free access save for your phone line costs. One advantage Company users have they get access to my Trail articles more than a month ahead of publication in the Journal!

### **WEST COAST REPAIRS**

Sarasaur Frank Thompson reports a good place on the West Coast to get Apple ///s, parts and services:

**The ARC (Apple Resource Center)  
1014 Central Ave.  
Tracy, CA. 95376**

**(209)-832-4300: Info/Support  
(209)-832-3270: Fax  
(800)-753-0114: Order Line**

Frank says they are ***'friendly and helpful as well as being reasonable with their prices. They have a good stock of older Apple parts and supplies along with books and manuals.'***

## APPLE /// RESOURCES

Apple Technical Support  
(800) 767-2775

Bob Consorti  
xxxxxx  
Brookline, MA 02148  
(617) xxx-xxxx

On Three c/o Joe Consorti  
1174 Hickory Ave.  
Tehachapi, CA 93561  
(805) 822-85801

Sun Remarketing  
(800) 821-3221

The Lisa Shop  
(916) 668-5637  
PO Box 969  
Woodland, CA 95695

Tom Linders  
(408) xxx-xxxx  
xxxxxxxxxx  
Saratoga, CA 95070

Allan M Bloom, PhD CDP  
xxxxxxxxxx  
Blacksburg, VA 24060  
Internet: xxxxxx@vTvmI.CC.VT.EDU

*By David Ottalini  
Apple /// SIG Co-Chairman*

*April 1994*

### SIG MEETING

Our quarterly SIG meeting was held the second Saturday of March with the Jernigans, Truax's, Seth Mize and yours truly in attendance. We talked a bit about our next project - a new communications program and logged into ///s Company WAP to see what was available. It was, as always, great to see everyone and talk about our Sara. Our next meeting will be held in conjunction with the Semi-Annual Garage Sale this summer.

### ZOOMING ALONG

I finally bit the bullet and purchased a high-speed modem for my ///. It was, actually, an experiment of sorts, since I was unsure whether I could get one that offers up to 14,400 baud and fax capabilities to work with my Sara. The /// can handle up to 19,200 baud but current software restricts things to 9600 Baud. It also has no fax capability at the present time. But with the impending upgrade to Communications Manager, I was being rather forward looking, no?

Needless to say, I had to do some reconfiguration. I loaded my SOS.Driver file using the System Configuration Program, got into the RS232 Driver and changed its configuration upwards to handle 9600 baud:

```
0E 22 00 00 00 00 13 11 DF 84 00 00
```

It's the first Hex number - 0E that tells the /// I'm going to use up to 9600 baud. That changed from 0A which means 2400 baud. Technically, you can always set your RS232 driver to the highest baud rating, since that's really the speed at which your /// talks with your modem. It's up to the modem to decide what speed it should talk with the other modem. (See Paul Campbell's note below, however for one reason you may not want to do this).

The next step was to look at the Zoom modem and its configuration. At only about \$150.00 from the Price Club, it is one heck of a full-featured modem that can do just about anything you could ever want. In making my purchase, by the way, I bought the version for the PC world - mainly because external modems made for PCs still have our 25 pin standard connector. Mac modems use those smaller DIN-style plugs and I didn't want to have to fool around with a different cable. Unfortunately, the package includes a male to female cable - but a quick trip to Staples for a gender changer took care of that.

Needless to say, I went through a lot of jiggering before I finally hit on a configuration that will work for the present. I use Communications Manager mostly these days, so that was the program I did most of

the "jiggering" with. I used the WAP TCS and CompuServe as my test-beds.

In Communications Manager, I reset the baud rate to 9600 and basically left everything else alone - the "default" settings.

As for the Zoom modem, its instruction manual is fairly straightforward but somewhat on the technical side. Anyone who had never used a modem before would run into trouble. I've had experience with frustration before, so this was no problem!

Even though the manual was written for a PC user, there were some helpful tips that I was able to glean from the text that were applicable for a SARAsaur like me. The Zoom modem uses what is called "auto negotiation" to arrange what it considers to be "the highest performance connection mode between itself and the other modem." What I discovered was that Communications Manager doesn't like that very much and went into the terminal crazies when the Zoom modem and the TCS modem started to talk. So, I followed the instructions in the manual to turn off auto-negotiation.

The second thing I had to do was basically hardcode into the modem that it should always connect at 9600 baud and no protocol. These settings were saved into my setup parameters and everything, for the most part, has been just fine. I still find a few letters are dropped here or there, but the higher speed - especially for uploading to the TCS is very much appreciated. It will be fun to use the modem to a much fuller extent once we have a more full-featured communications program in-hand.

#### PAUL'S COMMENTS

While I was having some problems getting the Zoom modem going, I posted the problem to the TCS and got this response from our Co-Chair Paul Campbell:

***You would be better off dialing in at 4800 instead of 9600 for now to avoid errors. Our SARA will handle 19200 bps, but the current version of Communications Manager will not allow for "clean" data transfers at 9600. This will be resolved with the next version of Communications Manager.***

#### A DAR-LING SUGGESTION

While we're talking about Paul, he also made an excellent suggestion about the protocol for naming disk sides that have been archived by On Three's DAR (Disk Archival and Retrieval) shareware program:

***There is a standard file naming protocol for special files that have been compressed or packaged on all types of computer platforms. It would make life a lot simpler for us if we adopted a similar method for DAR. I propose that we add the suffix ".DAR" to the Apple /// filenames which require de-archiving. An example would be "A3FONTS.DAR" or "GRAPHICS24.DAR". Not only would this common naming convention make the DAR'ed files stand out, it would also provide publicity for the program (by throwing its name everywhere)***

***and make people realize that they really need to have DAR.***

I had also asked about how to use DAR with a RAM disk - since it needs to see a "full" disk side of 140k. I was using Daryl Anderson's RAM disk for the Titan ///+// card - but one that was auto-formatting and thus, was NOT a full 140k. Sooooo, I switched out the .RAM drive to the "Full 140K" RAM disk and low and behold, DAR was able to see it. IF you have the Titan cards (either the ///+// or //e) and have not gotten 3UTL-18 - RAM+/// you are missing out on a great utility for your Sara. By the way - Bob Consorti says he will update his .RAM driver included with the 512K upgrade so it can work with DAR as well.

## COMPANY NEWS

The big news from the Company board this month is that we have started (what will be a) long-term project to upload the BBS files onto the TCS. In so doing, we'll be following the Company's library file index so that we can make the transfers in some sort of order. Files from ///s Company are being placed into a RAM file (Daryl Anderson's ///+//e 140K RAM Driver). Then, using DAR, I can convert these into one file that is then saved and uploaded onto the TCS as time permits.

Unfortunately, not a whole lot of files fit into 140K (one 5.25" disk side) so this will take a while. In any case, if you haven't gotten DAR yet and are interested in some of these files, I urge you to get the program from ///s Company, the TCS or our PD library, pay the shareware fee, and use it to help get into some of these great files. Right now we're working on disassemblies of various 6502 codefiles - including drivers - and will move into basic invokable modules and other miscellaneous disassemblies.

Now on the Company - All the WAP TCS help files, along with an encoded DAR file of a number of BOS Screen Blankers. Log onto ///s Co. - WAP (301) 593-0024 - to see what all we have to offer you!

## HARD DISKS

A recent article by Phillip Robinson in the Washington Post discussed what size hard disks today's users of PCs and Macs should consider when buying their machine. Here's the comparison as related in the article - but with our Apple /// thrown in for a little comparison:

DOS or MAC working only with word processing :	80-120 Megabytes
Windows and working only with word processing:	120 Megabytes
Windows working with a variety of programs:	200 Megabytes
Mac or PC with sound and/or color images:	200-340 Megabytes
Mac or PC with a large data base:	340 Megabytes
Mac or PC with a CAD program:	400 Megabytes
Mac or PC with video:	500 Megabytes

OK - are you ready for this?

Apple /// working with BOS3 and a variety of word processing, graphics, spreadsheet and data base programs: 5-10 Megabytes!

OK, so our Sara doesn't have a GUI or do CAD, video or stereo sound and multilayer color images. What she CAN do is a lot of work elegantly with software that doesn't take up megabytes of memory just to get started. A classic computing machine dressed in a very plain wrapper if you will – but what a performer under the hood - from the days when programmers knew how to get the most out of 128 or 256k of memory - and a 5 MB Profile!

### BOS3 PROBLEMS?

Our good friend Martin Davidson from Ontario, Canada is a new BOS3 user who has run into a few problems. He discussed them on ///s Company-WAP recently - basically saying he keeps getting stack overflow error messages on a 256K /// when trying to use System Utilities from BOS.

After I posted the question on the TCS, Paul Campbell decided to take a stab at a solution:

- Reduce the amount of disk caching.
- Make sure that you don't have any extra graphics space allocated under Pascal.
- The SOS.DRIVER file is suspicious... may be too big.
  - B. Drivers that you might need later, make inactive.
  - C. Correctly set the number of floppy drives.
  - D. Make sure that the Desktop Manager driver (if you have it) was removed via the DTM Install program before modifying the SOS.DRIVER file for BOS, and that the driver was also re-installed using the DTM Install program.
- If you are using a RAM-resident RAM disk, remove it (not very likely on 256k system!)

### THE TCS GETS RELIGION...

I've begun uploading files from the ///s Company-WAP BBS to our TCS file upload area. These will all be DAREd files to make it as easy for you as possible to download and use. There are already a lot of great programs and information files available for you - including a compilation of all the TCS help files you would have to download separately otherwise.

One of the most exciting uploads for our Co-Chair came courtesy of Frank Moore - who once ran Pair Software and the /// Newsletter and Magazine. Among all the materials we received from Frank's donations was a complete New Testament on disk (actually a number of disks!). When I asked if anyone was interested, Paul immediately raised his hand and the transfers got underway. Paul messaged recently on the TCS that:

***There is one specific reason why at least 3 people I know personally have given up their SARA for an IBM: Bible software. That is why I was so excited about getting the whole New Testament for the Apple ///. Maybe someone can use AppleWriter's WPL, or even Basic, to***



*create a simple Bible search program. A lot of ///'s get donated to churches, who would be willing customers for such software.*

*I've begun transferring the entire Old Testament to my SARA in hopes that someone would be able to come up with something. The King James Version is available as public domain from several sources, so I have been transferring about 1 or 2 books per evening to the Apple /// from my IBM. Yes, I have a switch box linking the two serial ports together, and my SARA can send stuff to the IBM as easily as printing (I switch the connection off when not in use, so that my Apple doesn't catch any cooties from MS-DOS). Do you know what's strange? It takes the IBM about 1 hour to transfer a complete book. Then to convert the ASCII file to a word processing document in EZP takes less than 30 seconds. Hmmm. And the holdup is not the actual transmission speed, it's the output rate from the other system that slows things down so much.*

#### APPLE /// RESOURCES

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Tehachapi, CA. 93561  
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The Lisa Shop  
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Tom Linders  
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Apple Catalog  
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Apple User Group Connection  
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Apple User Assistance  
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By David Ottalini  
Apple /// SIG Co-Chairman

May 1994

### ///ERS FROM THE PAST

The one interesting thing about being online on CompuServe and on the Internet these days is that we are hearing from more and more folks with ///s - or who were once active in the /// community and who (while perhaps still owning a ///) have moved on to other things (and yes - I pitch WAP every chance I can!)

One of those individuals is David Thomas Craig - who has contributed a number of excellent PD disks to our library (see disks 3PCL-13,14 and 15). He now lives in New Mexico, and contacted me on CompuServe. Among a number of SARA-related items David has are source code listings for things like the Apple // Emulation mode and many more. But his answer to a question I had about Apple's archives of /// material surprised me:

***I doubt if Apple has much /// source code in its archives. I talked with one Apple employee (he was around before Apple became a company). He said Apple's software archive really began with the Macintosh in 1984 and as such contains very little pre-1984 software. I also recall hearing that Sun Remarketing was looking for the SOS source around the 1988-1990 period and could not find a copy at Apple (I don't know if this true).***

And why wouldn't Apple have kept such an archive? If true - it would be a real tragedy for the entire Apple // and /// family. David answered this way:

***It has been my experience that companies are not good archivists of software sources since once a piece of software has no operating value to the company, the sources for that software just take up space.***

We hope to work with Dave to develop a complete set of source listings for the Apple /// that can be held as an archive at WAP. He also has a large set of LISA documentation, which we may also be able to get copies of. Stay tuned!

### DETROIT DOINGS

We missed Paul (and Anita and family) at the last /// SIG Meeting - But we are always happy to see his postings on the /// SIG Board on the TCS. As usual, there's a great story to tell about our SARA besting

Messy-DOS:

Well it's been an interesting week with almost no time for computing. My third IBM has decided to not fail so I hooked it up to my /// so they can share files. It's funny, after playing around with the direct connection for the first weeks, the IBM now sits idle most of the time (as usual). I don't have the patience to work in slow motion, while SARA rips through the same workload without asking any questions.

I was also frustrated by WordPerfect to the point of just transferring the file to the Apple as soon as possible. I had worked through my entire lunch hour writing a three page letter, brought it home and jumped into WordPerfect. WP 5.1 would not load the file. Matter of fact, it would not let me print or even look at the file, and I had to have it ready for the next morning! It was a minor oversight on my part: WP 6.0 at work, and WP 5.1 at home. I had to drive thirty miles (back to work to change the format). When I got home I just had DOS output the file to the Communications Manager so I could grab it in /// EZ Pieces. That's where I should have done it in the first place! By the way, WP 6.0 is unusable in the graphics mode unless you have a good 486 or better. I gave up on the spell checker after waiting 10 minutes for the checking of the first PARAGRAPH. I assumed that a 20 MHz 386 could do better than that, but I guess not...

#### **PAUL II: MORE IRONY**

They have the best computers in the entire corporation, plus an IBM 9000 mainframe, file servers and super servers, LANs, WANs, and standalone applications. "They" are the administrators and database programmers for the Detroit Medical Center. They are working on a new database and discussing database report output. They hold in their hands the standard, the goal of their output, the example of how they felt it should be done. They hold in their hands a final report that was being examined because it looked much better than their own. They hold in their hands the creation of an Apple ///.

#### **PD LIBRARY ON THE MOVE**

I've been working the past few months on a project to reorganize our PD library (that scream you just heard in the background was our own John Ruffatto - who has to do the actual, physical reorganization) (But it's not too bad - just 250 disks!).

My main goal here was to turn it into something that was easier for you to use and find disks you're interested in. Better organization also makes it easier as we develop new disks, since we have more categories that better describe what we have to offer. Please see our separate article about these changes and when they may take effect.

#### **WORD JUGGLER PATHNAME PROBLEMS**

A new Apple /// SIG Member, Gracie Clifford, has been using her faithful SARA for a very long time with basically one program - Word Juggler. But recently a new copy I gave her had a problem - it had a default pathname of /Profile.2 while her system couldn't recognize because there was no Profile to

begin with. What to do if you are only using a floppy-based system?

I am NOT a Word Juggler user. But, after rooting around in an old manual, I discovered how to change the default pathname and decided you might like to know too (if you are a Word Juggler user).

When you boot into Word Juggler, you are taken to the Edit Configuration Menu. One of the choices tells you the default pathname and asks if you'd like another. If you change it, though, that new pathname does NOT become permanent, but rather is good only so long as WJ is an active program.

The only way to change the default pathname (for some unknown reason) is to use a program on the WJ boot disk called "Make.Params." It is a Basic program! To use it, you will have to boot Business Basic and at the ")" prompt, type in

**Run .D1/Make.Params**

and hit RETURN. The program will load and in a few seconds you'll see:

Word Juggler Parameter File Editor

Now remove the disk and insert your WJ Boot/Program Disk. Note that the Editor program gives you 3 choices. Choose #3 "Set Default Pathname" and press RETURN. The disk will whirl a tad and about 2/3rds down you should see:

Current Default Setting is "/Profile2."

At the bottom, you'll see the question: "New Default Prefix?" Type in either ".D1" (for the WJ boot disk) or (say) ".D2" IF you want WJ to look there for your WJ files. Press the RETURN key. Your WJ Disk will whirl a tad and the screen will note (at the bottom) "System Busy" and then stop.

Whew! You're done. You can now either press "0" to end completely or simply press the CONTROL and RESET keys at the same time to boot into Word Juggler. It will now look to .D1 or .D2 as your default and you won't have to go to the setup menu to change the pathname.

### **BOS3 PROBLEMS TAKE TWO**

Our Canadian ///er Martin Davidson noted with interest Paul Cambell's suggestions for making BOS work better with his system. Martin had these additional comments:

*I think Paul has correctly identified the sources of my memory problems (see below the readout I get from BOS utilities when I check memory allocation):*

<b>Bank \$06</b>	<b>Reserved for The Desktop Manager</b>
<b>Bank \$05</b>	<b>Reserved for the BOS Program Switcher</b>
<b>Bank \$04</b>	<b>28K for drivers 1K for cache 3K free</b>
<b>Bank \$03</b>	<b>32K free</b>
<b>Bank \$02</b>	<b>32K free</b>

Bank \$01        32K free  
Bank \$00        32K free

*The big memory consumers are of course DTM and BOS themselves, and the drivers. These last could indeed be controlled if I deactivate a few until I need them, but I'm too idle to go back in to reactivate them at need, and that seems an inelegant response in any case. BOS shares with Selector a regrettable inability to load drivers dynamically like Catalyst, as well as requiring more memory for itself than Catalyst does.*

*In its favor, BOS does NOT obstruct the operation of DTM macros. Any DTM macros I try to use to pass through the Catalyst menu fail completely to load and move on to the next interpreter, and I cannot use any DTM applications AT the Catalyst menu itself. BOS lets me cut something from one application and paste it in another all using the one macro, as well as invoke DTM at the BOS main menu.*

*I compromise by booting BOS from one side of my boot disk and Catalyst from the other. Most applications can operate reasonably within 4 banks; even many Pascal ones, if I stick to RTPascal. It's just that with Catalyst I have only two programs I can't run for lack of memory (Lazarus /// and Keystroke DB), while with BOS there are a good many more. But 3E2P, AWR and Advanced Visicalc, my most commonly used software, gives no trouble. If I had 512K (which I otherwise don't need) this discussion wouldn't even be occurring.*

#### STEMSPELLER and BOS

/// SIGer Steve Truax has been having some problems with BOS and the old Australian program called Stemspeller of late:

**Now that I've taken BOS home and installed it, I have a problem. It has worked well with every program except Stemspeller. When I load Stemspeller, it seems to work fine. But it won't read any files from my old Corvus drive, where all my files that need checking live. I get a message that says "error reading file" or something (sorry - I didn't write the message down) and then it looks like it's proceeding anyway but terminates. The system doesn't hang or crash, but it refuses to read my files and Stemspeller can't seem to recover from the error. It all works fine under Selector ///. Any suggestions? Should I call Stemsoft's technical support number? (A little orphan humor there). I haven't had time to explore this, so I can't tell you any more right now. I hope one of you might have an insight into this. I do have a 256K machine with a very large driver file - could I be running out of memory?**

I put the question to /// SIGer Bob Consorti - who wrote BOS3 and here's his reply:

***I'm not sure about the StemSpeller problem. I just tried it out on my system and it worked fine. I would suggest reinstalling StemSpeller and the associated files and run a DDF3 check***

*on the hard disk. If that doesn't fix it, try running StemSpeller from bank 0 (put a "0" before the program name).*

*If it works from there the Apple /// has a memory problem that wasn't showing up because the program was in a different bank of memory under Selector. I would also try changing the order of the Corvus driver to see if it would work better there. I have a feeling it's a data corruption problem on the hard disk or a memory failure.*

#### **A FEW TIDBITS FROM BOB CONSORTI**

As designed, the Apple /// can handle up to 4MB of memory on board (but building a new RAM card to handle 4 MBs is not feasible financially and even if it were - programs would have to be rewritten to handle the extra memory.)

Our Sara works with the new Seagate 1.2 GIGABYTE hard disk! Bob says if anyone wants one, he would need to write a partition management utility since the drive would have to be split up into 66 16 megabyte partitions!

#### **APPLE /// RESOURCES/REPAIRS**

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By David Ottalini  
Apple /// SIG Co-Chairman

July 1994

**WOW!**

The Apple /// Community continues to amaze me - even after all these years of working away with our beloved SARA. The latest WOW! came from a ///er named Kevin Lund - who literally appeared out of nowhere on the Apple /// discussion group at West Virginia University. Kevin has written an Apple ][+ emulation in software to run on a Macintosh. Here's the message he sent after some members were daydreaming about ... well, let's let Kevin tell us what he wants to work on next:

*I'm the (principal) author of Stop the Madness, the foolishly named Apple ][+ emulator that was mentioned recently. From the start, I had it targeted for a metamorphosis into an Apple /// emulator. To this end, all of the I/O stuff is in external code resources which are loaded at run-time (in the current beta version, I just rolled the code resources into the application to avoid confusion). Currently, the modules handle the disk II card, the language card, the keyboard, and the paddles; (next) I'll pull out the video and CPU code as well. So, what I'm trying to say is that all that's needed to make it into an Apple /// is some new I/O modules to handle the /// stuff, plus whatever was done to handle the banked memory (I have a ///+, but no technical manuals. Which is why I still have only a ][+ emulator...). Oh yeah, and a little code to handle the new video modes. It could all probably be done in a week or two...ah, to have a week or two. Kevin Lund (xxxxxx@cassandra.ucr.edu)*

As you might imagine, the response was rather excited, with many ///ers (including yours truly) offering to provide whatever information Kevin needed. He later communicated to me that:

*From what I understand, the real fundamental difference between the ][][+ and the /// is the banked memory. So I'd be interested to know how it works; that way, I can make sure that the main body of the emulator can offer that sort of service to external modules. Any other major deviations from the basic architecture are important, too (e.g., does the /// do all of its memory-mapped I/O in page \$C0?). I've been planning to clean up the external module interface and release the specs; that way, as long as the emulator core has the flexibility it needs, I can stick other people with the work of doing the modules themselves...*

I think I'd die happy if I could see the running horses demo on my mac...

Kevin also says:

***It'd work on just about any Mac; in its current incarnation (as a ][+ emulator) it runs on anything with system 7 and 256 color display. My girlfriends brother said, "now, an Apple ][ emulator, that might actually be useful. But an Apple /// emulator, now that'd be art for art's sake...***

Kevin has been given Bob Consorti's e-mail and regular address and phone number - Bob is our best source of knowledge for anything SOS related with the /// at this point. I'm also trying to find out if this program would be Freeware, Shareware or ??, and will pass that along as I find out more information.

### **WOW2!**

On another front, I am happy to report that we have begun the process to begin work on our next Software Development Project. As discussed before here along the Trail, we are going to contract with Bob Consorti (once again), this time to develop an entirely new version of The Communications Manager. While I cannot tell you about all the features it will have right now, we hope to model it after the Shareware Mac program called ZTerm, which offers an easy to use interface able to handle 14,400 baud, ZModem, internal Macros, page scrolling and more. We will also ask for a number of terminal emulations (like VT 100 and 220). In previous discussions, Bob also indicated it would not be difficult for him to add a BBS capability, something I would love to have to replace Infonet.

As with BOS, this project will cost our Software Development Fund \$1500. Bob has agreed to take \$1000.00 up front to get started as we raise funds for the rest. The way we will have to do this is through pre-sales of the program. We are doing this because, honestly, we have not sold out all our copies of BOS. As you may remember, we raised enough funds to purchase 30 copies of BOS from Bob. By selling them all, we would replenish the SDF so that we could then go on to the next project. Unfortunately, we have not sold a dozen copies of the program yet. While support from our WAP ///ers has been strong, our friends at ATUNC in California, for example (who contributed \$500 to get things started) never purchased one copy.

We are still selling BOS and hope to sell them all (again, if you do NOT have yours yet, you are missing out on a truly wonderful program). But in the meantime, we are going to sell pre-orders for the new TCM. Price will be \$45.00 for all, with a \$5.00 Postage and Handling fee if delivered by mail. The program will cost \$50.00 when it is released (plus P&H).

AS for a timetable, here's what Bob told me on CompuServe:

***My schedule is going to be pretty busy this year as I'm doing a rotation in the summer, teaching a class in the fall and preparing for my oral examination but as long as you're willing to give me until say December I should be able to get everything done.***

Bob went on to say that, knowing him, he would add even more features to the ones we request. I'm asking our Co-Chair Paul Campbell to coordinate with Bob about what goes into the new TCM. But feel free to call or message either one of us (or communicate with Bob directly) if there are some features

you'd like to see included.

As with BOS, though, this program promises to give our SARA added life and capabilities. If you can be a little patient and willing to invest \$50.00 one more time, please send in a check to the WAP office and note it's for a pre-order for the new Communications Manager. As always, thank you again for supporting the /// Community!

### THE ELECTION

Well what can I say here but thank you to all who again supported me with your votes to serve as a member of the WAP Board of Directors. It was close, but I maintained my record of never having won an election to serve as a Director (I did serve as Secretary once - but ran without competition). Given these events, I will no longer allow my name to be placed in nomination to run for the BOD and will not nominate myself. I feel I can best serve the club at this point by concentrating on the /// SIG, as I have for all these many years.

### CRASH BUT NO BURN

My 10 MB Profile finally bit the dust in late May - much sooner than I expected (though the 10MB Profiles do not have as good a service record as the 5s do). Luckily, I had heeded my own advice (given to you many, many times) to do a backup often. The backup I had was still not as late as I would have liked (it was about a month old) but it was close enough. I pulled out my old backup 5MB Profile and reinstalled everything.

That brought up an excuse here, though to take you through the steps of what I had to do. Not difficult, but something you should keep in mind should something similar happen to you:

- 1) Make up a System Utilities disk containing the proper drivers for your system.
- 2) Boot your system with the backup hard disk and format it.
- 3) Makeup a copy of your GoBack /// (or Backup ///) disk with the proper drives for your system.
- 4) Boot up GoBack and reinstall your system onto the backup hard disk.

My system includes an 800K Unidisk, which I used for making backups. It certainly makes it easier. A better solution would be a SuperDrive, since it can hold even more data (1.4 MB).

I was NOT able to reinstall everything because I was going from a 10MB to a 5MB hard disk. BUT with GoBack, its' easy to cull out all the things you really don't need on the hard disk, and if you do get your original hard disk repaired, you still have the backups on the (in my case) 800K disks and can reinstall everything if need be.

By the way, GoBack has a special feature that makes the most out of your hard disk when it's got a "clean slate" to restore to. You can also take advantage of a special feature in BOS that enhances disk caching with hard disks restored from scratch.

## APPLE /// RESOURCES

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*By David Ottalini  
Apple /// SIG Co-Chairman*

*September 1994*

### **A VISITOR ...**

You may remember I've talked about our friend Koji Anoura from Japan. Well - he paid us a visit in late July! Just one stop on a lengthy cross-country trip that started in Los Angeles and ended up at the MacWorld Convention in Boston.

Koji is an avid Apple user - and /// supporter. He's also an author who contributes to an Apple magazine in Japan. And while it is unlike any Apple (or other computer) magazine I've ever seen before, he has given WAP and the /// SIG, as well as On Three lots of space in his articles.

His primary reason for coming to the United States was to visit all the Apple places he's been reading about - and write articles about them. He stopped at Sun Remarketing, for example and talked with Bob Cook. He visited Alltech Electronics and attended KansasFest. He also visited the Big Red Computer Club (which was going out of business even as he visited...)

While here, I took Koji to the WAP office and to give him a ton of Apple /// software - as well as the complete Apple //, //e, ///, GS and MAC catalogs on disk. We had a great time talking about Apple and our SARA. And of course, he took videos and lots of pictures. We even did a session in my computer room at home! From Washington, Koji went on up to New York, visited Bob Consorti in Massachusetts and then finished things out at MacWorld.

Once again, I was hit by how many nice people our SARA has introduced me to from around the world! Koji has promised to send me his articles – and some pictures. However, the articles WILL be in Japanese (imagine that - a Japanese author writing articles in Japanese!). SO Anyone out there know Japanese? I already have some articles on disk from him, as well as the magazine he sent. It would be fun to get them translated and then republished in the Journal.

### **NEW COM MANAGER UPDATE**

We have sent, and Bob has now received the first payment toward development of our new Communications Manager. IF you have not pre-ordered please help us by doing so now, so that we can be sure to see this project through to completion. We are continuing to sell our copies of BOS3, I am happy to say, and that is helping too, but your support is greatly appreciated. Note that we have a special deal on - buy BOS and the new TCM together and save! Call the WAP office for details.

## INTERNET QUESTIONS

New ///ers abound on the Internet... and they all have questions. Here are a few of interest.

///er Kevin Burtch asked:

***I have a few ///s and a ///+, and only one of them has this "feature" upon startup of going into a RAM test mode. I've seen other people mention it in the newsgroups, but I don't think I've ever seen an answer. It will boot if I hit RETURN, so there doesn't appear to be any problem with it. The others just boot right up upon powerup.***

Our friend Tom Linders (xxxxxx@AOL.COM) out California way was one of many to venture an answer:

***As you were told by the powers that be, the self-test is triggered by the keyboard light being burned out, or not being there at all. This light is tied into the base of a PNP transistor on the mother board and prevents the computer from working if the keyboard is not there.***

***I have solved this problem by replacing all of the lights that I find with a LED and a 100 ohm resistor in series. One side of the keyboard light is connected to power supply return and the other side goes to the 26 pin IDC. If you make the change, make sure that you cut the trace and bridge it with the 100 ohm resistor. I have probably modified close to 200 units and have had no troubles. The PNP transistor is in saturation and the system works slick as a whistle.***

Of course, you can always leave it and do a control reset.

Our own Dave Jernigan later asked about what might be wrong with his /// - the color monitor was jiggling and his SARA would not recognize his hard disk. Tom Linders answered it this way:

***If your hard drive does not run, and the drive is a Profile, you would be well advised to check the activity light on the front panel to make sure that it flashes when the unit first comes on. Getting the power supply out of and apart in a Profile is a real pain in the posterior.***

***A simple test to run is to loosen the four screws on the top of the back and remove the three bottom screws, then measure the power supply voltage on the digital board five pin connector. This board stsn p of the power supply. You should find ground (bottom pin) plus five, plus twelve, and either minus five or twelve, I cannot remember. Also, the middle pin is, I believe, normally low.***

## APPLE /// CARDS IN THE GS?

That was the question from WAP /// SIG member Steve Truax on the TCS recently:

***Can my Profile and Corvus be hooked up to my ][GS? I have both formatted in SOS, and have some large files I'd like to move, for one thing (the 3.5 cards on my /// have both stopped working, and this seems like the simplest way to move and backup files). Are the cards and all compatible, or would I cook them if I just plug them in? As simple as this question seems, my Profile and Corvus manuals are both specific to Apple ///s and don't address Apple //s at all.***

This time it was Seth Mize pulling the rabbit out of the hat:

***DO NOT USE the Apple /// cards in the IIGS! Bad things will happen unless you bend the correct pins to one of the chips on the controller card. I have not done it, since you might ruin the card for use with an apple /// when you bend it back.***

I do not expect the cards to fit inside your Apple IIGS...but, even if you took off the cover and tried them out, they are not ready for use on the IIGS.

#### **AND WHAT ABOUT USING A //GS COLOR MONITOR?**

New ///er Mitchell Spector (xxxxxx@vax2.concordia.ca) was thrilled to find that he could, in fact, hook up a //GS Applecolor RGB monitor to his ///. The plugs are certainly the same. He told other Apple // family users on the Internet's comp.sys.Apple2 Usenet board that:

***IT WORKS! Not just somewhat, but 100% as if the monitor were made especially for the Apple /// computer! Text looks sharp and great and even displays it in FULL-COLOR! Funny thing is, the Apple /// makes more use of its colored ASCII text than the Apple //gs (up to 16 background and foreground colors using text at once, much like IBM's color ANSI text).***

Actually - the display is NOT really the same, since the /// requires that it go through a special resistor network in order to get the proper colors to be produced on the RGB screen. Color monitors produced during the time the /// was being produced - like the Electrohome RGB monitor included these networks as part of their design. WHY Apple didn't do this on the computer side, I'll never know. Mitch realized this and reported later on the Internet that:

***One thing to note! Color information doesn't come through correctly. I run the diagnostic with a color-map display, and most of the colors were not as they should be. It STILL works beautifully as-is for text or other purposes. You might want to pick up a second-hand AppleColor RGB screen and try it out (they can be bought from about \$50-\$100 US these days).***

The CORRECT version of the resistor network, by the way, was provided with On Three's Draw On Three manual. The version shown in the Apple /// manuals was NOT correct. Let me know if you'd like a copy.

## SOS ERROR CODES

The Apple Users Encyclopedia (Arrays, Inc., 1984) writes that

**If SOS encounters some condition which prevents system operation during the process of booting the Apple /// system, a SOS error message is displayed on the screen.**

And I might add, they are highly aggravating at times! SO, to help you deal with them at least a little bit, the messages or condition, cause and remedy are all listed in the accompanying box. You might want to make a copy and cut it out, to display near your SARA - just in case.

*(Please Place Infor below in a Separate BOX)*

MESSAGE/CONDITION	CAUSE	REMEDY
<b>Blank Screen</b>	Disk in drive is not boot disk	Retry with boot disk
<b>RETRY</b>	Boot process failed	Attempt reboot Remove disk and insert again
<b>DRIVER FILE NOT FOUND</b>	Disk has no file called SOS.DRIVER	Add drivers with SCP
<b>DRIVER FILE TOO LARGE</b>	Memory too small to hold all drivers	Delete enough driver files to fit
<b>EMPTY DRIVER FILE</b>	Driver file has no drivers in file	Add appropriate drivers with SCP (Sys Utils)
<b>INCOMPATIBLE INTERPRETER</b>	Interpreter too big or specifies wrong memory location	Check SOS version
<b>INTERPRETER FILE NOT FOUND</b>	No SOS.INTERP file on disk	Add to disk
<b>INVALID DRIVER FILE</b>	SOS.DRIVER file in wrong format	Delete and add valid file with SCP
<b>I/O ERROR</b>	I/O error found when loading kernel, interpreter or driver	Reinsert disk and try again
<b>KERNEL FILE NOT FOUND</b>	No SOS.KERNEL file on disk	Add from other disk using Sys Utils
<b>TOO MANY BLOCK DEVICES</b>	SOS.DRIVER has too many block devices	Delete as many drivers in the file as required

## MEETING QUEUE

With the club moving this month, I've decided to hold off our quarterly meeting until October. Thus, I hope we can gather on Saturday, October 8th at the NEW WAP Office at 9:30am. We'll be talking about the new Communications Manager and the status of the Software Development Fund. Just for fun we'll also try out a CP/M card on the ///. I'll also discuss the new arrangement of the PD library. As always, we'll move on to lunch at some new exciting location the Jernigans will find for us!



## IN MEMORIUM

We're sorry to report a SARAsaur passed on in late July. Thanks to Tom Linders for reporting that:

***John Cowman, a long time Apple three guru has died. He had a minor stroke about six weeks ago, and a massive one on the 24th. John founded Apple ///ers Unanimous (in the San Francisco Bay area).***

I will miss him. We chatted on the phone a few times a week, and, because he had a problem getting around, I would go and see him every week or two.

I looked forward to our ten minute chats early in the morning, and will really miss him.

Our friend Jeff Fritz at West Virginia University replied:

***Sorry to hear about John's passing, Tom. What machine do you think God gave him to use up there? Why a /// of course! ;-)***

## APPLE /// RESOURCES

Bob Consorti  
xxxxxx  
Brookline, MA. 02148  
(617) xxx-xxxx

On Three c/o Joe Consorti  
1174 Hickory Ave.  
Tehachapi, CA. 93561  
(805) 822-8580

Sun Remarketing  
(800) 821-3221  
PO Box 4059  
Logan, Utah 84321

The Lisa Shop  
(916) 668-5637  
PO Box 969  
Woodland, Ca. 95695

Tom Linders  
(408) 741-1001  
xxxxxx  
Saratoga, CA. 95070

Wayne Meckling  
W.M. Enterprises/Annapolis  
(410) 263-4053

///s Company WAP BBS  
(301) 593-0024

Apple User Group Connection  
(800) 538-9696, ext. 500

Apple User Assistance  
(800) 767-2775

*By David Ottalini  
Apple /// SIG Co-Chairman*

*October 1994*

### **THE AMAZING BOB**

Yup. Our own Medical Researcher and SARAsaur, Bob Consorti, continues to produce the code for our ///! By the time you read this, there should be a number of neat new Apple /// programs for you to try out. Here's what's on the table:

\* BINHEX /// : A special program that formats files for easy transfer on the Internet. This takes DAR one step further and gives ///ers the same capabilities as Apple //, Mac and PC users. Likely Shareware offering.

\* DAR //: Per a request from your's truly, Bob is releasing an Apple // version of his great Disk Archival and Retrieval program. As with the /// version, this one will allow you to place all the files on a disk side into one binary file for easy transport. It will likely be compatible with DAR /// - so you can use either version to archive and retrieve programs from any Apple // family (ProDOS/SOS) computer.

\* BOS3 UPGRADE: BOS3 has been updated a tad so that those who use the DeskTop Manager's Macro Manager utility can automatically load specific Macromaps when booting a program (thus, you can tell BOS which Macromap to load for each program you use!). There may be another goodie or two as well. Upgrades will cost \$5.00 from the WAP Office for current owners (to cover P/H). New purchasers will get the new version automatically.

\* TITAN ///+//e LAUNCHER: For those of you with Titan ///+//e cards, you'll be able to automatically switch to ///+//e emulation mode from BOS3 (or Selector or Catalyst I believe) without having to use the "Preboot" disk. Even more exciting, Bob says you'll be able to load ProDOS and run Prosel 8 or other Apple // program - from a hard disk! When you quit emulation mode, you'd automatically be returned to /// native mode. Various bugs in the Titan emulation software will also be fixed - the worst being a restriction on which version of ProDos you can use when you have a Profile installed.

\* Work on the NEW Communications Manager will begin once these other projects are completed - hopefully by the end of August.

\* Finally (Whew!) Bob is updating GoBack /// to fix a couple of bugs. Primarily - he's fixed a problem that caused GoBack to add 128 Blocks to files in multiples of 16 blocks+1 (thus if the file was 17 blocks long, it would have another 128 blocks added). This would only be a problem IF you had a fairly full hard disk, did a backup and then tried to fully restore it - you could get an "out of space" message. There was also an infrequent problem with sparse files that has now been fixed.

## PARALLEL PRINTERS ON THE ///

While your Apple /// has a serial port in the back that can be used for a printer (or modem), you can also plug a parallel card into one of the slots in your ///. Apple produced its own Universal Parallel Interface Card (UPIC) (available from On Three mostly, or another ///er) and drivers (in the WAP PD) but there were a number of third parties that sold cards for the // that worked for our SARA as well.

As with all devices hooked up to your ///, you will need a device driver (see WAP PD Disk 3UTL-04) and the proper cable (see the note below). Normally, the card is placed in slot 1 of the ///, but you can place it in ANY slot, so long as you use the System Configuration Program in Sys Utils to tell the driver where the card will be.

Recently, on the Internet, there was a discussion about the Apple // parallel cards once sold by Orange Micro - called the Grappler + and the Buffered Grappler + (Orange Micro still produces cards for the Mac). The question concerned what the 4 DIP switches were used for on the cards. Mitchell Spector (xxxxxx@vax2.concordia.ca) answered this way (with some comments from yours truly):

***I have two standard Grappler+ cards, as well as the 64k Buffered Grappler+ version. The DIP switches are used to configure your card for a series of different printers out there (I'll list those settings below). The cable you need is very common, and all my other Apple II printer cards use it. It's a 26-pin female, to a 25-pin centronics ribbon cable (you should be able to get one at Radio Shack).***

G+ Pin assignments:		DIP switch settings:				
~~~~~		~~~~~				
STB	1	DIP SWITCH POSITIONS	1	2	3	4
D0	3					
D1	5	Epson Series and Star Gemini	OFF	ON	ON	ON
D2	7	NEC 8023/C, Itoh 8510/DMP 85	OFF	ON	ON	OFF
D3	9	Centronics 739-1	OFF	ON	OFF	ON
D4	11	Anadex Printers	OFF	ON	OFF	OFF
D5	13	Okidata 82A, 83A, 92, 93, 84	OFF	OFF	ON	ON
D6	15	Okidata 84 w/o Step II Graphics	OFF	OFF	OFF	ON
D7	17	Apple Dot Matrix	OFF	OFF	ON	OFF
ACK	19	IDS Printers	(Any position)			
BUSY	21					
P.E.	23	Notes: "+" side, or set to right, the switch is set to				
SLCT	25	the ON position. Switch 1 controls MSB, the 8th bit.				
N/C	-	Setting switch 1 to 'ON' makes MSB _not_transmitted.				
GND	all others					

Since there are many other choices of parallel printers today (like the Panasonics, Stars, etc.) you would be best advised to start with the Epson setting for whatever card you have and then experiment a bit to see what works. Most parallel (and serial) printers today include an Epson emulation mode.

One other Parallel Card that was used extensively on the /// was called the PKASO/U parallel interface card. Dan Martin, writing in the November, 1986 issue of *ON THREE* said this was the "most powerful

printer board available for the ///" and that it was "configurable for any printer present or future."

Two years later, Dr. Al Bloom wrote in the *TAU Journal* that:

***I hear the Apple II PKASO/U card beats feet out of the Apple /// UPIC for connecting a parallel printer to your /// and doing neat graphics.***

The card was originally sold by a company called Interactive Structures in Malvern, Pennsylvania, and later was available from DAISI Electronics in Newtown Square, PA., but I'm not sure either still exist. In any case, we have the appropriate printer drivers in our PD (same disk as above).

Interactive Structures really did care about the /// - and provided excellent documentation for using their card with our SARA. IF you need a copy, please let me know.

Other parallel cards that can work in the /// (if you can find them!) include the : Epson APL card, Apple // Parallel Card, Tymac PPC-100 card, Microtek RV-611C Card, MPC Card, Microtek Apple Dumpling-GX Card and Dumpling-64 Buffer/spooler card as well as Practical Peripherals Microbuffer // card.

As for drivers, Sun Remarketing many years ago offered "Printer Driver ///" that included the programs to work with these cards - drivers now available in our PD (Again - disk 3UTL-04). You might also want to check out Daryl Anderson's series of parallel drivers (for the UPIC Card) that sets aside memory for a print buffer that lets you get back to work more quickly. BOS3's Print Spooler function can also help with this (it works with any printer driver though).

### **MORE ON REPLACEMENT LAMPS**

Here's one new source for a keyboard "on lamp" replacement. Craig Larson of Columbia Heights, Minnesota (xxxxxx@pro-algonquin.mn.org) suggests:

***Industrial Lighting in Minneapolis (602)-333-4406). Ask for Todd and tell him you want part number 7362. They're only \$1.35 each - BUT you'll have to order 10.***

What happens to your /// if this lamp burns out? Dr. Al Bloom notes you will

***...get a RAM DIAGNOSTIC error when you try to boot your machine. You can get around that problem by keeping the CONTROL key pressed for a couple seconds after releasing the RESET key when doing a CONTROL-RESET reboot. Even this might not save you. Richard Powell reported that a dead "on" lamp caused his machine to stop recognizing his ProFile hard disk.***

### **MEETING QUEUE**

We will have a meeting this month - October 8th, 10am at the NEW WAP Office. A lot depends, however, on the status of our NEW Office. At this writing, I still do not know WHERE that will be or

exactly WHEN the move will take place, so please watch the TCS, ///s Company BBS or give me a call at home before making the trek.

We're going to try and give CP/M a go on the /// and hopefully demo some of Bob's new/upgraded programs for our SARA. As always, we'll take any and all questions, have PD disk sales, and check out the restaurants around the new office. We'll also discuss the status of the new Communications Manager upgrade.

### **FINALLY - DID YOU KNOW THAT ...**

The Solid-Apple Key on the Apple /// computer is used to increase the speed of automatic repetition of any key which is in the automatic repeat mode. It increases the speed of repetition from eleven characters per second to thirty-three characters per second (The Apple Users Encyclopedia).

It is also used with On Three's Desktop Manager as a "Function Key" - when pressed with the <ESCAPE> key, the DMT menu appears, or you can directly access one of four DTM programs directly by pressing <Closed Apple> + 1-4 (from within ANY Apple /// program).

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*(They answer Apple /// calls)*

By David Ottalini  
Apple /// SIG Co-Chairman

November 1994

### FIRST OFF

I wanted to add my thanks to everyone who helped move our WAP office from Bethesda to the new location behind White Flint Mall. Volunteers are what make this group the best computer club around! The new facility will offer us a number of improvements - ample parking, larger facilities for meetings, the library, computer museum and office space. Best of all, this comes at a considerably reduced monthly cost - which will help ensure the health of the club and allow it (with time) to improve the services we can offer our members.

### KEEPING ME HONEST

Our good friend Tom Linders, out California Way, is very much on top of all things Apple /// even if he IS retired. He does, in fact, keep me honest - a good thing sometimes when I give advice that could use a little fine tuning. Here's what he offered in a recent post via the Internet:

***\* While the ///+ keyboard looks like the Apple //e keyboard, it has a much different key vs X Y matrix output. As a result the Keyboard encoder chip is not the same as the plain old ///.***

***\* IF you must spray TV Tuner cleaner into the Apple /// keys, use black and white tuner cleaner as it is/was about 75 cents a can cheaper and is identical to the color stuff. I prefer Isopropyl Alcohol 99% pure myself.***

***\* The ///+ power supply is identical to the /// except that there is a remote sensor on the +5 volt output. It does not appear to have any more power. In fact it would be nice if it had even less power.***

***\* There is a 22 ohm resistor on the 5 volt memory boards. Many people say that this resistor is there to supply a bit of extra power to the 5 volt output from the 12 volt output. Don't you believe it. The resistor is there to make the 12 volt supply think it still has the 12 volt loads from the old 128 k memory boards. The 12 volt power supply is, in reality, made up of two power supplies, a five volt supply to ground and a seven volt supply sitting on top of the five volt supply to make the twelve volt supply.***

***\* One thing I have done on a few Apple ///s is to clip a 12 volt fan across the resistor and it***



*really cools the old /// & ///+ off. Try it, you'll like it.*

## WHERE DO I FIND??

Always a question on the mind of SaraSaur and other Apple Family Computerphiles. WAP is, of course, the best source for Apple /// material (we have some 250 PD disks, offer software on the TCS and more than a thousand files on ///s Company WAP - 301-593-0024). But there are other sources as well (see the end of my column each month).

IF you have never seen my shareware offering - ThreeWorks - there is a tremendous resource of information about the /// and where to find things. Then there's Jim Nichol - who posts from time to time a great list of resources that all Apple family owners can take advantage of. See the separate listing, to which I have (as I normally do!) added a few things.

(Katheryn: PLEASE PLACE IN A SEPARATE BOX/LISTING)

-----  
APPLE // (& ///) VENDOR LIST \* by Jim Nichol  
-----

The company's primary business is:

S = Software (Commercial or Shareware)

H = Hardware and Accessories (New)

P = Parts for Apple // & /// Repair, and Used Hardware - some do repairs

M = Magazine or Newsletter publisher for Apple //'s

\* = Apple /// support

- 
- \* - H P - Alltech Electronics (800) 995-7773 or (619) 721-7733
  - - P - Arminius Pubs. and Products (609) 662-3420
  - S - - - AV Systems, Inc (805) 569-1618, Adrian Vance, Compuserve 70415,1420
  - \* - - P - B&D Computer Repair (312) 735-9010, Larry Beyer, Fixes hard drives
  - S - - M Big Red Computer Club (Scarlett) (402) 379-4680
  - S - - - Caloke Industries, Dept. SK, PO Box 18477,, Raytown, MO 64133
  - S H - - Charlie's Appleseeds (619) 566-1297
  - S - - - Christella Enterprise, Box 82205, Rochester, MI 48308, catalog \$2
  - - P - CreativeSolutions (513) 429-5759
  - S - - - Educational Resources (800) 624-2926 or (708) 888-8300
  - S H - - Fas-Track, 7030 Huntley Rd Bldg C, Columbus,OH 43229, (800) 927-3936
  - S - - M GS+ Magazine, PO Box 15366, Chattanooga, TN 36415-0366
  - S - - M Kingwood Micro Software (Texas II) (210) 490-6373, Beverly Cadieux
  - S - - - Laureate Learning Systems (800) 562-6801 Special Ed talking software
  - S - - - MECC, 6160 Summit Dr. North, Minneapolis, MN 55430, (800) 685-MECC
  - H P - Memory Plus Distributors (602) 429202, Fred Cortazzo
  - S - - - Merit Audio Visual, Ben Weintraub (800) 753-6488
  - \* S - - M National Appleworks Users Group (Appleworks Forum) (313) 454-1115
  - \* S H - - On Three (805)-822-8580 or (617)-731-0662
  - S - - - Orange Cherry Software (800) 672-6002
  - S H - - Other World Computing (800) 275-4576 (formerly LRO)
  - \* - - P - Pre-Owned Electronics (800) 274-5343
  - S H - M Quality Computers (800) 777-3642, Scott Hebel-Compuserve 72133,3245
  - S H - M Resource Central (913) 469-6502 - official Apple s'ware & docs source
  - H - - Sequential Systems (800) 759-4549
  - S - - M Shareware Solutions II, Joe Kohn, Compuserve 76702,565
  - \* - - P - Shreve Systems (800) 227-3971
  - \* - H P - Sleepy Hollow Corp. (The Lisa Shop) (916)-668-5637

- S - - M Softdisk Publishing, 606 Common, Shreveport, LA 71101, (800) 831-2694
- \* - - P - Sun Remarketing (800) 821-3221
- S - - M Uintah Basin Apple Users Group, Bob Stewart, Compuserve 72143,1377
- \* S - - M Washington Apple Pi (of Course!) (301)-984-0300

### MORE PARTS ...

Sometimes you just can't get enough of them. Take the good Ol' DB-9 connector used on the // and ///. I-Netters wanted to know where to find them. Craig Larson (xxxxxx@pro-algonquin.mn.org) had the answer:

***I have received a number of requests in Email recently for a source of DB-19 connectors for making Apple II cables. They are readily available through JDR Microdevices, 1850 South 10th St, San Jose, California 95112-4108. The phone number there is 1-800-538-5000. The male plug is part number DB19P, 69 cents each or 50 cents each in quantities of 25 and up. The female plug is part number DB19S, 75 cents each or 55 cents each in quantities of 25 and up. These are the solder cup design with pins in all 19 holes. There are no hoods available in the 19-pin size.***

Craig, by the way, is the Sysop of the Electronics Shop BBS - (612)-789-2149. And while he primarily supports the Apple //, I have talked with him a tad about the /// - especially about power supplies. IF anything comes of it, I'll give you an update along the Trail.

### I MEET THE NICEST PEOPLE

One of them has been Joe Schneider of Chesapeake, Ohio - who has been using Apples ///s for many, many years. Joe owns and operates a funeral home and has developed a complete system to handle all of his business needs on Apple ///s. In fact, at one time, he was seriously going to market it to other funeral directors - but the lack of a good, inexpensive hard drive foiled his plans.

In any case, he continues to operate his business today on this ///s and says neither a Mac NOR a PC can do what his SARA can do as easily or as quickly. I wonder if he's been talking with Paul Campbell? Joe HAS become a WAP member (Thank you!) and hopefully has become a BOS3 owner by the time you read this. I've asked him to write us an article about his experiences with the /// - so watch for it sometime in the next few months.

### PUBLIC DOMAIN LIBRARY RESTRUCTURING

I'm happy to tell you I have made some progress with this project - and in fact, you may actually see the results this month or next. As I began working on it, I decided it would NOT make sense to release the updated files until AFTER the WAP Office had moved. The office staff and volunteers had enough on their hands AND, since each disk includes the WAP office address, it made little sense to release the disks and then have to go back to update them one more time. Since by the time you read this we

SHOULD be in our new office, I hope to have given John Ruffatto the first in our series:

**Accounting**

Same category, but some updated files

**Apple Software**

A home for former commercial software or updates to commercial software that I would rather not put somewhere else

**Bloom Software**

Dr. Bloom's great series of disks finally have a home of their own

**Business Basic**

A home for BB, its programs and utilities.

I may well have gotten further than this - watch the Journal for more details over the next few months. As always, I appreciate your help and comments about our PD disks - ESPECIALLY if you get one that doesn't work as advertised in some manner.

**FINALLY**

Your /// SIG really needs your help to make our current Software Development Fund Project work. Now is the time to ask Santa for that early gift by pre-purchasing your edition of Bob Consorti's new Communications Manager or BOS3 (in stock). Call the WAP Office for details on how to do this (they take plastic), but if every member were to pre-purchase a copy, we'd have enough to not only make our final payment to Bob, but also to help us with funding for our next project.

**APPLE /// RESOURCES**

**\*Repairs/Software/Hardware**

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xxxxxx  
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(617) xxx-xxxx

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*(They answer Apple /// calls)*

*By David Ottalini  
Apple /// SIG Co-Chairman*

*December 1994*

### **TO START WITH**

May your holidays be joyful and full of warmth and love. I've written before, and would like to say again, that the main reason I continue with this SARA of ours is the people I've met over the years. Many are gone now. But whether here now or in the past, I've managed to meet so many nice people – Ed Gooding, Lavona Rann, Taylor Pohlman, Frank Moore, Daryl Anderson, Tom Linders, Joe Dobrowolski, Charlene Ryan, Bob Consorti, Jim Salerno, Paul Campbell and many, many more. I can't possibly list everyone (Please forgive me!), but you get the idea. So thank you all for adding something special to my life over the years. I hope we've added a bit to yours as well! Happy New Year!

### **///s COMPANY WAP**

I'm sorry to announce that ///s Company-WAP, the only remaining Apple 3 BBS, will officially go dark on December 24th. We have more than fulfilled the requirements as set by former Sysop Ed Gooding to operate the BBS (in return for donating the files to WAP) and I've enjoyed the opportunity. NOW the real work will begin, as we start the process of compiling and uploading the files to the WAP TCS. There are more than 1000 files!

My plan remains to primarily use Bob Consorti's DAR program to compress these files for uploading - which should make it easier for folks to download full-disk sides of information. I will also keep for archival purposes the original backup set Ed sent me (representing ///s Company when it was turned over to WAP) and a set as of the 24th of December. These all become the final legacy - the historical archive - of a resource many have enjoyed for many, many years. I also hope to make the files available on the Internet through the Apple /// Listserve at West Virginia University.

Many, many thanks to Ed Gooding for his years of service to all the SARAs out there. And thanks to WAP - Lorin, the BOD and you, the members – for helping make the BBS go by supplying some equipment and paying for the phone line.

### **SDF**

We continue to solicit your support for our Software Development Fund Projects by asking for pre-orders of the new Communications Manager to be written by Bob Consorti of On Three. To spice things up a bit, we are adding a promotion to the sale - everyone who pre-purchases a copy of the program will be placed in a drawing for a 512K upgraded ///! The one string is this: we MUST have at least 10 pre-orders to make this promotion a go. But at just \$50.00 for the software and a chance for a 512K ///,

what have you got to lose? In all seriousness, your support for our projects is appreciated – and makes it possible for us to continue with additional projects in the future. As I've mentioned in the past, the club makes nothing on these projects – the money goes towards the development of new projects. Period.

### **WAP /// SIG PD UPGRADE**

I have finally gotten a good start on my long-term program to reorganize the PD Library - in fact, John Ruffatto has about one-third of the categories in-hand, and will get a number more in the near future. I have basically tried to make our disk library easier to use and find material. I am also bringing files up-to-date as possible so that they reflect today's reality.

In addition, to help John, I have also ported over the PD database to Filemaker Pro (a MAC database program) - which I'll make available on the TCS for those interested. This will be the LAST TIME I reorganize the PD like this - since my free time is increasingly being eaten up by things like soccer, cub scouts, a life..etc. BUT I do hope to keep adding new disks to our PD (now 251 and counting) as time permits.

### **NEW BOD DIRECTOR**

OK, so I told you earlier that I would stay out of politics, but when the President calls and asks, can you turn him down? In my case, it was an easy "yes" to Lorin Evans (backed up by the BOD) when offered a chance to become a replacement Director. I hope I can help represent the Apple side of the family for our club in a way you would want.

### **VENDORS ALERT**

I wanted to let you know about another vendor that supports our /// in many ways. B&R Computer Services is based in San Diego and actively solicits Apple and Mac users who have been orphaned by that company with the multi-colored logo. As their advertisement says - "We abandon no Apple Computer before its time. Tell us what you need to accomplish, chances are we can help you. You can save your time and money on phone calls because we have what you need."

I recently got a copy of B&R's latest flyer - which says they can provide everything from owner's manuals to joysticks, hardware repairs, file conversion, instruction, encouragement and even telephone lessons. They offer a wide range of Apple and Mac hardware (though no Apple ///s that I saw) and accessories - but as always, double check prices against Altech, Sun or other vendors before purchasing (and remember the garage sale is this month!).

They do offer some /// software packages - including Apple Writer 2.0 (\$75.00) and Data Base /// (39.00). The value with these programs is that you get the manuals - many times much more difficult to come by than the programs themselves. There were also a number of programs that could work in Apple // emulation mode.

## WAP /// SIG MEETINGS

We will have our regular table at the Garage Sale this month. In January, we'll try to get back on track by holding a meeting on the 14th at the WAP Office, at 10AM. We will be taking a look at CP/M - in fact, we will have a special surprise for everyone attending that meeting. Anyone with CP/M experience welcome!

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WAP /// SIG Co-Chairman*

*January 1994*

Slowly over time, in secret, the Apple /// PD factory continued to churn, its production line whirling faster than the hands of Big Ben. It was a cold wind from the North, blowing along the San Andreas Fault and then East that finally brought from the depths of time new disks for Apple ///ers to enjoy. It was a new year, a new world, full of new hope.

Hmmmmmmmmmm

IF you ever wondered just how tinged your /// SIG Co-Chair is at times... But then, it DID get your attention, No?

We have, in fact, been adding disks to our PD over the past few months. IF you watched the back of the Journal, you'd have noticed new numbers popping up on occasion as John Ruffatto completed the copying process and added the disks to our library. My end, to let you know about them, has fallen woefully short - though I have to admit it's been more and more difficult to keep these articles - especially my Trail Column - going every month. Work and children seem to do that to you.

In any case, we do have a number of new disks in the PD which I hope you'll take a look at - here's what's in store for you:

### **Appleworks/3EZ Pieces**

Disks **3AWZ 12-15** are called Parishworks and are downloads from Compuserve. They enter our PD due to the donation of a /// system to a Washington DC church a few months ago - and the need to provide them with some church-specific software. These disks will work with any Apple // family machine that has Appleworks or 3EZps. I won't list everything they offer, but suffice it to say that if you need to keep track of everything from baptisms to sheet music, attendance and the offertory, these disks are for you.

### **Catalog**

We've updated **3CAT-04 and 05** -the ASCII versions of our PD Catalog to include all the latest disks. 3CAT.01-03 have the 3EZPs version in database format.

### **Games**

We recently came across the actual manual for our game Cap'n Magneto – disk **3GAM.03** - and have not included it on this updated disk. The manual has also been uploaded onto the TCS and our ///s Co. - WAP BBS (301-593-0024).

### Information

Disk **3INF.39** is our latest "Best of Ottalini" disk - this being number 8! It includes all my columns from 1993, as well as all the PD articles and additional musings from other ///ers over the year. Menu.Maker is included of course and you can read each article individually and print it or use our famous "Print.All" program to print all the text files from any disk side.

### Telecommunications

Disk **3TEL.12** is Easyterm ///, another telecommunications program you might like to try. It includes a "manual" of sorts on disk for you to read as well as the program itself. This was a formerly commercial program sold by Sun Remarketing.

Disk **3TEL.13** contains the source code to Gary Kato's XMODEM /// (disk **3TEL.05**) - a great PD telecom program that you can use to do XMODEM uploads and downloads. The source code is offered in the hopes someone might be interested in doing some upgrades to make this program even more useful.

### Utilities

**3UTL.49** contains the original Titan ///+// emulation disk, as well as some information about the Titan cards, articles about them, etc. The ///+// emulation disk only works with the single Titan ///+// card.

**3UTL.50** offers the Titan ///+// emulation disk with built-in RAM disk. A set of utilities to use on the // side are also included.

**3UTL.51** has the Titan ///+//e emulation disk - used with the two-card Titan set. It also includes a RAMDISK driver you can use in native mode (that is - use the RAM on the Titan cards as a RAM disk in native mode). The Daryl Anderson drivers tho (on disk **3UTL.18**) are much better.

**3UTL.52** is another version of the ///+//e emulation disk courtesy of ///er Matthew Thomas. This version has been modified so that it is, in essence, a "double boot" disk - you can add a ProDOS based program on the disk and it will run automatically after you've booted into the Titan emulation.

**3UTL.53** is a program called SOSTRAN. A former commercial program, this is a neat little Pascal-based program that will allow you to transfer files from DOS 3.3 format to SOS and back. It will also make some conversions so that, for example, a DOS 3.3 Binary graphic file can be loaded as a SOS Fotofile (in case you don't own On Three's Graphics Manager program). Information about SOSTRAN is on Side One while the program itself is on Side Two.

**3UTL.54** offers up an auto-install program to update your disks with the 1.3 version of SOS.KERNEL.

Easy to use - just boot and follow the instructions if you have a need to do this. Also included is an Apple // DOS to Apple /// SOS conversion program.

**3UTL.55** is the ORIGINAL Apple // emulation disk! Vintage 1980 - it will only allow you to load Applesoft or Integer Basic before booting a 48k (or smaller) disk. To make things interesting for you, we've included an old Apple // game - "Snake Attack" on side two you can run. It does not need a joystick - just the keyboard. You'll recognize what it resembles when you see it.

**3UTL-56** is a great new program from Bob Consorti called DAR – for Disk Archive and Retrieval. It will take an entire disk side and archive it for you as one Binary file. It is NOT compressed. BUT you can take that archived file and transmit it or upload it in one easy step. DAR is shareware - it requires a \$20.00 payment to Bob Consorti of On Three Fame.

## *"Profile" of a Hard-Learned Lesson*

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*By Burr Patterson, Jr.*

David has been after me for two years to write an article for THE JOURNAL, I made this one of the things I said I would do for the new year.

At just about the same time I messed up and down I went, I lost my Profile with all my software in it. No problem, I got "GO BACK ///". There is only one small problem with this, you only get out what you "got" in.

Here's the way it went. I started noticing that something was wrong with .Profile in the middle of the night. Now anytime something goes bump in the night we should get up, go to bed and think about it the next day, I didn't. I said, OK I have everything backed up; I can just reload and get going. I checked a few things, remembered a few bad commands I had given in the last hour or so and ASSUMED I had messed up.

I couldn't get the drive to do much that I wanted it to do, I even FORMATTED THE D#%& THING, nothing seemed to help. I was starting to worry. I thought maybe I'll put my other Profile on line and see if I can load it (I know it is messed up). When I crawled under the desk (to make a long story short) I found the plug loose. No problem, I got it "backed up".

I got the backup disks (28) out and started, the first thing I found out was, I had not backed up this drive in 6 months, the restore went well only, boy it's slow (maybe Bob can fix it so we can turn the monitor off!) I lost 125 files that I had formed in the last few months - files that had things I had made special and were one-of-a-kind.

I backup my files every week or more often if I do a lot of work on them. The reason my mind didn't want to back up the Profile (all software) was that, nothing ever happens to this drive - it just sits there and runs. I AM NOW A BACKER UPPER of "all" things! I use the modified, date & time for updates as I go along.

I think I have learned a major lesson about backing up. I hope this little story will help someone else that thinks they don't need to B/U "everything".

*Procedure for doing a hard (or deep) format on a Profile hard disk using an*

*Apple ///*

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*By Tom Linders*

0. Prepare yourself by reading these notes completely before doing anything.
1. Turn off the compute and the Profile.
2. Move Profile I/F card to Slot 1.
3. Remove four screws (brown) on the back of the Profile, and the three (silver) in the front on the bottom.
4. Lift lid on profile and be careful of wires etc.
5. Disconnect LED cable.
6. Push down on all chips that you can see.
7. Remove U25, install U25 A (the masked ROM), install 2-pin jumper.
8. Boot the formatting disk and follow the instructions. Remember; when it says hit any key, always hit **Return** (not **Enter**).
9. About half way through the process you will be prompted to remove the jumper. Do it.
10. When finished, turn off power and reverse steps 1 through 7.
11. With the I/F card in slot one do a high level format, using System Utilities or a program of your choice.
12. Sometimes a second time through the hard formatting process is needed.

By Tom Linders

## CODES TO START THE DISKS RUNNING

### A GREAT WAY TO TURN ON THE DRIVES TO CLEAN THE HEADS OR CHECK THE SPEED

To get any of these codes to work you must be in the monitor. To get into the monitor type:

Control + Open Apple + Reset and keep holding the first two down while releasing the Reset key. That is, wait for the beep, and then release the Reset key.

While you're there and before you begin the disk drive checks, try your hand at the memory test. Type:

F6E6G (RET)

If all the crazy characters are followed by an 8 by 8 matrix of dots and no disturbing messages, then things are OK. Let the test run twice, and make sure that the Profile card is removed beforehand. Remove the card with power off, of course.

After the warm up, let's do the disk drive tests...

### INTERNAL DRIVE

.D1 C0EA (RET) This selects the internal drive

C0D4 (RET), C0D2 (RET), C0D0 (RET)

To turn the drive on type: C0E9 (RET)

To turn the drive off type: C0E8 (RET)

### EXTERNAL DRIVES

C0EB (RET), C0D5 (RET) This selects the external drives and deselects the internal drive

.D2 C0D2 (RET), C0D1 (RET) To turn the drive on type: C0E9 (RET)  
To turn the drive off type: C0E8 (RET)

.D3 C0D3 (RET), C0D0 (RET) To turn the drive on type: C0E9 (RET)  
To turn the drive off type: C0E8 (RET)

.D4 C0D3 (RET), C0D1 (RET) To turn the drive on type: C0E9 (RET)  
To turn the drive off type: C0E8 (RET)

Easy isn't it.

The basics for the above were found on page 12.10 of the **Apple /// SERVICE REFERENCE MANUAL**. A few minor changes were made and the whole thing translated into readable English (I hope) so that a non-technonerd (or nerdette) could implement it.

*By Tom Linders*

Setting the clock on your Apple/// is as easy as one, two, ..., eleven:

1. Remove the lid and any cards in the four expansion slots.
2. Remove the eleven screws that hold the mother board to the frame and remove the mother board.
3. Keep the computer on its back with the keyboard end toward you, making sure that there is something under the keyboard to support it.
4. Put a counter on the penultimate pin (number 11) on the 1 to 12 row, of the clock chip using the chassis return.
5. The counter should count 32768 Hz. If it doesn't, adjust the tiny variable capacitor adjacent to the clock chip. The total adjustment range is about three Hz.
6. My clock's oscillator was set to run at about 32765 Hz. One Hz off means an error of about 2.6 sec per day.
7. While you are inside the computer this would be a good time to brush off all the dust from all the chips inside the computer as well as pushing down on all the chips to make sure that they are all in their sockets.
8. One last thing, make sure that the battery pack for the clock is pretty close to 3.0 (or 4.5 for a three battery pack) volts. If it isn't, it's time to replace the batteries.
9. Put the eleven screws back in, and set the time by booting your favorite program (like System Utilities) (or even Word Juggler).

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*By Tom Linders*

### **Disk Cleaning**

Some people say to clean the disk drive heads with some sort of disk cleaner every two or three days. Some others say to do it once every six months to two years. If you are writing the great American novel, then follow the advice of the former, otherwise, do as the later says.

The next thing is, what to clean the disk drive heads with. The only thing I know of that is reliable is alcohol. The question is what kind? There are three general kinds of alcohol:

- % Rubbing**
- % Denatured**
- % Isopropyl**

Of these three kinds the best is the third kind, isopropyl. Rubbing alcohol has too much (30%) water, and you are not usually aware of the denaturing agent (the thing that makes you sick if you drink it) in denatured alcohol. In the later alcohol the denaturing agent may be JP-4, MEK, etc. I use Isopropyl, 99% pure, that I buy from Longs for \$1.23/pint.

Also, remember, if the disk drive head is very dirty, make sure that the head load pad is also checked to make sure it is clean.

If you are having trouble with a disk drive, bring it to me (after a phone call) and I'll check it out for you. The only charge is my cost for the parts involved, which is usually not very much.

### **Disk speed Checks**

There are several ways to check the disk speed. The best way I know of is to remove the bottom of your Disk ][ or Disk ][ and check the speed with a strobe light. The best strobe I know of is a neon bulb with 50 or 60k ohm resistors in each leg of the little bulb. Not having a bulb, just use a regular lamp (a fluorescent one is better).

The bottom of the disk hub has a strobe wheel with two tracks, one for 50 Hertz and one for 60 Hertz. In Europe use the 50 Hertz track and in America use the 60 Hertz track. The speed is good enough when the little bars move less than one space in ten seconds.

The disk drive speed should be set to 300 R P M or one revolution in 200 milliseconds (200 milliseconds = 0.2 seconds = 1/5 second). There are many commercial programs that check this out by just booting a disk and (sometimes) inserting a blank disk. In order to check disk drive speed the disk usually writes to the disk (but not always).

The above programs work just great if you have an American Spec Apple computer. An American spec Apple Computer has a master crystal frequency of 14,318,180 Hertz. The European computers have a master crystal frequency of 14,250,450 Hertz. Not much of a difference, but enough to make any speed tests rather inaccurate. I shall discuss three programs, Apple Diagnostics, EDD, and Copy][+.

### **Apple Diagnostics**

This program gives a count of plus minus about 100. For the European model Apple computers to have their drive speed set accurately the count should read +13 +/- 2 counts. For the American Apple computers the counter should read about -3 +/- 2 counts. The reason for the negative setting is that the drift is usually in the positive direction.

### **EDD**

This program sets the disk drive speed in two ways, one for making program copies, and the other for just everyday use. For the American machine, just set the both drives to original for everyday use, and set as directed for copying. For a European model, set the drive speed the same way as for the American models, except set the count about +3 to +4 counts (to the right) from the indicated nominal.

### **Copy ][+**

This program presents the speed as a measurement of the period of rotation of the drive. Remember, period is the inverse of speed. For this program the American model should have the speed set to 200 +/-0.1 milliseconds (ms) and for the European machines, try 199.1 +/-0.1 milliseconds. Remember, you need to use a version equal to or lower than 4.4 in an Apple ///.

An easy way to set the speed is to have a hole drilled into the side of the disk drive so that disassembly is not necessary every time you want to check the drive speed.

The same thing applies as applies in cleaning, if you have a problem give me a call and bring your drive to me. Actually the whole computer is better as sometimes the problem is not with the drive but with the brains behind the drive.

### **General Interest**

For you Apple ][ or //e owners (not //c), I still have a pair of those controller card connectors that will not allow you to plug the disk cables in wrong. You could be avoiding a disaster if you spend a couple bucks.

12 July, 1985

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*By Tom Linders*

Joe Dobrowolski (of Apple Users Group International fame) bought an A143 from someone who had moved it from its nice metal enclosure and put it into an Apple Disk /// enclosure. The end result was a bit of jury rigging and a drive that wouldn't read any disks at all due to a bad write IC as well as screwed up head alignment.

### **HOW DO YOU ALIGN THE A143?**

There are four parts to the alignment, and, if done correctly, they should result in a reasonable job. I do not have an alignment disk, so I used one of my A143 data disks, as well as one of Joe's ///EZP disks.

#### Step Zero: Verify the problem

The best thing to do, if you're sure the disk is out of alignment, is to read and write from a di, or at least format and verify a blank disk. When the drive formats and verifies it reads the bottom side and then the top side. If it will read and write on itself, but not from another disk, then alignment is the problem.

#### Step One: The mechanical stop

To start with, make sure that step zero has been attempted. If that has been done and the drive reads and writes on itself, but not on other disks, then back the mechanical stop off a turn or two. The mechanical stop is an allen-head screw that is at the far right hand rear of the drive.

#### Step Two: The optical stop

On the left side of the drive rail is the optical stop. Before proceeding into the how of the adjustment, it is wise to take a moment to review the way the optical stop works. From my earlier article, the optical stop is activated when a light path is interrupted by a mechanical device. This signal is "wire ored" into the write protect circuit and sensed during the head retract operation. If the optical beam is out, then the write protect line supplies a signal to the computer that causes the head step pulses to stop. (The fourth pulse line is used as a head select line).

To align the optical stop, loosen the two screws and push the optical stop as well as the head toward the center of the drive as far as they will go. Put in a disk that has A143 data on it and try to read from it. I like to use the systems utility "list file" option. As the disk tries to read track 00, it may stop and try real hard. It will be observed that the optical sensor has three stop points, and the best place to try to find track 00 is when it is right at the front point of the rear Phillips screw head (middle position).

If, try as you might, you cannot get the drive to read track 00, this would be a good place to stop and repeat step zero. Put the optical stop just in front of the rear most Phillips head screw and tighten the two screws down prior to running step zero again.

### Step Three: The stepper motor

If step two doesn't work, and it didn't work on Joe's drive, then the final step will be to move the head step motor slightly by loosening the two mounting screws and turning the motor one way and then the other. Prior to doing this, it is advisable to mark the motor ear positions with a pencil, in case you have a strong desire to return to the place you started. As you rotate the motor, you can see the head et al move with it. On Joe's drive, it was a simple adjustment of the motor, and then everything was quite normal.

Then you should run the mechanical stop screw back until the point just about contacts the moving part of the head mechanism.

I tightened up the screws and then read a Word Juggler disk of mine, as well as Joe's ///EZP disks. I also did this as I finished up each step of the disk reassembly. Then, prior to shipping it back across the Atlantic, I did aread and write, as well as a read and write from my WJ disk as well as his ///E disk.

This procedure is not for the faint of heart, but it works, and would probably work better for me if I had a decent alignment disk.

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## *Apple /// to Mac, The Hard Way*

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*By Mike Lee, University of Oregon  
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My mother has used an Apple /// for address lists and correspondence for about ten years. When I sold her my Mac LC, part of the deal included transferring her old files to the new computer. It's not impossible, but it requires a bit of patience.

Although good A/// file-transfer programs exist, I was not in a position to use them. (If you have Internet access, you can get more information from the Listserv discussion group APPLE3-L@WVNVM.WVNET.EDU, or FTP to NAMES.WVU.EDU.) What follows is the bare-bones method.

You'll need a \$15 Mac-to-Hayes cable (25-pin D-connector, software handshake), a \$5 null modem plug (also called a "modem eliminator," available at Radio Shack), a Mac modem program (I used Zterm shareware), and two A/// system disks: "System Utilities" and "System Utilities Data." You may want to buy a few blank 5-1/4 inch double-density disks as backups.

The concept is simple: Make the A/// "print" text to the Mac instead of a printer. You'll have to strip out the paragraph marks at the end of each line, but at least you won't have to retype everything from scratch.

What you'll be doing is modifying the A///'s serial-port driver (called "RS232") to feed information to the Mac. These instructions presume a single-drive system; if you're working with two drives, type ".D2" where appropriate.

To begin, slip the System Utilities disk into the A/// and turn on the machine. (If at any time you need to reboot, press CONTROL+RESET simultaneously.) After booting, you'll see the Main Menu. Select "S" (System Configuration Program, or SCP).

Select "R" (Read a Driver File). The driver file is like a Mac extensions folder. When you boot the A///, the computer searches the "SOS.DRIVER" file for configuration information, including disk drives and the monitor.

The screen will likely read ".D1/SOS.DRIVER". The A/// uses command-line naming conventions. Anything with a period designates a volume or peripheral (.D1 and .D2 for disk drives), followed by a backslash and file name. If you want to work with your boot-disk driver file, press RETURN. Otherwise, type in another file name.

The program will now load the drivers into memory. You'll likely see ".PRINTER", ".CONSOLE", and so on. You also should see ".RS232". If not, you'll need to add it from the System Utilities Data disk. Insert the disk, type ".D1/RS232.DRIVER" and press RETURN. The serial driver will be added to the list. Reinsert the boot disk and press ESCAPE to return to the SCP menu.

Select "E" to edit a driver, then select the number of the .RS232 driver on the list and press RETURN. The driver parameters will be displayed.

Item 2 (Device Type) should have a value of \$63 (Char, Read, Write). If not, press 2, type "63", press RETURN, then ESCAPE to the parameters list.

Item 4 (Driver Status) should read ACTIVE. If not, press 4, type "A", then ESCAPE to the parameters list.

Item 6 (Configuration Block data) is where the action is. Press 6. The screen will display a series of 12 hexadecimal numbers. For complete information on what it all means, see pp. 118-122 in the A/// Standard Device Drivers Manual. Here's how I set mine up:

**0: 0A (2400 baud)**  
**1: 22 (7 bits, one stop bit, odd parity)**  
**2: 00 (no carriage-return delay)**  
**3: 00 (no line-feed delay)**  
**4: 00 (no form-feed delay)**  
**5: 80 (XON/XOFF protocol)**  
**6: 13 (XOFF character)**  
**7: 11 (XON character)**  
**8: DF (maximum buffer)**  
**9: 84 (minimum buffer)**  
**A: 00 (not applicable)**  
**B: 00 (software handshake)**

Press ESCAPE to return to the parameter list, ESCAPE to return to the driver list, then ESCAPE again to return to the SCP menu.

Select "G" (Generate New System) to compile the results. The program will ask for a new driver file name. You can update the boot disk you're working on, or another. (I saved the new driver file to a separate program disk, for example.) Press RETURN to save the file, ESCAPE to return to the SCP menu, then Q to quit to the main menu.

You are now ready to transfer text files to the Mac. Attach the cable to the Mac's modem port (the phone symbol) and to the A///'s Port C, using the null-modem plug. Set the Mac modem software for 2400 baud, 7 data bits, one stop bit, odd parity, XON/XOFF protocol. (The A/// can transmit at 9600 baud, but I found 2400 sufficient for my needs.) Make sure it's ready to receive.

From the A/// Main Menu, select "F" (File handling commands). For a directory of a given disk, select L (List files). To transfer text, select "C" (Copy files). Type the name of your file, then press RETURN. Next, type ".RS232" as the destination and press RETURN. (To see it on the A/// screen first, type ".CONSOLE".) Your text should appear on the Mac screen. If not, double-check your driver settings and Mac settings. Have patience – it only took me a dozen tries to get it right.

## DAR: Apple /// Disk Archive and Retrieval

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```
+-----+
|
|           DAR: Apple /// Disk Archive and Retrieval
|
|           Allan M Bloom, PhD CDP
|           2303 San Marcos Street, Blacksburg, VA 24060
| Institutional Research, Virginia Tech, Blacksburg, VA 24061-0433
|           irbloom@vtvml.cc.vt.edu
|           December 13, 1994
+-----+
```

DAR is Apple /// guru Bob Consorti's first shareware program, possibly the first shareware program ever for the ///, and it is great for anyone who wants to exchange Apple /// software electronically, whether via bulletin board like WAP's TCS or ///'s Company, or via on-line services like CompuServe, or via the InterNet's ftp file transfer protocol archives. DAR archives a 5.25 inch floppy disk into a single SOS file for storage on an on-line service as a binary file. That is its "archive" function. After you download a DAR'd binary file to your ///, DAR will "retrieve" a recreation of the original floppy disk from that file.

This is a marvelously useful tool. Let me give you an example of why. A very personal example. I wrote a fair amount of freeware back in the good old days, and a lot of it was distributed by user groups, but it all had to be on disk. I wrote in Pascal, and much of what I wrote used special library files -- home grown, from others like Bob Consorti, and from Apple itself. No way anyone could just download the program. He or she would also have to download the appropriate libraries and wire them together in exactly the right way. Adding insult to injury, my stuff was large enough that it often required two disks to boot and load. Most folk don't know how to wire up a two-stage Pascal boot. And, of course, he or she would have to download the documentation files separately.

No one in his or her right mind would post my programs to an on-line service or make more than one attempt to download them. Now, with DAR, it is as easy as pie. Maybe even easier. I've never had much luck with pie. All I have to do is DAR a boot disk to a file and upload that DAR file to an on-line service. Someone who wants to use that disk needs only to download the DAR file, run DAR in "retrieval" mode, and get a fully functional boot disk for the program.

And DAR is about as good as an Apple /// program gets. The user interface is state of the Apple /// art, and then some. It is the first /// program I've seen that uses a "thermometer" progress bar, instead of a bunch of dots or an odometer, to show you its progress in archiving a disk or retrieving a file. But it hardly needs it. DAR is an interpreter, so it is blazingly fast. It takes a very few seconds to either convert a 140K disk to a DAR file or to create a disk from a DAR file.

Yes, I like DAR, and I recommend it. And I sent Bob Consorti his \$20 shareware fee, which some take as the sincerest form of flattery. Shall we, gentle reader, take a look at this program? When you boot the DAR disk, or launch DAR from Catalyst or Selector, you are greeted with the following main menu screen:

```

| D3 Archiver/Retriever                               Shareware Version 1.0 |
| (c) 1993 by Bob Consorti: ON THREE, Inc.           All Rights Reserved |
|-----|
|               (1) Archive a disk                    |
|               (2) Retrieve a disk                   |
|               (3) Shareware Information              |
|               (4) Quit                               |
| Use the Up/Down Arrow Keys to Select.              Press RETURN to Accept |
|-----|
| Selection : (1) Archive a disk                       Press ? for Help |
|-----|

```

The "help" key (?) tells you the following about the program. This program allows you to make archives of any non-copy protected 5.25" disk. These archives are stored in normal files that you can place on a hard disk or other large capacity storage device. When you want to make a copy of the disk that has been archived you can easily retrieve it.

By using this program you can eliminate or reduce your need for boxes and boxes of disks and something else. Until now there was no easy way of using a communications program to transmit or receive an entire disk. You previously had to use Binary II to transmit a file or group of files at a time and the person who retrieved the file had to reconstruct the disk. Using this utility you can archive an entire disk to a file, send the file and the other person can retrieve the disk quickly from the archive.

When sending disk archives in this manner you must use XMODEM or Binary II in The Communications Manager (TCM) or other communication programs. Note that the file created by archiving a disk will only contain the blocks that were actually used by the files on the disk. This will usually compress a 140K disk into a smaller size and save on modem transmission time and costs.

The "Shareware Information" key (3) tells you where to send your \$20 check (cash for non-US folk) and what will happen to you if you don't. Bob apparently has Dave Ottalini's cousin Vito (The Knee Breaker) on retainer. Yes, I'm just joshing. But if you use DAR and don't pay Bob his \$20, your conscience will bother you so badly that a case of shingles is the best you can expect. Why take the chance? Pay up. If Bob finds this exercise rewarding, there's no telling what other goodies might be forthcoming.

### Archiving a Floppy Disk

Let's move on to the functional parts of DAR. The first option from the main menu is "(1) Archive a Disk," and it is the default option. That shows Bob's (and my own) bias as a software creator and uploader and BBS sysop and such the like. Which yields my first sniggling criticism. In my years of customer service (or whatever they call my day job), I've learned there are more of them than there are of me. I'd hope there are more DAR downloaders than uploaders, so I'd prefer seeing "Retrieve" as the first, and default, menu entry. But I quibble. Let's see what the archivers are presented with. There are actually four



separate screens that I've condensed here into one figure:

```
| D3 Archiver/Retriever                               Shareware Version 1.0 |
| (c) 1993 by Bob Consorti: ON THREE, Inc.           All Rights Reserved |
|
|               'Archive a disk'
|
|-----|
| Screen 1:
|
|               |
| Highlight the 5.25" disk drive that contains the disk you want to
| archive and press RETURN to select it.
|
|               ---> .D1
|                   .D2
|
| Use Up/Down arrows to highlight, RETURN to select, ESCAPE to exit.
|
|-----|
| Screen 2:
|
| Enter a line of descriptive text about this archive and press RETURN.
|
|-----|
| | ASCIDIF: ASCII Text to DIF Format, Disk 1 of 2   AMB:12/93
| |-----|
|
|-----|
| Screen 3:
|
| Enter the pathname of the file to save the archive to & press RETURN.
| File selection is available by typing a disk or volume name and pres-
| sing the Up/Down arrow key. Use RIGHT/LEFT arrow to select/deselect
| a file, ESCAPE to exit. OA-DELETE (\) will 'pop-off' a directory level
|
|-----|
| | /PRO/COPY/ASCIDIF1.DAR
| |-----|
|
|-----|
| Screen 4:
|
|               Working...
|
|               |-----|
|               |||||
|
| Archive was successfully saved to disk. Press ESCAPE to exit.
|
|-----|
```

The first screen asks for the location of the disk to archive. You are given the option of a 140K 5.25 inch disk in the inboard (D1) or first outboard (D2) disk. Arrow up or down until the one containing your disk is highlighted, then press return. Couldn't be simpler.

This brings you to another nice touch. Screen 2 lets you add a line of descriptive text to your archive. In

this case I entered the program name, a brief description, a notation that it is disk 1 of a 2-disk set, my initials (Vanity, thy name is not necessarily woman), and the date I created the DAR file. The descriptive text line is good for a couple reasons. Apple /// file names can be rather more descriptive than those on Messy-DOS machines, but they can still be a tad cryptic. Text helps figure out what exactly you have. And, in this case particularly, you the user are told that this is disk 1 -- and that you'd best have disk 2 to complete the set.

The next screen asks where to put the DAR file. It uses the latest Apple /// conventions (up/down arrows and such) to select the directory in which to store the file, so you don't have to remember the whole path name. If you selected an inappropriate directory (Eye hand coordination problem?), pressing Open-Apple-Delete will get rid of (pop off) the last sub-directory name you entered. Nice touch, Bob.

Once you tell DAR what you want to do and where you want to do it, DAR presents Screen 4, telling you that it is "working" and showing you by a "thermometer" bar how much of its work is done. Once finished, you press ESCAPE to return to the main menu.

Once the DAR file has been created from disk (Screen 4) press ESCAPE to return to the main menu. If, at this point, you press (4) to exit, you will be asked the following question:

```
| Are you sure you would like to exit? |  
| Press Y to Exit, ESCAPE to Return. |
```

That is a nice touch. Just in case you hit the (4) key by mistake. Good user-friendly programming practice. It could be a real bore to have to re-boot or re-launch DAR for mere lack of eye-hand coordination, yes?

### Retrieving a Floppy Disk From Archive

Now let's look at the function that you, gentle reader, are most likely to use -- DAR's "retrieve" that turns a downloaded DAR file into a disk again. By the way, and I assure you this is no small BTW, DAR is not at all sensitive to the "type" of file you download. You can download via another kind of computer (Intel-Inside, Mac, whatever), a process that is guaranteed to not tag the DAR file with the proper SOS file type, and DAR doesn't care. Neat! Example: I download a DAR file from wherever to my Macintosh, which is a tad better "connected" than is my ///. I transfer the file to the ///. System Utilities shows it as an "unknown" file, type hex-00. A DAR-created file is of the "datafile" or "binary" persuasion, type hex-06.

By rights DAR should not even see any other file type, so you, gentle reader, should have to use a type changer utility to get the DAR file legitimate. Don't believe me? Ever try to get 3EZP to recognize a printer with a read/write driver? Probably not. Trust me then. Bob did a "good thing" when he didn't make you change the downloaded file's type.

The system isn't that friendly. If you download DAR.INTERP itself from a service, you must change its type to "sosfile" before the system lets you use it.

OK, that out of the way, let's see what happens when you want to create a floppy disk from a DAR file. Again, there are several screens that I have condensed into this one figure.

```
| D3 Archiver/Retriever                               Shareware Version 1.0 |
| (c) 1993 by Bob Consorti: ON THREE, Inc.           All Rights Reserved |
|
|               'Retrieve a disk'
|
|-----|
| Screen 1:
|
| Enter the pathname of the archived file to retrieve and press RETURN.
| File selection is available by entering a disk or volume name & pres-
| suring the Up/Down arrow key. Use RIGHT/LEFT arrow to select/deselect a
| file, ESCAPE to exit. OA-DELETE (\) will 'pop-off' a directory level.
|
|-----|
| | .U1/ASCIDIF1.DAR
| |
|-----|
|
| Screen 2:
|
| Archive version: 1.0.
| Archive was made on: Sunday, December 12, 1993, at 10:31.
| User supplied description:
| ASCIDIF1: ASCII Text File to DIF Format, Disk 1 of 2   AMB: 12/93
|
| Press RETURN to retrieve this archive, ESCAPE to exit
|
|-----|
|
| Screen 3a:
|
| Highlight the 5.25" disk drive that contains the disk you want to
| save the archive onto and press RETURN to select it.
|
|               ---> .D1
|                   .D2
|
| Use Up/Down arrows to highlight, RETURN to select, ESCAPE to exit.
|
|-----|
|
| Screen 3b:
|
| Erase the volume /FRED.WHATEVER retrieving this archive (Y/N)?
| Y
|
|-----|
|
| Screen 4a:
```

```

|                                     Working...                                     |
|                                     |-----|                                     |
|                                     |||| |-----|                                     |
| Archive was successfully retrieved.  Press ESCAPE to continue.                   |
|-----|
| Screen 4b:                                                                     |
| To make another copy of this archive, insert a new disk into the               |
| selected disk drive and press 'C' to begin.  Press ESCAPE to return to       |
| the main menu.                                                                 |
|-----|

```

This is looking familiar, I trust? It is almost the reverse of DAR's archive function. The first question (Screen 1) asks for the location of the source DAR file. Once you impart that information, DAR tells you everything it knows about the file you selected and offers to retrieve it for you if you press RETURN. If you inadvertently requested the wrong file, pressing ESCAPE will avoid embarrassment.

Once you have selected the source DAR file, Screen 3a asks you to select the drive containing the 5.25 inch disk as the target file. That drive must be D1 or D2. If you have put a good Apple /// disk into the drive, you'll see the message on Screen 3b, asking if it OK to replace the contents of that disk. If not, fear not. You'll be invited to format the disk before proceeding. Good gravy! Did Bob think of everything?

Once you get the destination drive settled, you get the "working" screen, followed by the invitation to ESCAPE when finished. But here, instead of returning to the main menu, DAR offers (Screen 4b) to make another copy for you. Hot Damn! Gee, I like the way Consorti thinks. It is always a good idea to have at least one backup of every floppy disk whose contents you are fond of. And here is DAR making that easy. You don't have to run the program twice. You don't have to use System Utilities to copy the disk. DAR lets you make a backup floppy without hassle.

### DAR Wish List

There is no program I've seen that is so perfect that I don't have a wish list for future versions. My only gripe about DAR is related to folk that have problems with binary files on the internet. Lots of folks do. It is pretty standard to "ascii-encode" binaries, so the files are straight text. Text files more reliably navigate the various nodes of the internet. Mac has its HQX (binhex-4) encoding, DOS and Unix have UU, and the poor benighted Apple /// has John Jeppson's "codefile transmitter." Remember that puppy?

Dr Jeppson did a pretty primitive job. Two separate BASIC programs, one to encode and one to decode. Instead of HQX encoding (each six bits of input going into a byte of output), he went for the "nibble-to-byte" mode. That doubles the size of the output hexified file instead of adding "only" a third. And of course you must remember the pathname of the file to be converted. And it is slower coming than Christmas.

I don't fault Dr. Jeppson for being primitive. Back in those days, what else did we have? I would like to see HQX for the Apple ///. Maybe even built into DAR. Hoo boy would that be hot stuff! I sent Bob a

copy of the binhex-4 specs. If he sells enough DAR, he might be willing to add that feature to DAR or write a separate program

### **The Bottom Line**

DAR is a great Apple /// utility. It keeps our beloved Sara cooking well into the '90s. I expect the WAP /// SIG will start loading its ///'s Company and TCS file areas with DAR'd files. I know I have already begun loading the InterNet Apple /// archive (anonymous ftp to names.wvu.edu, directory public/apple3) with DAR files. DAR itself is at that archive site as the straight binary DAR.INTERP file. DAR is that unique program. It is a standard.

## *We Get Questions...*

---

*By Dave Ottalini*  
*WAP /// SIG CO-CHAIRMAN*

Boy, do we ever - from new SARAsurs all over the country - sometimes even the world! I've answered many of the same questions so often, I decided it was time to share them with you as well! They are in no particular order but you might find something of use here. As always, if YOU have a question or two, feel free to write, call or post on the TCS or ///s Company WAP.

### ***Are back issues of your Trail Columns available? What about other articles?***

I've been writing articles about the Apple /// for many, many years and all of them are available on disk from the club. We also have many other articles on disk from other groups. My ThreeWorks Shareware disks list more than a thousand Apple /// articles going back to 1980 or so (also available from the club).

### ***Are back issues of old Apple /// magazines and newsletters available?***

I have copies of practically every Apple /// magazine ever published and thus can make available copies of specific articles at very reasonable prices. The WAP library also has an excellent cross-section of Apple // and Apple /// magazines. The club has a copy machine should you wish to copy something. Costs are reasonable.

### ***Is there any public domain software available for the ///?***

The WAP PD library offers some 250 PD disks for the /// alone! A catalog on disk is available from the club. OR try our ///s Company WAP BBS FREE at 301-593-0024 - it offers some 1000+ files for downloading.

The WAP TCS File Download area offers a growing amount of software too.

A new source is the Apple /// Listserve on the Internet. Contact APPLE3-L@WVNVM.WVNET.EDU or LISTSERV@WVNVM.WVNET.EDU and ask to be added as an Apple /// user.

Finally, there remains some good PD software on CompuServe. After you've joined, type in at the prompt: GO APPUSER and you'll be taken to MAUG - The Micronetworked Apple Users Group. The Apple /// board is board 13.

***I'm interested in CP/M – an old operating system for the ///.***

I have copies of CP/M software for the /// but to get the CP/M card and manuals, you'll have to call Sun Remarketing in Logan, Utah. Their phone number is: 1-800-821-3221. Sun has the old Microsoft Softcard (they have lots of new ones available), though (if you can find it) the PCPI Applicard got a better review.

***What's so great about BOS3?***

BOS3 is the newest OS for the /// - it is completely backwards compatible with SOS and all /// programs, but offers a host of great new features for our SARA - including disk caching, print spooling, password protection, fast menu selection, screen savers and much more. It is about \$50.00 from the club - and all the funds go into our Software Development Fund to help produce new programs for the ///! Our next project, in fact, is an upgraded communications program that will offer all the latest transfer protocols, macros, terminal emulations, etc... It is available at a pre-sale discount if you buy now. It won't officially be released till the end of the year (our target date).

***What does the emulation disk do on the Apple ///?***

The emulation disk gives you the option of Applesoft or Integer Basic but NOT both - since your choice is loaded into memory. The basic emulation is 48K Apple ][+ which means it can ONLY run DOS 3.3 Apple ][ programs. Our PD Library offers a number of different versions of the emulation mode, as well as the Titan emulation disks that went with the ///+// or ///+//e cards.

***Is SOS compatible with ProDOS?***

ProDOS was written from SOS (by the same programmer). The file formats are the same, though you can NOT run Apple //e programs (without the Titan cards) on the /// or vice versa . There was never a software-only //e emulation disk, though there was a ][+ emulation disk that attempted to provide something near 64k. All of these are in our PD library.

***Can I use a larger format disk drive on the ///?***

The Apple /// can use the original Profile 5 and 10 MB drives, as well as SCSI drives, the Apple // 800K Unidisk and the Apple //e or Mac 1.4MB "Superdrive". To hook up SCSI, however, you need a SCSI interface card that will fit in the /// and a device driver (which you would have to get from Bob Consorti of On Three - he would also have to set up the hard disk for you). The /// can only handle up to 16MBs so any harddisk over that would have to be partitioned and the driver configured properly (which Bob can do). On Three also sells the drivers for the Unidisk and Superdrive. You must use the //e 800K (Liron) or Superdrive card to run the appropriate Apple drive. Bob has also written a "universal" 800K driver for use with third party 800K units like the Laser drive (which requires its own interface card).

1995 - Bob Consorti has also written a driver for a European-designed card that will work with any MS-DOS 3.5 drive. Call him for details.

***Whatever happened to the Titan ///+//E cards? Are they still available?***

Titan as a company is out of business. A man named Greg Stuk bought out their supply of Apple /// components and for a time offered both the ///+// (a 128K Apple // emulator and RAM card) and the ///+//e (two card set that turned the /// into a true 128K //e or RAM card in native mode). Unfortunately, he abruptly stopped offering the cards and will no longer answer letters or calls. The only way to get the ///+//e or ///+// now is to get one from another SARAsaur.

***What languages are available for the ///?***

There are quite a few, actually: Basic (our version is called Business Basic), Pascal, Modula 2, Cobol, Fortran and Forth. Business Basic, Pascal and Fortran are available in our PD Library at the present time.

***Can a Disk /// be modified to work on the ][? Can Apple ][ cards work in the ///?***

Disk ///s could be used on the Apple II with a modification to the analog card that I can't remember anymore. It basically involved the removal of a chip and installation of a jumper but which one is beyond me. The Apple II Super Serial Card can be used on the ///, Thunderclock. Just about any Apple // card could IF it fit and IF there were a driver for it (for example, the Quickie hand scanner COULD work - IF there were a driver and software to run it in native mode). The mouse card for the //e will work on a ///. We have the driver in our PD library.

***My /// goes into a Diagnostic when I try to turn it on. I have to press <Control>+<Open Apple>+<Reset> to get it to boot.***

The "ON" lamp in your keyboard is burned out, forcing you to do the extra key-presses to start up your ///. Tom Linders in California (xxxxxx@AOL.Com) (408-xxx-xxxx) can help you replace it (see my September Trail column for more information on this).

***I have some sticky keys – what can I do?***

Try spraying some color TV tuner solution from Radio Shack into the offending key(s) and see if that doesn't help. The keys are easily replaceable if you know how to use a soldering iron. The club has extras if you need them.

***What was the difference between the Apple /// and ///+ keyboards?***

The ///+ keyboard is essentially the //e keyboard - that is the only real difference from the original /// keyboard.



***There wasn't all that much difference between the /// and the ///+ was there?***

No - they were very similar. The ///+ had: A more powerful power supply, a battery backup for the clock chip, interlace built in, and the updated keyboard. Nothing else was different, really.

*David Ottalini  
Apple /// SIG Co-Chairman*

If you're an Apple ///er, have a modem and a subscription to the Internet E-mail option on the TCS (or other Internet gateway), you have the ability to talk with SARAsaurs all over the world - for free! All it takes is a message to the Apple /// "Listserver" at West Virginia University in Morgantown. Jeff Fritz, a Telecommunications Engineer for the University set up the "Apple /// Discussion Group" there and handles the "Sysop" duties.

It's easy to get your name listed. Just send an email to Jeff at xxxxxx@WVNVM.BITNET and request to be added to the Apple /// Discussion Group. Soon thereafter, you'll get a message back, indicating you've been added to the LISTSERVE along with the following information:

Please save this message for future reference, especially if you are not familiar with LISTSERV. This might look like a waste of disk space now, but in 6 months you will be glad you saved this information when you realize that you cannot remember what are the lists you are subscribed to, or what is the command to leave the list to avoid filling up your mailbox while you are on vacations. In fact, you should create a new mail folder for subscription confirmation messages like this one, and for the "welcome messages" from the list owners that you are will occasionally receive after subscribing to a new list.

To send a message to all the people currently subscribed to the list, just send mail to APPLE3-L@WVNVM.WVNET.EDU. This is called "sending mail to the list", because you send mail to a single address and LISTSERV makes copies for all the people who have subscribed. This address (APPLE3-L@WVNVM.WVNET.EDU) is also called the "list address". You must never try to send any command to that address, as it would be distributed to all the people who have subscribed. All commands must be sent to the "LISTSERV address", LISTSERV@WVNVM.BITNET (or LISTSERV@WVNVM.WVNET.EDU). It is very important to understand the difference between the two, but fortunately it is not complicated. The LISTSERV address is like a FAX number, and the list address is like a normal phone line. If you make your FAX call someone's regular phone number by mistake, it will be an unpleasant experience for him but you will probably be excused the first time. If you do it regularly, however, he will probably get upset and send you a nasty complaint. It is the same with mailing lists, with the difference that you are calling hundreds or thousands of people at the same time, so a lot more people get annoyed if you use the wrong number.

You may leave the list at any time by sending a "SIGNOFF APPLE3-L" command to LISTSERV@WVNVM.BITNET (or LISTSERV@WVNVM.WVNET.EDU). You can also tell LISTSERV how you want it to confirm the receipt of messages you send to the list. If you do not trust the system, send a "SET APPLE3-L REPRO" command and LISTSERV will send you a copy of your own messages, so that you can see that the message was distributed and did not get damaged on the way. After a while you may find that this is getting annoying, especially if your mail program does not tell you that the message is from you when it informs you that new mail has arrived from APPLE3-L. If you send a "SET APPLE3-L ACK NOREPRO" command, LISTSERV will mail you a short acknowledgement instead, which will look different in your mailbox directory. With most mail programs you will know immediately that this is an

acknowledgement you can read later. Finally, you can turn off acknowledgements completely with "SET APPLE3-L NOACK NOREPRO".

Please note that it is presently possible for anybody to determine that you are signed up to the list through the use of the "REVIEW" command, which returns the e-mail address and name of all the subscribers. If you do not want your name to be visible, just issue a "SET APPLE3-L CONCEAL" command.

More information on LISTSERV commands can be found in the LISTSERV reference card, which you can retrieve by sending an "INFO REFCARD" command to LISTSERV@WVNVM.BITNET (or LISTSERV@WVNVM.WVNET.EDU).

*By Paul Campbell  
Edited by Dave Ottalini*

**FIRST OFF:** /// SIG CO-Chair Paul Campbell is one busy Motor City SARAsaur... but that doesn't mean he doesn't have time for the other joys of life - for instance, he became a Daddy again this summer:

The moment we were waiting for came last Wednesday, August 24 at 2:01 pm... his name is Joshua Paul Campbell and he was 8 lb.10 oz. This means I'll need to work more with the other three, but at least I'll get a break from painting and re-arranging bedrooms! I bit the bullet and purchased one of those "tot trailers", it hooks to the back of a bike so you can haul a couple of kids on short bike rides. It works out well, as my eldest son is 7 and can ride his own bike. The other two (2 and 4) can sit back and make faces at their brother (grin).

## **COMPUTER NEWS 1**

ARGGGHHHH!

Once again my Intel system has found a way to get more usage time. Yes Sir,.. I was running SpinRite to see if it was worth purchasing for myself and it ate my hard drive. I now have a C: drive that has a chunk of its media unformatted, lost WordPerfect, SeedMaster, KeyCad, and my scanner software. It turns out that SpinRite, when you ask it to give an analysis of your hard drive, performs a low-level format that is supposed to be safe for your data. Unfortunately, the drive was DoubleSpaced and SpinRite does not tell you that it is formatting your drive while it checks things out.

It did detect a number of bad areas on the C: drive, most of which it could not repair. It's funny, my hard drive for the Apple was \$10 per megabyte, but it's been used full time since February of 1991 with several thousand files and has never been reformatted despite several trips in the backseat of a car. And yet it has no media imperfections, no bad blocks, no file corruptions, and no file or directory problems. It runs just like the day I first plugged it in, only better now that I've upgraded to BOS3.

For the Intel system, I'll probably plug in a second drive and transfer the software that survived, then reformat. I guess I shouldn't expect so much from such an obsolete OS anyway. Wonder if Bob Consorti would make a version of Disk-Direory-File Fixer /// for the IBM side of the computing world!

## **THE JERNIGAN FLICKERS**

*(Dave Jernigan's /// screen was giving him fits a few months back.. Paul, as always, came to the rescue):*

When your Apple /// screen flickers, do the characters seem to "smear" sideways on the screen? That is one of the symptoms of a problem that seems to be rearing its head at this time in SARA's life. The problem is this: The power supply connectors have become burned or corroded causing a reduction in

power supply amperage... especially during bootup or when external peripherals consume extra power from the ///'s power supply. In addition to flickering or smearing screen characters, symptoms include random lockups, erratic external devices, and fatal \$01 errors. The solution is to remove the Apple /// motherboard and make sure the pins on the power supply connection are clean and shiny. If not, clean all four sides of each pin with a miniature file or similar tool. It may be necessary to replace the power supply connector cable if the connectors are burned. This problem can be caused by age and humidity, a weak connection which causes arching, OR a bad capacitor in the power supply. I've come across three SARA's with this problem these last two months.

## COMPUTER NEWS 2

Upgraded the DOS system recently so I could run a graphics program that I use to play around with scanned images. This one has a color monitor, more speed and a little more space. It's still not able to come close to my old Apple though. The VGA display is nice but the Apple can kill the CPU in both data and graphics manipulation. A sample graphic on the DOS system took over 18 minutes to output the image to the laser printer. I re-created the same image on the Apple in about 15 minutes and then sent it to the printer. The IBM compatible system is connected to the printer via parallel (lpt1), the Apple is using the serial port of the same printer. The Apple finished in 14 seconds.

## COMPUTER NEWS 3

*(Paul reported to us on the TCS in October that he's once again been running circles around SARA's Messy-Dos proponents at work):*

SARA has been solid as a rock and just got done doing a project that knocked my supervisor's socks off (he's still looking for the left one). The task was to take 3 pages worth of material that we need to keep info on 6 different subjects, and make it into something that was functional and organized. SARA and I got it into a layout that looks neat and attractive, and fits on ONE sheet of paper with room to spare. Maybe I'll upload the form after we get through the final tweaks.

Speaking of tweaking, you know that game of Star Trek for the ///? It's fun to have a game that really makes you use your noggin. The only thing that bothered me was the short range scanner display which showed the Enterprise as an "E", Klingons as a "K", ect. The results of my weekend of working on this game are obvious before you even engage the Warp engines. The game code has been modified and a new character set has been created which allows the game to display the ships on the scanners as they would appear from an overhead view! Not sure if I'm satisfied with the appearance of the Klingon ships, but the Enterprise seems just right. Got new stars, Bases, and sector markers too... I also patched a problem with the Galactic Memory map displayed by the onboard computer that would make the map difficult to read. Only remaining problem that we need to solve before going public is "?SYNTAX ERROR IN 4100" when accessing the ships communications.

(We'll look forward to this new version of Star Trek - and hope Paul will have uploaded it to the TCS by the time you read this.)