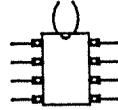


# South Bay Users Group

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## DYNAMIC MEMORIES

APRIL

88

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12 CLUB MEETING	13	14	15	16

DEAN SEVERNS ON 286 HARDWARE  
FRANK GOTTSCHALK MEMORIZES THE  
MODEL 4  
BERNIE THOMPSON TRIPS TANDY



---CONTENTS

- 3 FINANCIAL REPORT by Treasurer Henry Schulze
- 4. MODEL 4 MEMORY by Frank Gottschalk
- 8. Q-DOS II A REVIEW by Editor
- 11. HARDWARE AND PERFORMANCE DIFFERENCES BETWEEN THE 286 AND THE 8088 & 8886 by Dean Severns
- 12. WELCOME TO THE WORLD OF WINDOWS by Dean Severns
- 14. RADIO SHACK SAGA by Bernie Thompson

LOOK PAY ATTENTION \*\* The next SBUG meeting will be held at the Saratoga library. The meeting dates will be as follows: April 12th, May 10th, and June 14.

The time of our meetings is constant // 19:15, otherwise known as seven fifteen P.M.

COMING EVENTS: In a state of nebulosity.

\*\*\*\*\*

MEMBERSHIP

If you wish to become a member of SBUG and start receiving our newsletter DYNAMIC MEMORIES then send a \$20 check or money order to the following address:

SOUTH BAY USERS' GROUP  
P.O. BOX 60116  
Sunnyvale, CA 94088

Or come to one of our meetings. We also perpetrate a bulletin board to which you will have access as a member of SBUG.

\*\*\*\*Special note: Available from Bernie Thomspson, librarian, \*\*\*\*  
8OMICRO Quarterly disk--Jan, Feb, and Mar. 1988

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If the need arises feel free to give anyone of us a call.

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THE EDITOR'S BYTES AND BITES

I HAVE CONTRIBUTORS!!! See pages 4, 11, 12 and 14. I see a bright future for these novitiates in the newsletter world. Under my editorial guidance they will become stars in the computer literature firmament. Stars whose gleaming will never evanesce. Or am I exaggerating? They sure look good to me.

This issue of DYNAMIC MEMORIES is put out using FIRST PUBLISHER completely. I know the program well enough now to turn out a really good job starting next month. One of the problems with FP is that it has its incompatibilities with DESQview. Or vice versa. It would be interesting to see if Microsoft WINDOWS does better. The trouble is obviously with the graphics because FONTASY has a few problems too.

To give an example, the snapshot feature (taking graphics from another program to FP) sometimes doesn't work and I have to go out of DV to do a graphics transfer. I haven't identified just what does this yet. WORD PERFECT will be out with this feature soon and it will be interesting to see if the same thing goes on. As it is, WP working from the Shell (as I always do) has a minor, solvable problem with DV.

Now that I have DESQview I wouldn't want to be without it. On the other hand it is a barely acceptable substitute for a DOS.

## THE 386 REVEALED (ALMOST)

I have now accustomed myself to working with DESQview and the 386. I have a pretty good idea of what the 386 is capable of and frankly DESQview is just a stopgap. In order to *REALLY* take advantage of the 386 a DOS will have to be written for it and carefully debugged. You know that that's a couple of years down the line.

The 16Mhz speed shows up when pure DOS functions are invoked. When the processor goes through video RAM the speed is only barely appreciable because the video RAM is slow. For a while I had MACE's EEMS RAM disk working and that is a rocket. Oc casionally I am running one DOS function and in the few seconds it takes to do that I set another function running at the same time. It's kind of nice.

Basically I use DESQview to go from one program to another without having to go through DOS. There is a caveat with this. DESQview has its incompatibilities. It has trouble handling graphics programs. If I go from FIRST PUBLISHER to another program FIRST PUBLISHER hogs the screen. There is a solution to this. DESQview has a function called "Hide" and another called "Put Aside". Either of these may be used when working with a hog like FIRST PUBLISHER.

"Hide" simply removes the program from view (It may be brought back at any time via DESQview). "Put Aside" will put the obstreperous program on HD or RAMDISK where it will not conflict with the current program.

Windows have been a sensation with the tech writers ever since they appeared. So far they don't do a thing for me. As a technical tour de force they're impressive. My question is, what do windows do for ME? Presumably one puts two (or more) windows containing different programs on the screen and compares the information in them. Using DESQview one could then take the information from one window to another, possibly observing the result the changes made in one or each of the windows.

To date I've never had the need to do this. Have you? Even the process of taking information from one window to another is (as it has to be) a rather heavy and involved process. Judge for yourself from the command sequence below.

From the DESQview manual:

Tap the DESQ key, then select the program from which material is to be selected.

Tap the DESQ key to redisplay the DESQview menu.

Select Mark by typing M.

Using the arrow keys position the cursor on the first character of the program you wish to transfer.

Select Mark Begin by typing B ("1" appears in reverse video. Now as you move the cursor a reverse video rectangle will follow you until you complete the lines you wish to transfer.

Move the cursor down until you have included all you wish to transfer.

Move the cursor to the right until your transfer material is enclosed in the rectangle.

Be sure you don't leave any of the desired program outside the rectangle.

Select DONE.

DESQview remembers the text you marked. Then the reverse video rectangle and the Mark menu disappear.

NOTE: Although this page appears in sheet 3 location, read it as page 11a. (after page eleven). Frank Vanslager has 2 Model 3's available for \$100.00 each (negotiable).

## MODEL 4 MEMORY+

by Frank Gottschalk

(Winner of the golden screwdriver award)

This is a sequel to my previous article about putting expanded memory into my two model III's. In case you missed that article, I installed 768K of memory from Alpha Technology about a year ago. It installed easily and worked beautifully right away. My first step was to put in double sided 360K drives and switch to LDOS 5.3 to use the drive capacity, extend the useable date to 1999, add the convenience of the Key Stroke Multiplier program and gain the use of TED the text editor program which I found very useful.

I use the 768K as a RAMDRIVE for 550K of programs including SuperScripsit and Profile III+ for word processing and an invoicing program. It has been working fine for almost a year now. Once loaded, all automatically at boot up (11 minutes to load). It runs **FAST**, calling up documents and programs from memory and with programmed KSM keys switches to various parts of the Invoice program and SScrip documents very quickly. I believe it is faster than a hard disk and at the time, less expensive. It cost me about \$300 per machine versus the \$900 a hard disk and controller would have set me back at that time. Hard disk drives of course have come way down in price and capacities are way up but mine is internal and easy to use and move around..

Now, on to the Model 4 version. This was a calico cat of another color. It has been a long ordeal to get it going the way I wanted it to work, **NOT** due to the memory installation but the programs and not the way I **wanted** it to work.

The idea of going to a Model 4 was to double (or triple) the already fast Model III operation. Again I installed double sided drives which by now was incredibly easy and changed over to LDOS 6.3. This time I got the full meg of memory which installed quite easily in about four hours with the removal of several small capacitors around the memory banks, the cutting of a few traces and soldering in ten jumper leads. True this precludes the use of Radio Shack service in the future, but for the price and the reliability of the Model 4, well worth the time.

I ordered the 6 Mhz. speedup kit also but have not received it yet. Does anyone know of any other available speedup kit for the Model 4 that will run with my memory? Actually I think it is fast enough already. I can't stay ahead of its operation as it is even using the Typeahead feature.

The first problem I encountered was that the RamDrive would not install properly like it did so easily on the Model III. After several tries by Anitek, the RamDrive software people, they succeeded in getting it loaded but not as controllable as the Model III. I could not for the life of me get it to set up the RamDrive, load the system files, and then my system programs. I had to set up the RamDrive, it then loaded the system files but immediately aborted my AutoStart program. It required a second Keystroke command to complete the program loading. Well, as someone said, I would have to make some compromises.

Problems really emerged when I started to run the programs. Some of the problems came from my own stupidity, mistakes, or just lack of knowledge. I tell you all this in case you want to go this route with your own machines or if you're having trouble with said machines with certain programs even without added memory. My first problem was with Profile 4. It didn't run with LSDOS. I found out from Mysosys that I needed Profile 4+! (Why must they have

## DYNAMIC MEMORIES

APRIL

+ 's and -'s and 6 4's and 999 31 aZ's?) I procured a copy of this thrice blessed Profile 4+ but it hung up when I was doing the setup procedure. After hours of trying and dissecting it turned out that it had a bad file in it!

More hours of phone calls finally found me a good replacement. It ran just fine by itself and I soon got it set up just the way I wanted it. All set no, right? Just put it on my system disk and load it into RamDrive. **WRONG!** It locked up the minute I put it in with my Keystroke Multiplier (which resides in high memory). A few calls to the Small Coomputer Company that wrote Profile confirmed that Profile 4 does not respect high memory like Profile III did. Now what? I already had about 20 Keystrokes programmed in. More conversations with various members of SBUG. (It pays to belong to more than one club) I found that if Keystrokes are kept small enough Profile 4 would not crash into them. How small? 256 bytes and here was I with about 1350 bytes programmed in! Well, a little reprogramming cut it way down. I cut each Keystroke to "DO X" and made a separate JCL file to do what I wanted to do. A call to the memory supplier, Alpha Technology, saved the day. I sent them a copy of my programs and they patched Profile 4+ to respect my Keystrokes in high memory.

The next feature I wanted to install was DoubleDuty so I could jump back and forth between word processing and invoicing. Easy, just load it and call it up. **WRONG!** It locked up my SuperScripts! Oh, well, more compromise.

Well, how about a Keystroke calling up a JCL file to get me into the Profile invoice program up to the record # prompt, or the customer code prompt, which I could type ahead while it was getting into the program? Easy, just build the Keystrokes into the JCL file and DO it. **WRONG! AGAIN!** The JCL lost accurate control. It worked sometimes but not always. Misosys Typein Utility to the rescue! Nothing. I just couldn't get it to work for beans. More compromise.

After many hours of trying and rereading the instructions I finally got the hang of it. Some more experimentation and suddenly I could get the RamDrive to install, load the system files and continue on and merrily load all my 550K of programs! I did this by making my AutoStart program use Typein instead of a JCL.

More playing around with DoubleDuty and Profile showed me that if I loaded DoubleDuty first and then Profile that Profile would then respect a large chunk of the high memory in use. And what about SuperScripts? Forward! Load DoubleDuty first and it was O.K.

My nine month bout with my Model 4 upgrade was making progress and I was winning. Now what?

Let's get some faster **LETTER QUALITY** printer(s). (None of this dot matrix "near letter quality" stuff for my wife...) I found a good deal on a Diablo 1650 Daisy wheel printer with keyboard that would print twice as fast as the Radio Shack DWP210's we had. Okay, but it needs a driver. Okay, Alps in Colorado sells them. Okay, order one. It arrives and I install it. Let's print a document with it, Okay? Wrong, it won't right justify while doing proportional spacing. This is one of the primary requirements and the reason we have stuck with SuperScripts so long. After after several driver modifications preceded by numerous phone calls and the sending of sample printouts, they finally got it right.

Now I needed a cut sheet feeder to speed up the printing of multi-page documents obviating the need to stop printing to load each sheet manually. I scrounged up one of those too, made the interface cable and Voila! it worked

In the process of scrounging I found a good deal on a Diablo D80IF printer with dual bin sheet feeders built in. Great!

## DYNAMIC MEMORIES

APRIL

And of course being as they are both Diablos the drivers will be the same? **WRONG! AGAIN! ONE MORE TIME!** It required a different driver. I am currently waiting (patiently) for Alps to get it right after four tries.

You might know that just after buying the D80 printer, I won a Diablo 635 printer in a raffle. I bought three cut sheet feeders for it at an auction. Anybody need them?

Okay, now I've got two fast printers (really three), so I picked up a switch box at a swap meet for \$20. I added the internal buffer to the D1650 and now use the buffer I had for the DWP210 for the D80. Now I can really fly, right?

**RIGHT!!!!** This time anyway.

I forgot to mention in all the excitement that my Model 4 came with an external 80 track 720K drive. I dragged it out, put my 550K of programs on it and left them there. Why not add a second one so that I may easily backup all documents to it in chronological order? Great Idea.

I bought one from a more than helpful South Bay club member and plugged it in. It didn't work. It kept telling me "no disk". I took it back, we plugged it into his system and it was fine! Oh, boy, now what? Well, he gave me another, fully tested before my very eyes. I went home and plugged it in. It wouldn't format any disks for me. All bad tracks, it said. I took machine and drive to an east bay 1/11/14 meeting. One of the members had another drive to try. It didn't work either. It appears my Model 4 has a problem. Bad controller, maybe? Well, another very helpful member there started investigating the problem with various approaches and suddenly it started working. Nobody knew why, but it did. I took it home and it worked well for an hour. Then it gave me "a directory read error" just after I had re-formatted my backup system disk to make sure that it was good to make an updated backup. It blew my only good system disk!

Back to the original supplier with the blown disk for some surgery. He was able to resurrect my disk minus four files which I did have some original copies of. I'm sure he was getting tired of my problems by now, but he gave me a third drive of a different make AGAIN fully tested before mine eyes. I got the same results as before on my system. I took my whole system to his house and it worked fine on his family room floor. What's different? I've got a cordless phone at home that chirps sometimes while accessing my drives. Maybe that could be it, RF interference. I went home and unplugged the phone. I got the same, familiar results after a few disk operations. Okay, I've got a controller problem. It won't work with a second external 80 track drive. Maybe I've got a heat problem occurring after my system has worked a certain period of time. Radio Shack won't touch my system with the extra memory installed. Well, let's do some swapping around. The controller works fine with my original drive as #4. I swap it to logical #3 and put the new drive as #4. The original drive works fine and the new drive is still flaky. Sigh of deep relief. My controller is Okay.

Then I went to testing for heat problems. Nothing positive. Now what? I talked to another East Bay club member who also has been more than helpful in my crisis (but was also the cause of some of it) and he suggested more swapping around of drives and systems. I took my whole system to his place and spread it out on his floor for easy access. We got mine to malfunction and started swapping. One of his drives worked fine when plugged into my system and my drive malfunctioned when re-plugged in. I've been using his drive heavily now for a week, error free. Maybe my system had a problem, but it sure works great now, something it wouldn't do with three other drives. Perhaps some signals are weak or marginal (and perhaps on their way out) and I finally lucked out with a drive that can work with

## DYNAMIC MEMORIES

APRIL

them anyway.

Only one vital and truly key thing is left now. The great shortcoming of working with RAM is that all is lost during a power failure or an inadvertent shutdown. (How well you know!). To solve this, after a Scripsit document is closed, one Keystroke automatically saves it to disk directly to the invoice program for billing update. At lunch break and at the end of the day, a different Keystroke saves all memory documents to the large external disk as a chronological backup and the latest invoice updates to the boot disk for next day's loading.

A clue for you SuperScripsit fans as to how fast this system is. This 2500 word document was proofed with the dictionary in 37 seconds. The slowest thing as always is unloading to the disks. I've tried some fast loading programs but they either don't work the way I used them or really didn't save that much time.

What have I got after this long ordeal? What did it cost? Well, I've got a tried and tested Model 4 running at 4Mhz (soon to be 6 Mhz) that I can't stay ahead of even with the Typeahead going, with 1 Megabyte of memory used as a superfast RAMdrive that holds my 550Kb of programs including SuperScripsit and Profile 4+ with all its invoice data for 70 clients, as well as the Dictionary with room to spare.

It runs under LSDOS 6.3 with about 20 keys programmed in the Keystroke Multiplier and switches back and forth like lightning between two documents or the invoicing program with DoubleDuty. I have two external 80 track drives, one to hold all the working programs for loading, and one to hold an automatic chronological backup of all documents worked on. It all loads automatically after date insertion, including setting up the Supermem RAMdrive, then loads all the programs and comes up in SuperScripsit Open Menu. It takes 3 1/2 minutes to load.

Hooked up to this are two Diablo 40+ CPS Letter Quality Daisywheel printers, both with buffers and cut sheet feeders with a selector switch between them. Both of these can be printing while working on a third document or updating the invoice program. Agreed, it's pretty specialized but certainly does a job, and *fast*.

The cost? Well, the Supermemory and its software and selftest programs were about \$300.00, compared to about \$500-\$900 for a 5 meg hard drive at the time I started this project a year ago. I picked up both printers for \$550 plus \$100 for the two drivers and \$20 for the switch. The Model 4 with the two external 80 track drives totaled \$500. The D1650 internal buffer was \$50 and the external buffer I already had cost \$120. The total cost then, counting from scratch, was \$1590 and lots of frustrating time to get the programs debugged and the system set up the way I **wanted it!!!**

I could never have done it without the endless help from several members of both the East Bay Nybblers and South Bay Users Group. I thank you all for your help and am thankful that you and the clubs exist. I hope that someday I'll catch up with you (technically speaking) and be able to help you out as you have me. Thanks again.

**Editor's notes:** It's nice to have a contributor and nice to have this type of input which has been woefully missing from DYNAMIC MEMORIES since I became editor. Coincidentally, what Frank has done here, i.e., souping up the Model 4 was something I thought long and hard about. As you can see, for the money he has invested he has system superior in some ways to the 16 bit-ers. If you want to do a specific job without wearing out your wallet pocket, this is certainly the way to go. Not every one has his perseverance and enthusiasm, much less his persuaviveness. I'm not sure I want to be around him too much. There's no telling what he might convince me to do.

## QDOS--A REVIEW

by Editor

QDOS is a DOS utility-substitute like XTREE and PCTOOLS. Until recently I used nothing but PCTOOLS. It is easy, it is competent, it has no bugs. Then I began using XTREE a little and found that XTREE was somehow handier. Or was it just the attraction of a new girl on the block?

Then at the most recent swap meet a fellow in the restaurant (where they sell the beer) was bragging up the advantages of QDOS, more properly QDOS II. I thought about it a while and finally concluded that Gazelle systems, the purveyors of QDOS II, probably don't station people in swap meet restaurants (where they sell the beer) to hymn the glories of their program. Maybe this guy had something. People who hang out in restaurants (where they sell the beer) sometimes do. And sometimes don't.

Actually someone had put QDOS II on my hard disk and I had tried it a time or two and didn't like it so I erased it. Now I went out and bought it. That doesn't make any sense to you and it doesn't to me either, but then you don't read this newsletter because you expect me to make sense and I long ago stopped trying to make sense to myself. Too much trouble and too many explanations.

It's a good buy and the best of the utility programs as far as my knowledge goes.

If I have XTREE and PCTOOLS why would I change to QDOS II? Gazelle Systems, the owners of QDOS stress its speed and it is fast and handy as well. Faster and handier than XTREE and PCTOOLS? Yes. Below you will find a copy of a QDOS screen. It is largely self explanatory as a good utility should be. If you have to be studying a manual to understand a disk management utility, why not use DOS?

This is the principal advantage of PCTOOLS. One look and you've got it. QDOS on the other hand will take the average (if I may be accepted as average) computer user a half hour's study to get the hang of it. Not much time for the advantages it offers. There is a help file available if you should forget your study of the manual. I will get into the specifics of QDOS in a minute.

The one peculiarity of QDOS is that there is no "format" command. It can be accomplished if you have "format" in a directory. I will quote from the manual:

**DYNAMIC MEMORIES**

**APRIL**

Directory Tag View Copy Move Find Erase Rename Space Attribute Print  
 Change current directory, make or remove directory, see directory tree

PATH >> C:\QDOS

Count	Total Size	File Name	Size	Date	Time
5	222,849	PENCILA	<DIRECTORY>	3- 9-88	7:40p
		QD2 .EXE	74,752	3- 2-88	2:12p
1		QD2 .HLP	97,998	3- 2-88	2:08p
		QDCOLOR .COM	7,091	3- 2-88	2:08p
0	0	QDSTART .EXE	23,040	3- 2-88	2:08p
		QED .EXE	19,968	3- 2-88	2:08p

F1- Help	F2- Status
F3- Chg Drive	F4- Prev Dir
F5- Chg Dir	F6- DOS Cmd
F7- Srch Spec	F8- Sort
F9- Edit	F10- Quit
SPACE BAR- Tag file	
ESC- Abort Command	

Q-DOS II -- Version 2.00  
 Copyright (c) 1986  
 HAZELLE SYSTEMS - Provo, Utah

**F6-DOS COMMAND**

This command allows you to access the DOS prompt line so that you may enter any DOS command. This allows you to execute any DOS command or application.

"If you need to access the DOS command line, simply press the F6 function key. This will display a DOS prompt (if using drive C, the prompt will be "C>" in the place where Q-DOS II normally lists the path of the current directory.

"Upon selecting the F6 command, the command line appears near the top of the screen and a cursor is displayed allowing you to enter the desired commands. The lower lefthand side of the screen displays the special function keys that work with this command. At this point, you may enter any command you wish (i.e. execute a program, perform a CHKDSK or DIR on a disk, etc.)

"The function keys are redefined to make entering these commands easier. F2 will type the highlighted file name (not including the extension) on the command line. F4 will type only the extension of the highlighted filename. F6 will type the filename complete with its extension. This allows you to run programs files and combine them with selected data files.

"Pressing F8 will immediately put you into DOS; if you use this function key, you must type "EXIT" to return to Q-DOS II. [NOTE; The command actually runs another copy of COMMAND.COM on top of Q-DOS II. Q-DOS II is still in memory, taking up part of RAM. If you need all or part of the RAM, you should quit Q-DOS II and then run your other programs. Then, when you are finished, type "QD2" to get back into Q-DOS II.]

"For example, suppose you wanted to find a word processing document and use the word processor to edit it. You could use Q-DOS II to quickly find the document. After the file is highlighted, you would then press the F6 key. After the DOS prompt is displayed, you would type the command to execute the word processor (i.e. "WP"). Then, by pressing the F6 key, Q-DOS II will type the full filename for you (i.e. "LETTER.TXT") so that all you need to do is press RETURN. This offers you a simple way to compose whatever DOS command you need quickly and easily, without having to type the full filenames. [NOTE; See also the F9 - Edit command)

"Another example would be to have Q-DOS II find the FORMAT command. After highlighting it, pressing F6 would bring up the DOS prompt, pressing F2 would will display the first part of the filename (i.e. "FORMAT") and all you then need to do is insert the proper drive designation (i.e. "A") and press RETURN."

Easy to learn and easy to do. At the same time it shows a proper respect for the FORMAT command. One is unlikely to format the hard disk following this method. I keep FORMAT in my UTIL directory, Bernie Thompson keeps it on a floppy. I know one fellow who won't have it in his house. When he has to format a disk he has to borrow it from a friend.

But on with the handiness of Q-DOS II. The screen is, as you have seen, very informative. All the information you need under most circumstances is instantly available and perfectly organized.

Most of the features available in Q-DOS II are also available in other utilities. They are handier in Q-DOS II, more at hand as it were. The most unique feature of Q-DOS II is Q-EDIT.

Q-EDIT allows you to write edit files, it also takes the place of Edlin for writing .bat files. Below I list the commands available in Q-EDIT so that you may have an idea of its power and flexibility.

Again (Repeats the last Find or Replace command.)  
 Buffer (Puts the designated block of text into the buffer.)  
 Copy (Inserts the contents of the buffer)  
 Del (Same operation as buffer)  
 Edit  
 Find (search for any text string)

This should give you a pretty good idea of why I like Q-DOS II and have made it my DOS utility of choice. If you're inclined to disburse the shekels you will probably spend fewer at:

Warehouse Data Products  
 2701 West Glendale Ave.  
 Phoenix, AZ 85051  
 Tel. 800-421-3135

\$49.00 plus shipping and handling.



#### HARDWARE AND PERFORMANCE DIFFERENCES BETWEEN THE 286 AND THE 8088/886

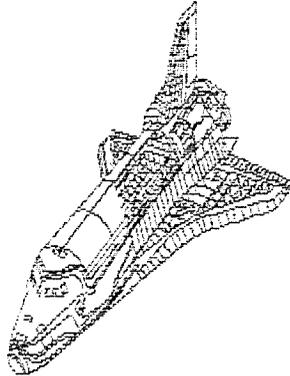
by Dean Severns

The main difference between the 80286 and the 8088/8086 is that the 80286 has a protected mode of operation where the processor itself can keep track of multiple programs and allocate a small amount of time to each one (Multitasking). In order to handle all these programs the processor was designed to directly address 16 Megabytes of memory. If you were to buy all that RAM \$5 a chip it would cost you \$2812!! The other major difference is that an 80286 can run up to 14 Mhz due to the very large scale integration of circuitry onto the chip. However, most of the high speed clones specify perhaps 12 or 13 Mhz with one wait state. However, I would recommend the more reliable 10 Mhz with no wait states, which has an equivalent throughput of 13.5 Mhz with 1 wait state. The only problem I have found with this high speed is that you need 100 ns. or less 256K DRAMS which run \$5.00 each.

How does a Norton rating of 11.5 strike you? If Norton ratings are not in your vocabulary it means that it runs 11.5 times faster than a standard IBM PC running at 4 Mhz. To put that in a little better perspective, a VAX 11/70 minicomputer only runs about twice as fast. You can get even closer by adding the 80287 math coprocessing chip for about \$250.00.(8 Mhz versipn)

I was going to conduct a few time trials but the magazines are already filled with them and since Mr. Lee has shown us his even faster 80386 machine, it wouldn't be much of a service. Nevertheless, let me tell you this. If you ever get a chance to use one of the faster machines, you will never want to go back to your XT. Having instantaneous response to your keystrokes makes computing fun instead of chewing away at your patience.

## Welcome To The World Of Windows!



This is not a paint program. This picture is contained within the full featured wordprocessor Write. It can be moved or sized and if necessary cut out, pasted into Paint for *changes* then cut and pasted back into Write.

The text below was originally created with Word Perfect using all of it's capabilities for spell checking and the Thesaurus. I should make it clear that this program is Windows Write and not Microsoft Word which has greater capabilities than this simple wordprocessor. However, this program does support Word disk files and can convert or save in Word format.

### NEW KID ON THE BLOCK

I purchased an IBM AT clone, (10MHz, 0 Wait States) last August to upgrade from my TRS-80 4P. I knew that most of the club had migrated to MS-DOS, but I was a little surprised to find out that I was one of the very few to have an AT. The subject arised when a club member was giving a demonstration of Microsoft Windows. We were disappointed at the stow operating speed of the PC he was using. We were hoping that Windows could at least run two very simple BASIC programs simultaneously with decent speed. Hence, for any kind of serious graphics work you would need an AT.

With IBM's switch to the new PS/2 line and the hint of a fascinating operating system called OS/2, a few of you may be considering the purchase of an 80286 machine or just a board that allows you to run an 80286 in your current PC. Thus, Chris Oman and Bernie Thompson suggested that I give you a little taste of what a high speed 80286 can do.

## DYNAMIC MEMORIES

APRIL

To transfer the information:

Tap the DESQ key then type the number of the window you wish the information transferred to.

Move the cursor to the point at which you want the information to enter.

Tap the DESQ key.

Select transfer

The transfer menu appears.

Press enter.

As you can see you are not going to go through all this to carry a couple of numbers from a data base program to a spread sheet or a name from a word processor to a spread sheet. Even granting that continual use makes an expert this would only be for rather large transfers of material.

I will repeat a point that I have made several times. Integrated programs are a thing of the past. I can go as quickly from spreadsheet (possibly more quickly and more easily) to word processor to data base than any of the integrated programs do. I have the best programs at my reach, not whatever happened to be included in the XXXX integrated package. Most of them were notorious for good spreadsheets, mediocre data bases and poor word processors.

I will give you a report on TSR's in the next newsletter. To an extent, they too are outmoded by the 386. As I am continuing to work with DESQview and the 386 more things will come to light and you will be kept up to date. Again I say, most of you will switch to the 386 within the year.

## TRIALS AND TRIBULATIONS OF AN EDITOR

Some of you may think that the above title is a little too gross and exaggerated for the subject matter. Not at all. Listen to my plaint.

What indescribable joy when I received a 4 page contribution from Frank Gottschalk. Better still it dealt with Model 4 hardware, something not seen in these pages for lo! these many moons. And best of all it came on a disk and I would not have to laboriously, painstakingly type it in.

Oh, no? The disk was in Model 4 format, ASCII. I used HYPERSOFT's PCXZ to transfer the material to WORD PERFECT on the 386. WORD PERFECT choked on it. When I tried to bring it up on the screen it kept asking me if I wanted to hyphenate. No I didn't want to hyphenate, not ten times in a row.

So I put ELECTRIC PENCIL back on my hard disk. ELECTRIC PENCIL will eat anything. I loaded the article into ELECTRIC PENCIL, edited out the strange characters and took it over to WORD PERFECT. I spell checked it, did some more editing and then decided I was going to put it in FIRST PUBLISHER. I was still having trouble understanding FIRST PUBLISHER and wound up typing it in. Oh, well.

On that note I will tell you that this whole newsletter had been produced with FIRST PUBLISHER. If there seem to be some odd changes, a certain schizophrenia, it's because I had a little trouble getting used to FP. I'm getting the hang of it now. I feel that future issues of your newsletter will be of a very professional quality. Maybe that will inspire more of you to contribute. Remember, be courteous to your editor, for if you are not:

I will publish the newsletter this way.

**RADIO SHACK SAGA  
OR  
IF THE COVERED WAGONS HAD BEEN LIKE THIS  
THEY NEVER WOULD HAVE GOTTEN ACROSS THE PLAINS**

**by Bernie Thompson  
[slightly edited by Joel Lee]**

This is the history of a modest Model 4. The mother board (SOB) was replaced last year because of a bad printer port in a Model 4 gate array version. This was done by Radio Shack at their Hayward facility. The machine had to be returned the first time because it went to them with 128K memory and they returned it with 64K.

The machine was given to the author for repair because it would not boot. The following is the chronological history (comedy?) of the repair.

03/09/88. Found no clock on Z80 CPU, traced to no output (nor crystal input) of u9 (4.1 chip). Found cassette plug jammed (unplugged) behind mother board. Found resistor (1 K) in series with crystal to pin 2 of u 9 soldered on back of board and jammed in by nearby screw.

By chance board operated when pressured near resistor and schematic diagram shows no resistor in this circuit.

Called Hayward service center and was told they could not do anything even though they had replaced the mother board. Call Fort Worth, they said.

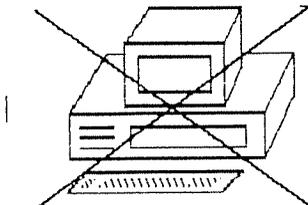
Contacted Cindy at 817-338-2394. She was very helpful and called back with the information that a 1K resistor was used if the 4.1 chip was manufactured by VTI. If the chip was by MHS or had no marking at all, a resistor is NOT used. Your acute and agile intelligence has already divined that the chip is MHS. The 1k resistor was removed, replaced by a jumper wire and the board worked like a champion.

In my opinion, these inconsistencies in manufacturer's circuit plus the unconnected plug should not have been present. It would seem reasonable that TANDY/Hayward should be held responsible for these repair costs.

For the engineers in the crowd the "u" stands for U

**POOR MODEL 4**

(To be sung to the tune of Poor Butterfly--words will be published next week)



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FIRST CLASS MAIL