

Jr Newsletter December 1987

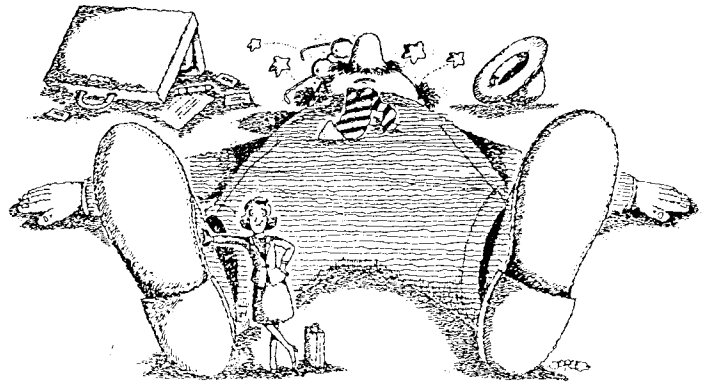
Computer Obsolescence Is a State of Mind

Flipping through the pages of computer magazines you can easily spot advertisements which offer something like the following: "Quantus Turbo XT — Monochrome monitor, 20Mb hard drive, 8088 running at 4.77-8MHz, 640K RAM, 8 expansion slots, text/graphics card, speaker, 360K floppy drive, 84 key keyboard, 150 watt power supply. \$795 complete."

As a PCjr owner, that amount of computing power for less than \$800 may cause you to salivate a little. Particularly if you are now doing your computing on a 128K single disk drive IBM "Peanut" that cost you in the neighborhood of \$1,000. (Which is what PCjrs were going for a few years ago.)

Just think of it, for a mere \$800 or so you could have the vast storage of a 20Mb hard drive, the blazing speed of 8MHz at the flip of a switch, expansion slots to add all the peripherals you could ever desire. Your left hand may creep toward your wallet with its credit card while your right reaches toward the phone. Would it be a mistake to call that 800 number and have the Quantus Turbo XT sent winging to your doorstep?

As you might expect from an article in a newsletter devoted to PCjr users, we think it might very well be a



"I just told him I prepared my sales reports at home on my PCjr!"

mistake to trash your PCjr and spend \$800 on an XT compatible.

We admit our bias, and we don't mean to suggest that the XT would be a mistake for everyone. If you have the money to spend and if you really need all the extra storage, speed and features of a more powerful computer, then the decision to buy an XT clone may be justified.

But many people, though dazzled by megabytes of memory and speed don't in fact need that much computing power. Most of us haven't even used our PCjrs to their fullest capacity — which is equal to that of a PC, perhaps even an XT, once your PCjr is fully expanded.

Even though the PCjr was orphaned two years ago and more powerful computers now cost less than our computers did, is your junior obsolete? If you have to do the bookkeeping and payroll for a company with 100 employees it might be.

But the PCjr serves the needs of many computer users very nicely. Thanks to its excellent built-in features, which cost extra on most computers, such as color graphics and three voice sound, true IBM compatibility in its 8088 cpu, (which is identical to the PC's), and thanks to the people who have developed ways to expand its memory, speed, storage capacity and other features, the PCjr is quite capable of fulfilling most people's computer needs more than adequately.

True, the PCjr with its much derided "chicklet" keyboard and its ungainly sidecars was an embarrassment to its maker. But many of us feel IBM was too

Continued on page 14

INSIDE

The Versatile PROMPT	2
Questions and Answers	3
How PCjr Cartridges Work	4
Reader Feedback	5
Tips on Using Wordstar	6
A File to Simplify Your Life	7
Shareware Sidekick Clone	10
PCjr's Connector Ports	11

PCjr Lives!

The Amazingly Versatile PROMPT Command

By Al Sexner

The PROMPT command is one of the most versatile and fascinating commands in DOS. It can tell you the date, current time, path, drive, issue a personal message instead of the usual A >, and when used with ANSI.SYS, it can change screen colors, redefine function keys, and position the cursor wherever you wish.

The syntax for the command is: PROMPT prompt-string is the text you use to define the new prompt. The new prompt stays in effect until you issue the command: PROMPT, without any parameters, this brings you back to the standard A > prompt. To see what your PROMPT is at any time just issue the command: SET. This will display the current PROMPT text.

If you want to start your prompt string with a character that is normally a DOS delimiter, such as colon, semi-colon, blank, comma, etc., you must precede it with a null metastring. This mysterious sounding bit of high tech language simply means a \$, plus any letter of the alphabet that is not a prompt command, such as \$A. This causes DOS to ignore the metastring but accept what follows as text and not a delimiter.

The basic PROMPT commands are:

CHARACTER	WHAT IT PRODUCES
\$	\$, the dollar sign
_(underscore)	moves to first position of the next line
b	the vertical bar
e	the ESCAPE character (CHR\$(27))
d	the DATE, like the DATE command
h	a backspace (CHR\$(8)), erases previous character
g	>, the greater-than character
l	<, the less-than character
n	the current disk drive
p	the current disk drive and path, including the current directory
q	=, the equal sign
t	the time, just like the TIME command
v	the version number of the DOS you are using

any other null; the character is ignored

Some examples; PROMPT Hey Joe, you're in \$n: . This would display: Hey Joe, your in A:

PROMPT \$d_\$p.

Would display: Mon 12-21-88

B: DOS\WORD\DOCS (or whatever path and drive you were in)

I have a prompt on one of my boot disks that gives me a blue background with bright yellow characters, then

displays in magenta, the date in the upper left corner of the screen, the path and directory in the top center of the screen, and current time in the right upper corner of the screen, and "Your wish, MASTER" in the bottom left corner of the screen. You must be aware that to do this requires the statement, DEVICE=ANSI.SYS, in my CONFIG.SYS, and also an awareness that once any program is loaded into the memory, there are only 127 bytes left in the ENVIRONMENT space, and if the promptstring is too long you get the message "Out of Environment Space".

A Last Resort For Problem Diskettes

On those rare, but unforgettable occasions when you have what appears to be a destroyed, or partially damaged diskette, try the following:

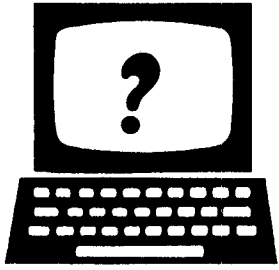
First, if the diskette is operable at all, try to copy as much of it as you can to a new diskette, using the *.* copy command, rather than diskcopy.

Then, take the damaged diskette out of your drive and very carefully take the outer jacket apart and remove the diskette. Try cutting one end of the jacket off and sliding the diskette out without touching the surface.

Then carefully insert the diskette (now jacketless) into your disk drive. Hold the diskette by the hub and the edges. Try to do this without touching the diskette surface.

Now, of course, this is a last resort and is not guaranteed to restore your data, but you may just find that your diskette without its jacket will now operate perfectly. Or you may be able to save a little more information than you could when the diskette was still in its folded, bent or mutilated jacket.

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Questions and Answers



EDITOR'S NOTE: jr Newsletter gets questions in the mail from PCjr owners every day. So many, in fact, that we apologize for not being able to answer them personally. This Questions and Answers column is our way of responding to the questions readers ask about their PCjrs. We can't answer all of the questions we receive, but we try to answer those that are either asked by several readers or those we feel will be of interest to PCjr owners in general. If you have a question that you do not see answered here, or elsewhere in this newsletter, please feel free to write to us at jr Newsletter, Box 163, Southbury, CT 06488.

Q: I use DOS 2.1 with my PCjr. Is there any reason to upgrade to a higher version of DOS?

A: Yes, especially if you are thinking of installing an eternal 3½ floppy disk drive. DOS 3.2 allows your system to recognize both 5¼ and 3½-inch disk drives. Also, DOS 3.X does a better job of allocating space for files, so you don't waste as much disk space on smaller files. DOS 3.X has a handy utility included called XCOPY which speeds the process of file-by-file copying (as opposed to diskcopying). Instead of copying the files one at a time, XCOPY lifts into memory as many of the files to be copied as there is room in RAM for, then lays them down one at a time. It is much faster than making the copies one by one.

Q: I'm happy enough with my PCjr keyboard, but I miss the numeric keypad I have on my machine at work. Is there anything I can do short of buying a substitute keyboard?

A: Yes. Keytronic made a numeric keypad that is a companion to the PCjr keyboard. You can get it for about \$40 from PC Enterprises in Belmar, N.J., (800) 922-7257, or (201) 280-0025. It's worth calling them, if only to get their catalog.

Q: Is there any legitimate way to get the full documentation for programs like PC-Write 2.7 and PC-File III. The versions on the disk are a little skimpy.

A: For those two programs, there's a book called the Shareware Book, (Osborne, McGraw-Hill, \$14.95) that is all about using PC-Write, PC-File and PC-Talk. It has

lengthy sections on each and tear-out help cards in the back. It is well done and a good substitute for the full documentation. The PC-Talk section may be of interest to users of the jr internal modem who like JR-COMM, since it is an adaptation of PC-Talk. The group strongly encourages members who like and use these programs to pay the small price to become registered users.

Q: I have been using Larry Newcomb's JRCONFIG.SYS program for my jr, which has 640K. It creates about a 90K RAM disk to fill up my low memory. I know filling up that first 128K of memory makes the PCjr run faster, but isn't it a waste of memory?

A: No, because there's a lot you can do with a RAM disk. For one thing you can follow the instructions in the documentation about how to get the computer to reload COMMAND.COM from the RAM disk instead of giving you that irritating message: "Insert COMMAND.COM disk in drive A and strike any key when ready." And you can also copy your favorite DOS utilities (CHKDSK, DISKCOPY, EDLIN, or whatever) to the RAM disk as well as a program to list or un-arc files. You can add a few lines to your autoexec.bat file to automate the copying, and a line that reads PATH=C: (assuming your RAM disk is C). That way you'll always have those programs available without having to put the disk where they're stored in the drive. It's like having a mini hard disk for your favorite utilities, except that they will load even faster from your RAM disk than they would from a hard disk. (JRCONFIG.SYS is one of the many programs on Jr Power Pack, Disk #52.)

Q: Why do PC and PC World magazines either ignore, or take delight in trashing, the PCjr?

A: PC and PC World are aimed largely at the people who buy new computers and software for businesses. Neither publication is really aimed at end users, let alone home users, even though they both carry some user tips.

Q: I have a PCjr internal modem and I just want to use it to read messages and send messages on bulletin boards and information services. Is there a simple, inexpensive program that will allow me to do this?

A: There sure is and if you're a PCjr owner, you pro-

Continued on page 8

How jr Cartridges Work

By Bob Magnuson

While reading in one of my books about computing (many of which are devoted to the PCjr), I became interested in how Junior cartridges work. The cartridge concept is not new in the computer world, yet IBM felt it could be used only in the Junior. Gradually, we are seeing more sources for cartridges that do different things for our Junior. There's a Video Cartridge that speeds up screen writes, a Keyboard Buffer Cartridge that stores keystrokes so your jr won't beep at you when you type too fast, a Keylights Cartridge, a PC ID Cartridge, and others.

So, how do cartridges work and what are some (if any) differences between the PC line and the PCjr in this area?

In the memory map of your Junior, there are portions of upper memory that are left open. These will be filled with the ROM (Read Only Memory) that is contained on one or two IC chips inside the cartridge. When we speak of address space, we are talking about addressable memory locations, all of which must be unique in 8088-CPU-based computers (like our PCjr).

The cartridge contains some header information at the very beginning of the ROM address space, and this

info is used during the starting boot process to tell DOS 1) if the cartridge slot is/isn't empty, 2) if the cartridge present is the BASIC language cartridge or something else, 3) if there is a non-BASIC program that should now take control of the computer, and 4) if there are any special command words that DOS should remember.

The fourth point, above, explains why you can type "BASIC" at the DOS prompt and immediately get BASIC without any disk drive turning on. BASIC (a program) is contained wholly in the cartridge space, and is loaded into memory. (Of course, that presumes you have a BASIC cartridge plugged in...). If you were to make your own cartridge, and put the command word "printer" in the header information, in simple terms you could type "printer" at the DOS prompt, and instantly DOS would start running the program inside the cartridge, without looking on any disk drive.

If the cartridge contains BASIC code, you would have to have your "BASIC" cartridge plugged in one slot, and the special BASIC cartridge plugged in the other slot. Cartridges that contain BASIC code are just like the files stored on disk, except the code is permanently etched into the IC chips in the cartridge.

The reason that DOS (and the computer) restart when a cartridge is removed or inserted is that DOS really wants to know that header information for any new cartridge inserted. The computer "re-boots" and goes again to read the header format to know what cartridge program is available.

In a PC, the memory configuration replaces memory space for cartridges with "slots". Most of us Junior owners thus recognize the major difference between our Junior and a PC-XT or the like. Those models have "slots" in which plug the various "boards" (very similar in concept to our sidecars). In many PCjr hardware discussions I've heard, people wonder why the Junior can't utilize the "cards" that plug into an IBM PC or PC-XT. With the address space available, what's the difficulty?

Since the Junior was built to be a "budget" machine, slots would have made the Junior too similar to a PC for marketing purposes. Thus the removable side panel that enables us to install sidecars on our PCjrs was a compromise to the slot concept. And if it were possible to hook up, let's say, a EGA "board" to our PCjr, the software just doesn't exist to make a PC-XT "board" work on a Junior. But, now we seem to have gotten off the topic of cartridges....

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READER FEEDBACK



Reader Submits List of Compatible Software

I do enjoy your newsletter and find your tips very helpful. You also have good information on expansion devices.

I feel that you should have a program compatibility list in every issue. I expected one when I got your newsletter. You do list some in your software store and mention names in your articles of compatible programs but a list would be nice.

You should maybe have a list in which jr owners send in the information too. Maybe the following will provide some starting information.

COMPATIBLE PROGRAMS: Thexdar, Police Quest, Mother Goose, Helicopter Simulator, Leisure Suit Larry in the Land of the Lounge Lizards all by Sierra.

Also World Karate Championship, Winter Games, Summer Games II, World Games, California Games, Pitstop II by Epyx.

From Springboard I have found the Newsroom and the Graphics expander compatible.

INCOMPATIBLE PROGRAMS: Championship Football, Basketball and Baseball by Gamestar. Marble Madness by Electronic Arts. Defender of the Crown and Super Star Hockey by Mindscape.

Other programs I ran into problems with are Starglider by Firebird. This program has the video buffer problem. If you have the Racore or Quadram expansion chassis running in the PC mode it will run perfectly fine.

Also Gunship by Micropose says in the manual not compatible with the PCjr. But I tried running in CGA graphics choice and everything worked fine. Although once it acted very strangely not responding. I called Microprose and they told me that the internal hardware differences make it not run right all the time. I wouldn't recommend buying this program.

I composed this list from my own experiences, other jr users, and calling the manufacturers. I do hope you use the information for a compatibility list since it could be very helpful to other jr users.

Rami Jundi

EDITOR'S NOTE: In the February 1987 issue, we listed 126 software titles and our March 1987 listed 85 more. All these titles were compiled from a survey of our readers who were asked to tell us what their favorite pro-

grams were. This list, then, is not merely a list of software that is PCjr compatible. It is a list of software that PCjr owners found to be the best software they have run on their computers. Since February, we have mentioned a few new titles that have proved not compatible with PCjrs. Several of these have been made PCjr compatible with patches created by PCjr owners. We have written about these patches and have assembled several of them on our jr Patches Disk #56.

We are grateful to Rami Jundi for listing the software he has found to be both compatible and incompatible, and we would like to encourage other readers to send us their lists. Since we are not able to buy and test all new software as it is produced, our readers are our best source of information on compatibility.

Reader Finds PC-ID Incompatible with DOS 3.2

I have subscribed to your newsletter now since January 1987. Both my dad and I have been very pleased and found it very informative. The newsletter has helped me solve problems ranging from internal modem interference to disk drive problems and discovering new products and companies for the IBM PCjr.

In the last issue of jr Newsletter I found an offer to send a friend or two a copy of jr Newsletter. Please find enclosed mailing labels for the two friends I wish to send sample issues to.

On another note I would like to raise the question of incompatibility of Racore's PC ID Cartridge M3400 with my PCjr when using DOS 3.20. As for my system I have an IBM PCjr, Racore Drive II Enhancement with DMA and 640K memory, NEC V20 chip, and datadesk international Turbo 101 keyboard. When attempting to use DOS 3.20 with the cartridge the system locks however, when using DOS 2.10 the cartridge works fine.

Kenneth Jon Erickson
Proctor, MN

A Fan of Fantasy Gives Tip on Speakers

I was one of the fortunate persons who purchased the FONTASY program when you ran the special in the jr Newsletter a couple of months ago.

It was every bit as good as you described in your arti-

Continued on page 10

Words of Wisdom From A Wordstar Fan

By Carl Haub
Metro PCjr Users Group

As Wordstar ages, much is written about it. This veteran word processor helped give PCs a reason for being back in '81 (along with Visicalc). Is it outmoded, too hard to learn? The answer to the first question is, yes, a little; to the second question, a definite no.

Another commonly asked question is: how does it compare to WordPerfect, the current "hot" word processor? Wordstar does lack some modern features, such as automatic reformatting, macros, and accents for foreign languages, and it can only work on one document at a time. Its spelling checker is functional, but not as slick as WordPerfect's.

If word processing is your life, you may want to look into something other than Wordstar. But if all you want to do is "write something" once in a while with a reliable program, Wordstar can fill the bill all the way from light duty to surprising sophistication.

The program's much-maligned Ctrl key combinations for commands are much easier to use than generally told. In general, only about 10 to 20 commands are

necessary for most applications. And the newer versions (also known as "Wordstar Professional" or Version 3.3 and above) place the 10 user-definable function keys visually across the bottom of the screen. The commands are divided into "families," such as Ctrl-K for block moves and saves, Ctrl-O for onscreen appearance changes. Wordstar itself takes only about 115K on a disk (90K in the original version), leaving lots of disk room for single drive machines, and runs very quickly from a RAM disk on a 256K PCjr - almost a necessity since the program does make many disk accesses. Help screens are always present in the upper half of one's screen and can be turned off by you power users, just type Ctrl-JH0 (simple, huh?).

WordPerfect? A fine program, but a bit of a bear on a single drive system. Its files fill a disk completely so that loading to a RAM disk is a necessity and that means 640K for reasonable use. Otherwise, many disk changes are necessary and don't do it at the wrong time... WordPerfect's command structure utilizes the function keys for nearly everything, bad news for PCjr users with the standard keyboard.

***"Wordstar never
beeps at me."***

Why does everyone criticize Wordstar's supposedly difficult commands when WordPerfect requires one to hit Shift Fn 7 or Alt Fn 6 just to issue a frequently-used command? If you don't use WordPerfect on a regular basis, you will find yourself taping a list of commands on the wall. And, once, while merrily typing away with WordPerfect on a RAM disk, my jr's screen went blank and presented me with a cheery "divide overflow." End of unsaved file. Wordstar never did THAT.

Wordstar is a perfect example of not needing a BMW to get to the corner drug store. True, it's a bit of a Chevy, but my Chevy has 75,000 miles on it and I go down Rt. 28 at the same speed as everyone else. Lastly, one nice thing Wordstar doesn't do: it doesn't "BEEP" at me. Ever.

Is Your Break On or Off?

If you find you are unable to stop a program by typing your break keys, you may not have set break on. Break is an internal DOS command, so you can type break on or off at the DOS prompt at any time.

When break is on, DOS checks every time it performs a function to see if you have pressed the break keys. Otherwise, it on checks when working with the screen keyboard, printer or serial port.

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How An Autoexec. bat File Can Simplify Your Life

By Betty Bullman

The AUTOEXEC.BAT file is a special batch file that will automatically execute when DOS is initialized. It will simplify and enhance your setup procedures. Below is a listing of the AUTOEXEC.BAT file we use when using the commercial program SUPERCALC III. It executes all the commands each time we load the program which saves us having to enter each command each time.

```
echo off
mode 80
verify on
capslock
copy *.*c: nul
c:
sc3
```

ECHO OFF --- Without this statement, all commands in the AUTOEXEC file would be printed on the screen as they are executed. With ECHO OFF, the commands are executed without being displayed.

MODE 80 --- The PCjr defaults to MODE40 and this command puts the computer into 80 column mode.

VERIFY ON --- Whatever is written to a disk will be

verified for accuracy against what is resident in memory. This is especially important if the file you are entering is long and will insure that it can be used later.

CAPSLOCK --- The PCjr defaults to lowercase and this command puts the computer into UPPERCASE letters.

COPY *.*C: NUL --- Because the PCjr is rather slow, we transfer the SUPERCALC file to a RAM drive called "C" where the program runs considerably faster. The *.* is a global command which copies all the files resident in memory to drive C:. NUL is similar to ECHO OFF and redirects the echoed statement to a nul or nonexistant device (the RAM DRIVE).

C: --- This command puts the computer in drive C .

SC3 --- This is the .exe file which starts the program.

To set up an AUTOEXEC.BAT file:

1. At the Dos A prompt type "COPYCON:AUTOEXEC.BAT" and press Enter.
2. Type in and enter, line by line, all the commands you wish to be executed automatically. Start with a simple one such as ECHO OFF, VERIFY ON, and the name of the program you wish to run.
3. After entering all the lines in the BATCH file, press the F6 key which signifies the end of the file. Press enter again. The message on the screen should indicate a file has been copied.

An important thing to remember! Any file in your BATCH file must also be in the disk's directory.

(The above article was originally printed in the Las Vegas PC Users Group Newsletter.)

* * * * *

New Disk/Magazine Is Called PC-Life

A new magazine with dazzling graphics, games, and feature stories about how microcomputers are used by well known people, has raised the standards of disk based publishing.

PC-Life comes on a single 5.25" floppy disk and is compatible with PCjrs running with 256K and DOS 2.1 or higher. It has equipment reviews, articles about developing technologies, free utilities from PC Magazine, usually a game and various other tidbits. Recent issues have contained articles on how such people as Isaac Asimov and Timothy Leary view computer software and hardware.

It is published every two months or so by Microstar Graphics Ltd., 1201 E. Fayette St., Syracuse, NY 13210. Each issue costs \$7.95.

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Questions and Answers

Continued from page 3

bably already have it. The disk called "PCjr Sampler" that comes with the computer has a little program called "Telephone Connection" that will let you log onto information systems or bulletin boards and send and receive messages. That's about all it will do, but it works just fine with the jr internal modem, which is more than you can say for a lot of programs.

Q: A hard disk seems to be all the rage now. I only use a few programs and I seldom move from one to another in the same session. Would a hard disk be of any use to me?

A: That depends on what programs you use. If you use software that accesses the program disk (or disks) frequently, or makes you change disks a lot, a hard disk would make your software run a lot faster. In addition, a hard disk cuts boot time, and all disk read & write time. The general view is that once you've had one, you'll find it miserable to go back to floppies.

(The above questions and answers were originally published in the Metro PCjr Users Group Newsletter.)

Q. I have expanded my memory to 256K, but sometimes my PCjr runs out of memory, even though I am running software that only requires 256K. What's the problem?

A. There is a difference between the memory your computer has in its chips and the memory that is available to run software. When you start up your PCjr, the memory count you see on your screen is the amount it sees as it checks its chips. But your available memory is somewhat lower — or perhaps a lot lower, depending upon how much memory is being used by DOS, memory resident programs such as Sidekick, Deskteam, a RAM

disk, etc. In order to find out how much available memory you have at any given time, just put your DOS diskette in Drive A and type CHKDSK. If the amount of available memory shown by CHKDSK is not sufficient to run the software you want to run, you may have to eliminate some memory resident software, decrease the size of your RAM disk, or add some more memory to your PCjr.

Q. Do you know a simple way to protect and unprotect BASIC programs ?

A. Here is a simple way to do it: Once you have loaded BASIC, type NEW (Enter); type DEF SEG (Enter); type BSAVE"UN.P",1124 (Enter). Then load a protected BASIC program and type BLOAD"UN.P",1124 (Enter). This will unprotect the program. To protect a BASIC program that has been loaded into memory, just type DEF SEG:POKE 1124,255 in immediate mode.

Q. Would it be possible to add a hard drive card to my PCjr?

A. We have not heard of anyone being able to install a hard card in a PCjr. For one thing, they take up too much space. For another, they are designed to work with PCs and other computers, not PCjrs, which, as you may know, have certain peculiarities which must be addressed by anyone designing a hard drive for them. This is one of the reasons hard drives for PCjrs are more expensive than those for other computers. Some day someone may design a hard card for PCjrs, but it just hasn't happened yet.

Q. I've heard about a chip that you can install in your printer to get letter quality print. How much do they cost and where can I get one?

A. There is an upgrade for Epson FX, JX, RX and MX series printers that is supposed to produce NLQ (Near Letter Quality) printing. It costs about \$120 and also provides an 8K printer buffer. Another one, without a buffer costs about \$70. A similar upgrade is available for Okidata 82A and 83As for \$79. There is another for IBM Graphics Printers. One company that handles all these is Alpha Scientific, Box 626, Chesterfield, MO 63006 or call 800-543-7117. We haven't tried these upgrades, but the company says defective merchandise can be returned. A less expensive way to get NLQ output from most printers is with software such as Image-print (Disk #50 in the jr Newsletter Software Store). It does slow your printer down because it requires several passes of the print head to produce darker type, but it works very well and costs a fraction of the hardware upgrades mentioned above.



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Personal Choice Software Helps With Term Papers

Term Paper Writer, published by Personal Choice Software, helps the student organize and write term papers, from the note-taking stage through the final draft of the paper itself.

One of the most valuable things that computers do for people is to force those of us with disorganized habits to become organized — at least while performing certain tasks on the computer. Term Paper Writer utilizes the computer's organizing abilities to help students make sense out of the usual pile of scribbled notes that passes for research of the term paper.

The Notetaker section of Term Paper Writer enables the student to edit, sort and print his or her notes so that they come out in legible, orderly form. This should make the job of the next step, creating an outline, much easier.

The Outliner section of the software helps make a logical outline from the notes put into the Notetaker. You can create your thesis sentence, main topic, headings, sub-headings and insert ideas as you go along. All of these can be rearranged until you come up with an outline that becomes the backbone of the term paper.

Term Paper Writer contains an easy to use word processor, which lacks some advanced features, but is adequate for most student purposes. This is what you use to

do your writing, unless you want to switch at this point to another word processor.

The final step — creating footnotes and bibliography is also made easier by Term Paper Writer, since most of the work is done once you have completed the earlier steps.

Term Paper Writer was given three stars (very good) for overall performance, documentation, error handling and value for money, by Family Computing. 256K and two disk drives are recommended. Retail Price: \$59.95. Personal Choice/Activision, 2350 Bayshore Parkway, Mountain View, CA 94043.

Target Diskette May Be What?

Although it should happen very infrequently, when using the DISKCOPY procedure to copy diskettes, you may get beeps from your PCjr and messages saying "Unrecoverable read (or write, or verify) error" and finally, when DISKCOPY stops you will read:

"Target diskette may be unusable."

In our experience, it may also be usable. But to be sure it is better to try again with another target diskette if the messages you got during the DISKCOPY procedure were "write errors".

If the messages were "read errors," then simply try again with the same diskettes just in case it was a quirk — you know, one of those unexplainable things that might not have really happened. Sometimes, the copy will be made without a hitch on the second try.

If you continue to get read errors you might have a problem on your source diskette. Or it could be your drive. Sometimes drives that need lubricating will produce read errors. So if your drive is particularly noisy (which means noisier than the usually noisy PCjr drive), you should try lubricating the drive. (This is a simple procedure which we have explained in a past issue. If you want a copy of the article, send us \$2).

Another possible solution to read errors is to format a new diskette and then use the COPY *.* command to copy the files from your source diskette to the new diskette. This may work flawlessly. At the very least, it should copy most of the files from your source so you don't lose everything on that diskette.

Here's another option: Just wait until tomorrow and try again. More than one problem we've encountered has disappeared into the night.

If you have any tips on getting the most out of your PCjr, please share them with readers of this newsletter by sending them to **jr Newsletter**, Box 163, Southbury, CT 06488.

IBM PCjr SPECIALS

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IBM PCjr JOYSTICK (hard to find)	\$29
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Reader Praises Fantasy And Gives Tips on PCjr Sound

Continued from page 9

cle and even more so. Although I still have a long way to go before becoming an expert, I have really had a ball experimenting with the program and have purchased additional Art Folders and the Fantasy Publisher. Thanks for the introduction.

After much misinformation from IBM engineers and technicians, I, with the help of my local Radio Shack Dealer, worked out two methods of enhancing the sound capabilities of my PCjr for under \$30.00 using inexpensive Radio Shack parts. All of the "experts" had quoted costs of up to \$300 to enhance the jr's sound system. If you think any of the other jr. owners would be interested in improving their sound system, let me know and I will gladly share the simple secret along with the parts numbers with the readership to equip their little jewel with a stereo or sound around system that will blow them away when playing games or music.

William G. Mullins

EDITOR'S NOTE: In case anyone missed the info in our October issue, the Radio Shack "Realistic Amplified Speaker System" is model number MPS-5 and part number 32-2031. Anyone who wants to purchase Fantasy at 20% off the retail price of \$69.95 should send us a check for \$55.95, plus \$3.00 shipping. It really is a fine software package.

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Shareware Sidekick Clone Outperforms the Original

By John M. King

PC-Deskteam is a Sidekick clone which outdoes the original. Deskteam provides nine utilities: alarm clock, calculator, phone book, auto-dialer, appointment calendar, DOS commands, notepad, printer control and type-writer. Deskteam can be used as a stand-alone program or made memory resident, in which case it occupies 64K bytes. I use it both at home and at work. Here are some highlights of the various features:

The alarm clock is the first I've seen which puts "10:41 pm" on the screen without anything blinking or changing every second. You can turn it off entirely or just have it chime on the hour.

The calculator is a four banger with one memory. In addition, if you type a list of numbers into your word processor and call up the calculator, it can enter the numbers without retyping them and print results back to your document.

The notepad, phonebook and calendar use the same, simple commands which are all available on help screens. The notepad is great for writing batch files quickly with full screen editing and for making notes while doing something else with Junior.

The DOS commands are: Dir, Copy, Del, Rename, Type, Print, ChDir and a check on available disk space. You can't format a disk or run another program within Deskteam.

The printer control makes it easy to set up on/off toggles for five printer functions of your choice. Complex, multiple codes can be sent if necessary. Configure files for Epson and Okidata printers are provided.

Typewriter turns your \$2,000 computer into a \$250 correcting typewriter. Why? Because its great for addressing envelopes!

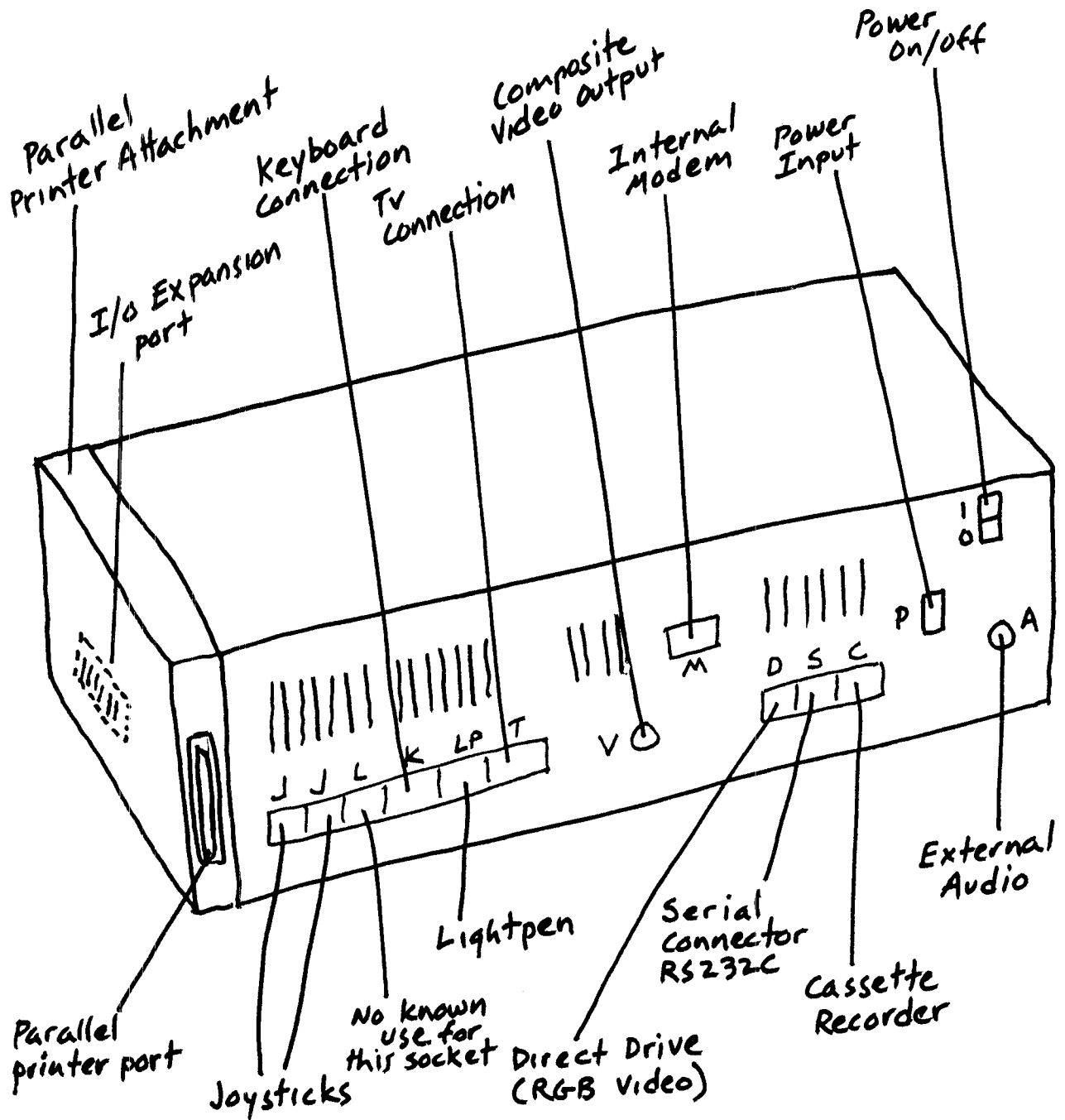
Finally, the options in setting up the clock display, calculator, dialer, printer, and screen colors can be changed easily at any time.

There is a fifty page manual available on the disk. Look it over, but don't bother printing it out. This program is so well done, with such good help screens, that you won't need it.

Deskteam is a shareware program. You can copy it freely; and if you like it, Alternative Decision Software, Inc. P.O. Box 307 Lancaster, NY 14086, phone (716) 684-2423, asks that you register your copy for \$25.

(Editor's Note: Deskteam is Disk #22 in the jr Newsletter Software Store, page 13. The above article was originally published in the San Francisco PCjr Users Group Newsletter.)

PCjr's Connector Ports





jr Newsletter Software Store



This software is the best public domain and user-supported software for the PCjr we've been able to find. All the programs in this collection have been tested on our PCjrs and are highly recommended. Some of these programs are equal to or better than commercial programs costing hundreds of dollars.

The programs in this collection are available for \$9 per disk or \$7 per disk, if you order four or more.

THE BEST OF JR NEWSLETTER. The best and most informative articles from twelve issues of jr Newsletter (June 1986 through May 1987 issues) are contained on this disk. More than 50 articles on compatibility, problem solving, software, maintenance, memory expansion, how-to projects, tips on using DOS, and more! 128K (Disk #54)

PC-WRITE. This extremely popular word processing program is both powerful and easy to use. A review in PC World said "PC-Write may well be more versatile than WordStar — it's certainly more straightforward." Version 2.5 runs well on 128K. Version 2.7 has more features, comes on two diskettes and requires 256K to run without the spelling checker, which requires 384K. (Order Disk #1 for 128K V2.5. Order Disks #2A and 2B for V2.7)

PC-FILE III. This excellent database manager will handle up to 9,999 records, such as names and addresses, notes, product descriptions, etc. Uses generic, embedded, soundex and wildcard searches. Global updates and deletes. Sorts on any field. Too many features to mention. (Disk #3 runs on 128K, Disk #4 needs 256K)

PC-CALC. A versatile spreadsheet program that can do up to 26 columns of adjustable size and 256 lines. Features on-screen prompts, many math and statistical functions, hidden column capability, many formatting options, 64 character cells, automatic global recalculation, and more. Has some limits on 128K, but still very useful. (Disk #5 runs on 128K, Disk #6 requires 320K and two drives.)

EASYRITE AND LABLFILE. Easy Rite makes your jr perform like a typewriter, without learning complicated commands. On screen prompts are easy to follow. Lablfile is also easy to use for printing labels and storing information. Runs well on 128K with Epson/Gemini coded printers. (Disk #7)

PROCOMM. This powerful, yet easy to use telecommunications program has become the one favored by more PCjr users than any other. Dialing directory, auto redial, XMODEM, Kermit and other file transfer protocols, auto logon, DOS gateway, keyboard macros, exploding windows and many other features. The editor of PC Magazine called Procomm "competitive with the best comm programs on the market." Manual on disk. 256K (Disk #15)

PC-OUTLINE. Review in PC Magazine called this program "really fine" and it outperformed many commercial programs. Word processing functions are merged, allowing greater control. Many customizing features. Nine windows. Many useful features. 128K, plus DOS 2.0 or higher. (Disk #17)

PC-TOUCH. Designed to teach and practice touch typing. As you type, an on-screen line shows the number of erroneous keystrokes, and your accuracy rating as a percentage of keystrokes. 128K. (Disk #18)

3 X 5. An information management program that works just like a 3 x 5 card file. It offers speed, versatility and simplicity in entering, indexing and retrieving data. Has an integrated word processor, powerful search commands, multiple windows so you can edit in one and search in another, etc. Requires 256K. (Disk #19)

PC-DESKTEAM. Enables you to have an alarm clock, calendar, typewriter, calculator, and phone book accessible from your keyboard. Can be a resident program while you are using other software if you have the memory. 128K will run it alone. Need more to run it with other software. (Disk #22)

PC-PROMPT. A memory resident program that provides the format for DOS commands in an on-line mode. Help screen toggles on and off. Also help screens for BASICA, Turbo Pascal, Debug and EDLIN. 128K. (Disk #23)

PC-DOS HELP. Similar to PC-Prompt, but takes up less memory (16K) as a resident program. Geared to DOS 2.1 with special PCjr commands included. 128K (Disk #24)

PC-CHECK MANAGER. A menu-driven program that can handle multiple checkbooks, unlimited payees and ledger account assignments. Requires 256K. (Disk #25)

FAMILY HISTORY. Includes complete manual on disk with how-to info on tracing and setting up your family tree with detailed genealogical information. Easy to use and modify as you gather more data. New compiled version runs faster than previous version. 128K order Disk #33 alone, 256K order #33 and #33A.

NEW KEY. Powerful, popular program that allows you to redefine keystrokes and assign series of keystrokes to one or two keys. Customize software to meet your needs. Many other useful features included. 128K. Disk #35)

PIANOMAN. A great music program!. Allows you to write your own music, store it and play it on jr's terrific sound system. 128K. Disk #36)

PC-KEY DRAW. A powerful graphics program that allows you to draw, paint, produce slide shows, store and print your work. 256K, two drives. (Disk #37)

PC-KEY DRAW DEMO. Contains a slide show demonstration which allows you to see the amazing results you can get with PC-KEY DRAW. Helps to learn the many graphic capabilities of PC-KEY DRAW. (Disk #38)

PRINT HANDLER — Excellent software for printing banners, sideways, etc. Contains custom font generator, print spooler, and other useful print control utilities for Epson and compatible printers. 128K. (Disk #51)

IMAGEPRINT. Produces letter quality print on dot matrix printers. IBM Graphics Printers, Proprinters, Epsoms and compatibles. Contains many format features, three quality levels, interfaces with word processors. 128K ok (Disk #50)

JR POWER PACK. A collection of particularly useful programs for PCjr owners. Set up RAM disks, address memory to 736K, turn a joystick into a mouse, set screen colors, keyboard click, scan and search text files, screenblinker, print spooler, and more. 128K. (Disk #52)

SUPER UTILITIES. The 15 utilities in this collection include Undelete, to recover a mistakenly deleted file; a powerful command editor; a clock, notepad, time and calendar; another to redirect file contents from printer to disk...and many more useful utilities. Under 128K ok. (Disk #28)

MORE SUPER UTILITIES. A collection of excellent screen and keyboard enhancements, useful file managers, color selectors, and more. Under 128K ok. (Disk #29)

DOS 2.1 FIX. Patches to fix the bugs in DOS 2.1. Cures most problems encountered when running memory intensive programs. Also patches to run BASIC and BASICA on DOS 2.1 without having Cartridge BASIC installed. 128K ok. (Disk #40)

DOSAMATIC. A nifty way to view the contents of disks, easily manipulate files and carry out DOS commands. Features a Mac-like "point and press" interface which allows you to select the commands you want from pull down menus. Also permits loading several programs at once and jumping from one to the other. 128K ok, but more memory needed for "multi-tasking." (Disk #49)

PCJR PATCHES. Many patches to fix software that ordinarily won't run on PCjr's. Includes patches for Starflight, Advanced Flight Simulator, Quick Basic, Turbo Basic, Turbo C, Double DOS, and more. (Disk #56)

HOME BUDGET MANAGEMENT SYSTEM. Easy-to-use system for keeping track of income and expenses. Create separate accounts for income tax categories and get a summary at end of year. Provides chart of accounts, transaction reports, sorted ledger entries, etc. 128K (Disk #57)

HOME INVENTORY. Taking an inventory of your home might even be fun with this easy-to-use software that takes you through the process step by step. Gives a complete record for insurance purposes. Also good for listing collections. 128K (Disk #58)

GAMES

GAMES. An assortment of games for hours of fun and excitement. Includes Spacewar, Airtrax, Life, Wumpus, Wizard and more. All good with 128K. (Disk #8)

DUNGEONS & WARS. In Dungeon Quest you can choose to be a dwarf, elf, magic-user, fighter or other type of character. You select your strengths and weapons, too. Then you enter the dangerous dungeons on your Quest. Thermonuclear War pits the US vs the Soviets in a very real demonstration of what a nuclear war might be like. Combat is a strategic battle on the ground. 128K ok. (Disk #9)

PINBALL RALLY. A colorful collection of amazingly realistic pinball games. Using the Shift keys as flippers, the games get more and more complex until you get to Twilight Zone, which is the hardest because some parts are invisible. Runs on 128K. (Disk #10)

ARCADE GAMES. Includes Kong, Pango, PC-Golf, Pyramid and other exciting, colorful games for hours of fun. 128K. (Disk #30)

BOARD GAMES. Play Monopoly against the computer. Backgammon, Yahtzee and Four — a game your jr is especially clever at. 128K. (Disk #31)

GAMES, GAMES, GAMES. A wild assortment of games to test your wits and skills. Includes Slither, Xwing, Torpedo, ABM2 and Overreact, where you are in charge of a nuclear plant. 128K (Disk #34)

PC-CHESS. A full color many-featured chess program, with four levels of play. You can play against the computer or another human, save games to disk, set up the board yourself and switch sides if you want. It has two clocks for elapsed time for each player, allows castling, en passant and pawn promotion with validity checking, plus other features. 128K (Disk #44)

ZAXXON/GALAXY TREK. Two exciting high tech shoot-em-up games. In Zaxxon you fly through an obstacle course, shooting while you go, up and over walls, and eventually through space. Galaxy Trek makes you the commander of a Star Ship which you maneuver through the universe seeking to destroy a fleet of Megaton warships before they conquer the planets. 128K. (Disk #45)

PHRASE CRAZE. Based on the TV show Wheel of Fortune, you get to be the guest who guesses the mystery phrases and wins piles of money! The wheel spins to select the amount of money you win for correct guesses. It gets harder with each round you play. You can add your own phrases to this game or try to guess the ones provided on the disk. Lot of fun for adults as well as older kids. 128K. (Disk #46)

GOLF/SAILING. Two great games for sailors and golfers! The golf game has three courses, user definable club ranges, and a swing control that determines whether you hit a slice, hook or straight shot. Three nine hole courses (Novice, Pro, and Sadistic). In the other game, you try to sail the three legs of the Bermuda Triangle, avoiding, if you can, the creeping mists, alien crystals, vortexes and storms. Your boat is equipped with radar, rudder and sail (all of which you control) and an engine for emergencies. 128K ok for sailing. Need 256K for golf. (Disk #47)

BOARD GAMES. Eleven different games on one disk! Hours of fun with Monopoly, Yahtzee, Cribbage, Backgammon, Othello, and others. All run great on your PCjr! 128K (Disk #31)

CASTAWAY/S. AMERICAN TREK. Test your survival skills as the survivor of a shipwreck in the South Pacific. Or as an explorer of South America. Two novice text adventures from Jim Button. Ages 12 and up. 128K (Disk #53)

SUPER BOARD GAMES. Excellent versions of two popular board games — Monopoly and Risk. Very much like the board versions, except your computer keeps track of everything for you. All you have to do is make the right moves and have fun. 256K (Disk #55)

EDUCATIONAL SOFTWARE

ORIGAMI. Learn the art of Japanese paper folding. This program shows you how, step-by-step, to create amazing animals and other objects just by folding paper. Fun for kids and adults, too. 128K (Disk #39)

PLAY AND LEARN. Educational games for kids five and up. Word match games, find-a-word puzzles, word scrambles, etc. made for PCjr's by school teachers. 128K. (Disk #32)

WORD PROCESSING FOR KIDS. Simple, fun and easy-to-use word processor designed especially for beginning writers. Allows children to express their ideas easily and then print them out in large type on your printer. Colorful opening menus make learning the simple commands very easy. Parents/teachers manual is on the disk. 128K (Disk #41)

MATH FUN! A great way to get kids learning how to add, subtract, multiply and divide. Includes a program called Math Tutor which has cleverly designed exercises for kids in Grades 1-6. Also Funnels and Buckets, a nifty math game that makes learning math fun. 128K (Disk #42)

EARLY LEARNING. A collection of colorful educational games for children ages 6-8. Sing-along alphabet, letter matching, alphabet tutorial, number/counting game, maze, pattern matching and time telling. 128K. (Disk #48)

* * * * *

Is Your PCjr Obsolete?

Continued from page 1

quick to be ashamed of what we have found to be an excellent and reliable computer.

We know people who have hardly turned their PCjrs off in three years. People who operate small businesses, elaborate bulletin board systems, and do extensive wordprocessing and database work on their PCjrs every day. Many of them are now equipped with hard disks, 736K of RAM, V20 speed up chips, 2400 baud modems and most of the peripherals you see in the glossy computer magazines.

There are also those who find the PCjr's flexibility its most endearing trait. One member of the family can use the PCjr to balance the checkbook, keep tax and investment records and write letters, while others will use the PCjr's great color and sound capabilities to play games and produce color graphics. It's hard to find all those features in one computer without spending several years worth of lunch money.

Computer obsolescence is often just a state of mind. Some people think they need a fancy new computer who really don't. Some people just want to have the latest thing and the idea of having an aging computer, no matter how useful, sitting on their desk bothers them. And others, with unexpanded PCjrs, haven't explored

the option of boosting their computer's memory or adding a second drive, which may be all that makes a difference between a useful computer and a useless one.

If you are sitting there with a 128K PCjr with a single drive, you can boost your memory to 640K, learn to use a RAM disk (it's easy) and you'll be able to run most of the sophisticated software available today — at twice the speed you're used to seeing. And it will cost you less than \$200. Or, if you've already expanded your PCjr to, say 256K, and you have a second drive, you can have your memory expanded further and perhaps add a 3.5 inch third drive for a lot less than it will cost you to scrap your PCjr in favor of a new clone.

***“You might ask yourself
whether you've given your
PCjr a chance to perform . . .”***

There are also even cheaper upgrades that could make a big difference in the way you feel about your PCjr. Cartridges that speed up screen writes, add keyboard buffers, or clock/calendars. Chips that boost processing speed or improve the readability of the characters on your screen.

And, for the power users, there are hard drives, turbo boards, quad density drives that will turn your PCjr into more than an XT clone.

So, if you find yourself looking longingly at the ads in computer magazines, you might ask yourself whether you've honestly given your PCjr a chance to perform as well as it can. Because, for most of us the PCjr can do everything we need to do on a computer.

And when your friends say “Oh, you've still got that clunker,” you can smile at their ignorance.

Have You Purchased New Software For Your PCjr Recently?

We would like to hear from readers who have purchased new software titles. If the software runs well on your PCjr, we'd like to inform the rest of our readers. Similarly, if software proved to be incompatible, we would like to publish that information as well. Please share your experiences with other PCjr users.

JR NEWSLETTER WELCOMES YOUR QUESTIONS. We enjoy hearing from fellow PCjr owners and will do our best to answer questions and help solve any problems you may have. Please, however, send your questions in writing. We are a part-time organization and are not set up to handle telephone calls. Please write to: jr Newsletter, Box 163, Southbury, CT 06488.

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ORIGINAL IBM PARTS for PCjr: One Parallel Printer Port \$50; One Internal Modem \$30. Phil Falcone, 402 E. Ridgewood Ave., Absecon, NJ 08201. (11)

IBM PCJR upgraded with factory installed 2nd disk drive, expanded to 512K and DMA by Racore, jr color monitor and both keyboards, serial adapter, parallel side car, IBM internal modem 300, basic and paint cartridges, assorted developer software, excellent condition and factory packaging, will ship for \$1000. Call (215) 928-9044 or (302) 227-8030, ask for Xavier. (11)

PARALLEL PRINTER ATTACHMENT Almost new. Will sell for \$35 or best offer. Sam Kim, 19 W. Monterey Ave., Schaumburg, IL 60193. (312) 351-3227. (11)

NEEDED: IBM PCJR - compatible serial interface mouse and IBM Adapter Devices if applicable for the IBM PCjr ColorPaint program. Denise Watson, P.O. Box 276, Lincoln, AL 35096 (11)

TECMAR MEMORY - Captain and Cadet to bring 128K PCjr's memory to 640K. Original price over \$500. Asking \$200. J. W. Graves (904) 328-2972. (11)

PCjr CARTRIDGES - ROM cartridge kits and clock/calendar cartridges. Integrity Technology, 105 Serra Way, Suite 230, Milpita, CA 95035.

WILL TRADE New IBM PCjr Internal Modem for PCjr COLORPAINT. William G. Mullins, 114 Roan Road, Versailles, KY 40383. (606) 873-5971. (12)

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IBM PCJR 640K - One drive, color monitor, DOS 2.1, cartridge basic, all software and manuals. \$500.00. Ray O'Connor, (201) 943-2991. Leave message. (12)

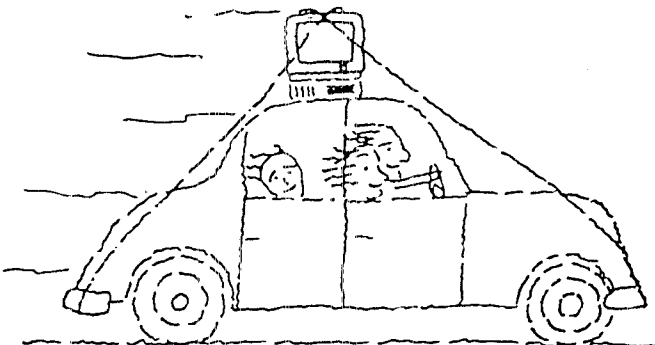
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ONE RACORE MEMORY BOARD 384KB for \$55; Hewlett Packard 12C, Financial Calculator for \$40; Harvard Professional Publisher \$150. You pay shipping. Contact: David Chin, 27 Linmouth Road, Malverne, NY 11565 (516) 599-7238. (12)

TECMAR JR CADET 384K expansion board for use with Tecmar Jr Captain. Will take your 256K system to a full 640K. Asking \$100. Norb Dulski, 7021 Plymouth Road, Downers Grove, IL 60516 (312) 971-3742. (12)

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