

# Jr Newsletter

May, 1990

## Random Thoughts On Five Years With Junior

By Dick Page

**EDITOR'S NOTE:** This article was written by Dick Page, a founding member of the Eugene (Oregon) PCjr Users Group. As one of the group's resident PCjr experts, Dick has been a consistent contributor of enlightening articles in that group's newsletter as well as a source of help for other PCjr users. In view of his faithful allegiance to the PCjr over the years his thoughts looking back on his life with "Junior" are particularly meaningful.

There are many reasons why the PCjr didn't "die" when it was orphaned by IBM:

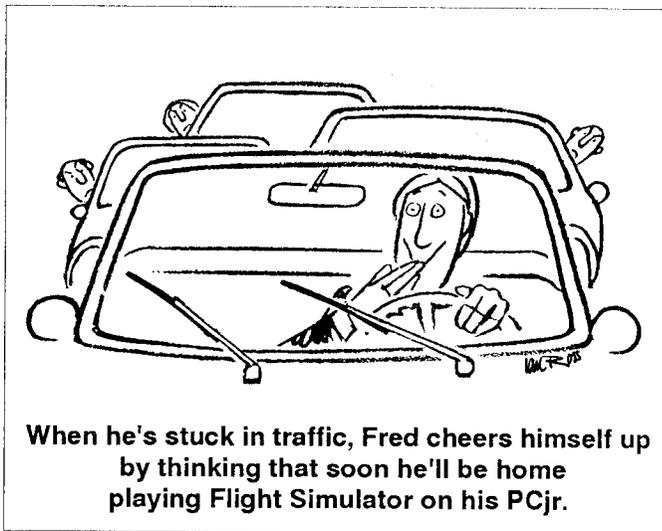
- \* It had a large enough base of machines manufactured and sold. It was, after all, an IBM (with all the real and mythical benefits which come with anything named "IBM".)

- \* It was well constructed - in order to withstand the rigors of use in a classroom or home.

- \* It had a flexible design which allowed for alterations and expansion (in ways even IBM hadn't anticipated).

- \* It had many unusual, unique features not found on any other IBM compatible computer on the market.

I embrace all the general reasons mentioned above, but I also have more personal reasons for having pur-



When he's stuck in traffic, Fred cheers himself up by thinking that soon he'll be home playing Flight Simulator on his PCjr.

chased and kept my Junior these past five years:

- \* Challenge. Working with Junior hasn't always been the "user friendly" experience I was told it was going to be (from the marketing hype IBM put out in 1984). Quite the contrary. There have been many times of frustration (and a few times of rage). But usually I have seen the PCjr's quirks as challenges, puzzles to solve, hurdles to overcome. And that has been fun, interesting, and rewarding.

- \* Hobby. My PCjr has carved out a special niche in my life. It has become an enjoyable distraction from my day-to-day working world. Five minutes quickly turns into an hour and an hour magically becomes three.

Junior has enough flexibility built in for many of its limitations to be circumvented and its many unique attributes taken advantage of. The efforts of many individuals, user groups, and third party manufacturers and suppliers to "push Junior's envelope" have kept my Junior alive and well. And I am thankful for that!

Apparently I am not alone in being transfixed by its mesmerizing, magical powers. It has touched a cord with lots of people. Without that fact I know my PCjr would have died a quick and lonely death.

- \* Anticipation. There is a pleasure I seem to derive from seeing what's around the corner, what's up over the next hill, what's in the latest catalogue. It tickles me to see that inventive souls keep puttering with their PCjrs and, thus, find ways to help keep Juniors current with this special world of ever-changing computer technology. So ---- I look forward to each monthly meeting, each catalogue, each Junior-oriented newsletter I receive.

- \* Addiction. While I have at times been labeled "misery", I have spent quite a few dollars on my Junior.

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## PCjr Lives!

## What A PCjr User Must Know, Part II

by John King

In Part I last month, we reviewed how to set up your PCjr system, how to make a simple boot disk, and the most important DOS commands. Now, we need to delve into the oddities of memory management. With that understood, we'll write CONFIG.SYS and AUTOEXEC.BAT files to create a better boot disk. Finally, we will discuss ramdisks and utilities to improve your computing.

### Memory Management

Let's start at the beginning. You've purchased a new program and, perhaps, looked at the manual. (Let's be honest. We all know reading the manual first takes all the adventure out of running a new program.) Now, you've put the disk in the drive and are ready to start.

You type the name of the program and press the Enter key. The drive spins, the red light comes on, and the program is loaded from disk into the computer's Random Access Memory, or RAM, chips. Usually, the package or manual will state how much RAM the program requires. If all goes well, you soon will see the program's opening screen and can begin. If you see the message "Insufficient memory," instead, you don't have enough RAM, or other programs are already using it. Let's focus on the total amount of RAM first.

How do you know how much memory your computer has? When your PCjr boots up, the count of RAM is displayed in the lower right corner of the monitor screen. If you have more than 128K, you need to know about memory management software. Since many PCjr owners have expanded their machines to 640K, I'll use this amount in the examples which follow.

You boot up your PCjr. The number on the monitor shows 640K RAM. (If there is more than 640K, it is not counted.) The hardware knows 640K RAM is present. You saw it counted, but DOS will not be able to use memory above 128K until a memory management program has been run. A memory management program was supplied with your memory expansion, but more on that later.

The problem is that the PCjr initially puts the "16K video buffer", the memory where the screen output is stored, at 112-128K. Furthermore, the PCjr hardware tells DOS that the top of RAM is 112K to prevent the video information from being overwritten if a large program is loaded. This leaves less than 90K between the top of DOS and the bottom of the video buffer for programs. All the memory above 128K is simply ignored.

Memory management software does two things. It moves the video buffer down so that programs are loaded above it, and it tells DOS the top of RAM is the true amount up to 640K. Since DOS and the video buffer take up 50-80K at the bottom of memory, the memory above that all the way to the top of RAM is available for programs. On a 640K system using DOS 2.1, almost 590K will be available.

CHKDSK.COM which is a part of DOS is used to check memory as well as disks. The last two lines of the CHKDSK report are "bytes total memory" and "bytes free", for loading programs (To convert the bytes to K, divide by 1024.)

Every brand of memory expansion for the PCjr provides its own memory management software. They all work although some have serious limitations. If you have the Impulse sidecar, the EXTRARAM.EXE program only works with DOS 2.1. The Tecmar CONPCJR.EXE wastes 16K of memory when used with newer versions of DOS. The IBM, Racore and Microsoft programs are better, but my favorite is a shareware program called JRCONFIG which works with all memory expansions.

Regardless of which memory management program you choose, copy the appropriate files to your boot disk and follow the instructions supplied. You can obtain the JRCONFIG program from the Software Store (Disk #65). JRCONFIG is also on PCjr AUTOSSETUP (Disk #99) which makes CONFIG.SYS and AUTOEXEC.BAT files for you automatically.

### CONFIG.SYS

When you boot up your PCjr after the operating system is loaded, DOS looks on the boot disk for a file called CONFIG.SYS. If found, DOS reads the file and executes the configuration commands it contains. If you didn't know

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# Questions and Answers

By Rene Waldron



**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. Is there a way to expand a Microsoft Memory / Mouse unit? I am a technician with enough familiarity to be dangerous and am considering buying one. Any comments or advice? E. Blake, Binghamton, NY**

**A.** Only the Memory Unit specifically made to plug into the side of the jr. will work. All others made by Microsoft are not only electronically different but they are physically designed to go into clones and/or IBM PC, XT or AT models so there is no way even to fit them into the jr!. If you are referring to a side-car memory unit made by Microsoft, then yes indeed they can be expanded; enough to give you 640k or more. Send your request to the Software Store for Jr Toolkit, Disk #110, which has the instructions for the job. Microsoft Mouse (serial model) should work OK with the jr. Please remember, no one yet has manufactured a bus connection conversion kit so we can use standard PC XT or AT boards or cards... Are you designers and manufacturers out there paying attention?

**Q. I have a question about compatibility. If the jr is CGA compatible why won't some programs run when it says CGA right on the box? An example of this is ALF. P. Hanson, Lombard IL**

**A.** When CGA software won't run on your PCjr, it's because the programmer did not follow standard programming routines. ALF is the ideal example of programmers writing directly to the video RAM which they assume is the "image" on the screen. Because the jr moves and sizes video RAM as necessary, the program may not be writing to the RAM which the jr is using for what's on the screen. The obvious answer is the one written clearly in the IBM Technical Reference Manuals; namely, DO NOT

**WRITE DIRECTLY TO VIDEO RAM!** What's probably happening here is that video routines in ALF are probably writing to RAM which in the jr has nothing to do with the video screen, or non-video routines are writing to the RAM which IS video RAM in the jr! The address for CGA in IBM and clones begins at hex B800 and continues upward. In the jr whenever hex B800 and above are called the info is "detoured" to the active video RAM which is somewhere else. Remember IBM CGA is basically a definition of colors, resolution, and method. It is not a separate hard-wired video system.

**Q. Have been trying to format my hard disk but keep getting a message "Format not supported on drive C:." No matter what I do this happens and no formatting occurs. Also am becoming enamored of scanners will they work on the jr? R. Torchia, San Antonio TX**

**A.** If your hard disk system is one of the standard (SCSI) add-ons for the jr, is without a boot cartridge and DOS 3.3 you won't be able to use DOS's format command at all. Instead, you will have to find the software which came with the hard drive system and use the formatting instructions and commands for your particular setup. You will probably be instructed to do all this from the A: drive. When you are done, do not be surprised if there are NO indicated bad spots on the hard disk according to CHKDSK.COM. The SCSI hardware/software takes care of recording and avoiding any bad spots so DOS doesn't even have to know about them. By the way, have any of you noticed that IBM has just standardized on the SCSI interface for their brand-new high-powered work stations? If the scanners in which you are interested are standard serial-input devices, and the software is without a true DMA requirement, there is no reason for them to not work with the jr. You will need LOADS of memory for the scanner program and the scanned input.

**Q. I haven't found a good printer buffer to work with a font producing program like Lettrix or Fantasy etc. The Tecmar printer buffer makes the printer work in a slow inch by inch style that is useless. Any suggestions? B. Milford, Tallahassee, FL**

**A.** It isn't the printer buffer which makes the printer print  
*(Continued on page 4)*

# Questions and Answers

*(Continued from page 3)*

slowly. The printer itself is the culprit, if there really is a culprit. All printers will slow down considerably whenever they are in graphics mode. We have found that the drivers for Fantasy and Lettrix are very efficient and right up there with the best, yet they seem to actually print slowly. If there is a need for you to keep on working while the printer is doing graphics printing here are a four suggestions: 1) Buy a separate, physical printer buffer with its own memory chips (get no less than 256k) and plug it in between your jr and the printer. The printer won't physically speed up but you will be back at the keyboard right away. 2) Save your font made files (these are actually graphics) then print them out later when you have the time. 3) Output your programs to DISK and not to LPT1 or PRN then use the DOS PRINT program to do it while you work. This second method will slow you down a bit, but not too badly; besides it's free! To do it just set up to print to a disk using a file name of your choice instead of printing to LPT1 or PRN or whatever you now print to. The print to disk goes pretty fast... Next, you just PRINT FILE-NAME to LPT1 or PRN and get back to the keyboard. Your DOS manual will give you more details if you need them. 4) Get a "spooler" program. This will be a more efficient version of the DOS PRINT command above but you will not need to print to disk first. A spooler is a kind of "multi-tasking" or "simultaneous operating" program. It will apportion (slice) some CPU time for you and some for the printing so it may slow you down as above, but most spoolers are quite efficient. Some are memory resident and all will automatically get between you and the printer to simply buffer all output to the printer. They do use up memory, and some are flexible as to how much memory and CPU slices they will use when in action. None of these methods actually speeds up printers. They go as



**PRINTMASTER LIBRARY.** Two disk set full of graphic images for use with PrintMaster. (Disk Set #3 - 2 disks, \$10)

**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)

**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)

fast they are designed to go...

**Q. Stock Portfolio by Byte Size Publishing for IBM and compatibles locks up my jr, runs on a PC and locks up a friend's jr. I get "Not ready error reading drive A:" on boot-up. I'm using DOS 3.3. B. Flannery, Louisville, KY**

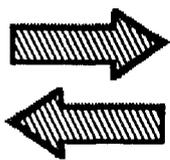
**A.** You probably aren't using DOS 3.3 when you boot up this baby! Who knows what it is? Here's a case of the kind of copy protection which probably relies on drive access time (related to true DMA and some specific errors on purpose) to allow the program to run. If a copy of this disk is made and is not exactly as screwy as the original it won't work! Be super careful of programs which require you to do either a warm or cold re-boot to run! One software company, we heard, regularly converts the jr to run in some kind of Apple operating environment when you re-boot! Return this to the dealer and avoid all copy-protected software. If we don't buy the stuff it won't have a market and it won't exist.

**Q. My keyboard locks up at intermittent times. In order to re-boot I most times have to shut down completely and start over. My problem started about a month after installing the SPC 20 meg hard drive. I have 640k (Tecmar devices), two floppies (Racore), V-20 chip, thinfont and a Keytronics 5150 jr keyboard. I have been booting with jrconfig.nrd. M Allen, Framingham, MA**

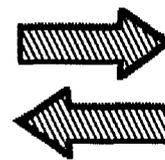
**A.** OK, you HAVE cleaned up (patched) DOS 2.1 if that's your system booter, haven't you??? Otherwise the usual reasons for the problem, when all these peripherals have been added is an improperly seated board in its slot or a loose chip on one of the boards. As the hard drive is the most recently installed device, it is the first place to look. The Systems Peripherals Consultants drive is as reliable as any other, so do not worry excessively. Look at the way the card is installed in the jr, then in the external power supply box along with the drive and its card. Mine had come loose in shipping, just enough to act up sometimes. jrconfig in all its variations takes care of any other keyboard problems of the jr. As other parts of your letter rightly assert, the keyboard lock-up is often a symptom of problems or conflict elsewhere in the jr.

**Q Our school operates 13 PCjrs in kindergarten through sixth grade classes. PCjr ColorPaint mouse based Cartridges graphics are ideal as first programs for our students from beginners at five years old up to more sophisticated artist/programmers. The problem is that we cannot convert the results of the ColorPaint program, namely \*.ART files, to any other for-**

*(Continues on page 19)*



# Reader Feedback



## Sports Fan Beefs Up His Junior

Well, I have just become a new subscriber to your newsletter, and I thought I would drop a line. I have been a jr user about 6 years now, but I have just upgraded it to 640K memory. I can't believe that I have suffered so long with a meager 128K. But I must admit that I didn't want to sink a lot of money into something that might not keep me satisfied. Being a big sports fan in play-by-mail league, I seriously considered changing computers when the league I am in decided to change games to Lance Haffner **Full Count Baseball**. Well, this game wouldn't run on a 128K jr. So I contacted the Metro PCjr Journal group who put me in touch with a gentleman that helped me get the game up and running on a jr. I had to expand to 640K and use the program nobeep from disk #65 to get by the keyboard interrupt. But the help that I received from these people and from the disk prompted me to subscribe to the Metro PCjr Journal and jr Newsletter. These two fabulous journals have really taught me plenty in a short time and have renewed my interest in my jr. I shall hold onto this machine for a long time to come.

For those of you that have not checked into PC Enterprises product, JrExcellerator, I consider this a must. I am sorry to hear that the MESA286 is dead, but if you are interested in a speed-up product, this is a great one. Sure, I know that the early productions had bugs, but they seem to be gone now. I did run into a few problems at first, such as keyboard freeze-ups, but after talking to the PCE tech people, I changed a few DIP switches, and everything is just great. Twice the speed. Games that took an hour to play now finish in a half hour. The board works in both speeds, and has a V-20 processor already installed. It hooks into the processor slot so, for those with memory expansion products that plug in there, it might create a problem. Call PC Enterprises.

When I upgraded to 640K, I decided to use PC-Enterprises' new Megaboard. This allows you to expand up to 1 meg of memory. Although I am only up to 640K at this time, the upgrade will be a breeze, and I'll be able to do it myself. Just buy the chips and plug them in. The instruction manuals for both of the above products are easy to follow, although the Megaboard instructions could give more info on how to set up and use ramdisks (one of their big selling points is their increased memory). It does come with all the software to get you started, however, including jrconfig. Again, I highly recommend both prod-

ucts.

Well, I guess I have taken up plenty of your time, so just keep up the good work. Incidentally, on Disk #60 from jr. Newsletter, it states that **Microleague** will run on a jr with 256K. I have been running on 128K. Also, **Stickybear Numbers** was supposed to run on 128K. I kept getting the venetian blind effect. Carl Haub said to put in the Tandy Mod. Well, I have the Tandy Mod, but I haven't installed it yet. However, when I increased my memory, the program ran beautifully. See ya.

*Terry Henry, Orlando, FL*

## Beginner Needs to Know How to Display Patch Instructions

We just recently received three disks that we ordered. Two of them are great! I'm having problems with disk #56 (PCjr PATCHES). I'm not sure I understand what it is. Is the disk itself a patch or do we have to make our own patch off this disk? If this is true, which patch listed is the one to be used with Microsoft Works 2.0? We are getting two key strokes per one stroke. They give you file names, example:

Under QuickBASIC:

INT9, INT9, JR.DOC

CURSOR.BAS, QuickBASIC.

When I exit the directions and begin at A:> and enter a file name it comes up one of three ways -- Syntax error, Invalid # of Parameters, or Bad command or file name.

I've followed the instructions to the best of my knowledge and ability with the PCjr at this time. I bought up the dir of files to see if I could get some of the others up. I get messages like:

All Done

Jr DPOS already in memory.

I don't mind telling you I'm at wit's end. I've spent a total of 27 hours working on it, and I don't know what else to do. Can you please help us out!?

*Cathy Labagnara, Cleveland, OH*

EDITOR'S NOTE: The PCjr patches provided on Disk #56 each come with instructions on how to use them. These instructions are in separate files on the disk. Once you read them it's relatively easy to use the patches. It

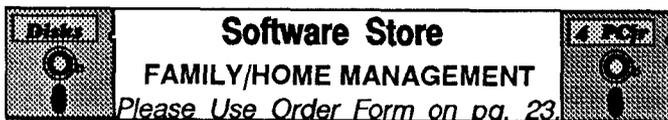
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# Reader Feedback

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sounds as though you don't know how to bring up the instructions on your screen in order to read them. We assumed that everyone who wanted to use the patches disk would know how to display the instructions, but that was not a valid assumption on our part, and we apologize to beginners who may have been stymied by this. It is quite easy to display a text file on your screen, but of course if you don't know how to do it, it doesn't matter how easy it is, does it? Here's how to do it:

First of all you need to know the name of the file you want to display. Most text files will have an extension (that means the three letters that come after the period in the list of files you see when you type DIR) of either .TXT or .DOC. These are the files that will most likely contain helpful information. In the case of the patches on Disk #56, all of the file names with instructions are given to you when you start the disk by typing the word GO at the A> prompt. For example, if you want to use the INT9 patch, the initial instructions tell you that the file called



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

**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. Cartridge BASIC required (Disk #58)

**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. 128 K. (Disk #57) Or v. 3.13 for improved screenwriting and disk access speed. 256K. (Disk #57A)

**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.

**EDNA'S COOKBOOK.** Will organize your recipes by subject, allowing for quick retrieval. Print out sorted collection for your own cookbook. 128K, 2 drives. (Disk #96)

**CHECK PROCESSOR - Easy to use software for financial record keeping.** Balance checkbook, print expenses by category, etc. 128K (Disk #59)

INT9JR.DOC contain directions for using the INT9 patch. What you have to do is, once you've left the initial instructions and you see an A> on your screen, type:

TYPE INT9JR.DOC

You DO type the word type and the filename as well as the extension, just as we've indicated above. It is not necessary to use upper case because DOS recognizes letters as letters whether they are capitalized or not. We just put them here in upper case for emphasis. Once you've typed these words, the instructions contained in the file called INT9JR.DOC to scroll up on your screen very fast. You stop them by using the Fn Pause key combination if you have a PCjr keyboard, or the Ctl NumLock or ScrollLok keys on other keyboards. Then, once you've read what one screenful has to say, press any key to start the scrolling again and the same key combinations you used before will stop the scrolling again. We've just given you an example using the filename int9jr.doc. You can use the TYPE command to display any file by simply using the filename and extension of the file you want to read. We usually include instructions for beginners on how to read files on our disks, but we omitted them on the Jr Patches Disk. We apologize to beginners who may have been hampered by this omission and we'll add those instructions to the disk immediately.

## Jr Lover Has No Regrets

As a former jr Report subscriber, I thank you for picking up my subscription. The jr Newsletter is every bit as informative as the jr Report was, and I look forward each month to its arrival.

I bought my junior 6 months before IBM announced they were no longer supporting them, but have never regretted the decision. I built my first computer, a Sinclair 1000, from a kit and I find the way the junior can be upgraded, added to, and is supported by third party hardware and software a most appealing feature.

The internal test feature of the junior has given me confidence in buying 2 more "previously owned" juniors for my daughters.

The junior I use at work has a single 360K disk drive, 640K RAM via a Techmar sidecar, a 20 meg SPC hard drive and recently I added a 286 MESA board. I had a lot of trouble getting the MESA board to work. I think it is finally working; however, I noticed that the MESA board seems to need to "warm up" for a few minutes before I boot up. The junior hangs up otherwise and keeps trying to read the floppy drive from which I boot.

*Ron Henderson, Shanty Bay, Ontario*

**EDITOR'S NOTE:** You're one of the lucky ones who got the MESA 286jr to work on your PCjr before Ed Strauss,

the creator of the only 286 modification for PCjr's decided to discontinue it. So consider yourself fortunate if the only drawback is a bit of warm-up time. Some people couldn't get it to work on their systems at all, which is why Ed dropped it.

## F-19 Patch Can't Handle All Versions

Your subscribers have been able to run the F-19 program as indicated in results of your recent favorite program survey (August '89 issue) and the Questions and Answers column of the December '89 issue. I have all of the software store disks containing configuration system file options and have tried every conceivable way to get F-19 to load properly in four color CGA mode but always get vertical bars obscuring the monitor display.

The only help Microprose could give me was that PC Enterprises could provide a patch.

I have a second 360K drive with a Creative Firmware card in the modem slot and Tecmar Captain and Cadet boards for 640K ram. The F-19 program, recently purchased, is Version 435.02 10/11/88.

*U. E. Leimkuhler, Catonsville, MD*

EDITOR'S NOTE: The patch for F-19 on PCjr Patches will work with some versions of F-19, but apparently Microprose spewed out so many versions that this patch cannot handle them all.

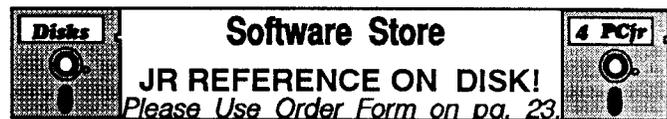
## Reader Requests Follow-up On Lotus 2.2 Article

After receiving only three issues of jr Newsletter, I've already found several items that have justified the price of the subscription. The article in the December issue about Lotus Release 2.2 was helpful, but only to a certain extent. Will there be a follow-up article or more detailed instructions on using the Allways program? The paragraph on page 14 about making the program think it's on a hard disk assumes a lot of prior knowledge on the part of the reader. For those of us more accustomed to using software than to programming and DOS commands, the instructions were a bit vague. I'd love to be able to "fool" Allways and use the features that I'm losing by not having a hard disk, but I also feel I'm too much of a novice to tackle making a directory and risking my sanity on something that looks more complicated than I'm ready to attempt. One additional paragraph (or a few additional sentences) by Mr. Haub would have been greatly appreciated by at least this reader of the Newsletter.

*R. E. Newton, Springfield, IL*

EDITOR'S NOTE: We passed your letter on to Carl Haub, who wrote the article you mention. This is what Carl had to say: Nice to hear that my article on Lotus 2.2 and the PCjr was helpful to you. You've asked some additional questions on the use of Allways on a PCjr without a hard disk and I hope the following helps. For one, you must have a hard disk to use Allways or at least a 3.5" disk drive or a high density 5 1/4" drive. If you don't have either of those added on, forget Allways. Another negative note is that Allways gives trouble on dot matrix printers; for some users I know, it skips lines when it prints. I use it at work on a LaserJet, so I don't have much experience there. In my article, I said that Allways assumes that it's being run from a hard disk in a subdirectory \123. It also assumes that Lotus itself was run from such a directory. My point was to create such a subdirectory on the disk where you will copy Allways. Do this my typing "md\123 <enter>" at a DOS prompt. Then "log" onto that directory by typing "cd\123 <enter>." THEN copy the files to the disk. You must also have done the same with the Lotus program disk; it, too, must be started from a subdirectory called \123. Note that, without a hard drive, Lotus and Allways must on different disks. It may also be that Allways expects that your high density drive is drive c:, the usual letter for hard drives; it just so happens that my 3.5" is c: so it conveniently emulates a hard drive as far as drive lettering goes. Hope this helps. If the business about creating directories is still unclear, any PC user with a hard drive can quickly explain the use of directories on a hard or floppy drive.

*(Reader Feedback continues on page 12)*



**THE BEST OF JR NEWSLETTER I.** 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)

**THE BEST OF JR NEWSLETTER II.** All the major articles and columns from June 1987 through May 1988 issues of jr Newsletter. Subjects cover most aspects of PCjr operations with tips on compatibility, DOS, expanding and speeding up PCjr's, best software, etc. Easy search function finds subjects quickly. 128K ok. (Disk #66)

**THE BEST OF JR NEWSLETTER III.** Disk contains most of the major articles published in jr Newsletter from the June 1988 issue through May 1989. Articles on compatibility, PCjr hardware and software tips, regular columns, letters from PCjr users, and other informative articles. Utility to search for subjects included. (Disk #91)

# What Pcj Users Must Know

Continued from page 2.

about this before, I'm not surprised. CONFIG.SYS is not listed in either the table of contents or index of the DOS 2.1 manual.

The CONFIG.SYS file is just a text file, so you can write it yourself. It must be plain ASCII text, so, if you use a word processor, you must save the file in ASCII format. Check the manual of your word processor on how to do this.

The special configuration commands are described in the DOS manual in the section "Configuring Your System." This is on pages 4-3 to 4-10 for DOS 2.1. Memory management programs are often loaded by the CONFIG.SYS file. Since these are not part of DOS, you will have to check the documentation that came with your memory expansion. In the example, I'll use the JRCONFIG program.

For your first experiments, you can use the COPY CON: CONFIG.SYS method for writing a text file as described under the COPY command in the DOS 2.1 manual on pages 2-54 and 2-55.

Here is an example CONFIG.SYS file for a 640K system. Put a boot disk in the drive and type it in as shown. The words in parentheses are the non-letter keys to press.

```
COPY CON: CONFIG.SYS (Enter)
DEVICE=JRCONFIG.DSK -t3 -j -s100 (Enter)
FILES=20(Enter)
BUFFERS=20(Enter)
BREAK=ON(Enter)
(Fn 6 Enter)
```

DOS will respond with "1 file(s) copied", and the CONFIG.SYS file will be written to disk.

The DEVICE= line invokes the JRCONFIG.DSK memory management program. This is a DEVICE driver, so the DEVICE= instruction is used, and the JRCONFIG.DSK file must be on the boot disk. The memory management program is almost always the first line of a PCjr CONFIG.SYS file.

The -t3, -j and -s100 entries are JRCONFIG options which set the video mode to 80 column, correct the COM port assignments, and create a 100K ramdisk. The 12 page documentation for JRCONFIG explains these and other options to set screen color, turn on the keyboard click, set the number of disk drives, and correct for disk drive noise problems with DOS 3.0 and higher.

The remaining CONFIG.SYS lines are explained in the DOS manual. Briefly, BUFFERS=20 will speed up disk access by assigning about 10K of RAM to hold disk information. If you have only 256K, you would probably not want to use memory this way. FILES=20 insures that complex programs do not have problems operating. Finally, BREAK=ON may allow you to use the Fn Break (Ctrl-C) to stop programs which are not running properly.

To read what is in a CONFIG.SYS file, give the command "TYPE CONFIG.SYS" without the quotes and press the Enter key. If you want to change the file, just repeat the COPY CON: instruction, type in the new contents, and press Fn6 Enter when you are done. The new version will overwrite the old one and take effect when the system is rebooted.

## AUTOEXEC.BAT

After the CONFIG.SYS file has been read during bootup, DOS next looks on the boot disk for a file called AUTOEXEC.BAT and executes any instructions it finds there. The AUTOEXEC.BAT is just a special batch file which is run automatically at boot up as described on page 1-27 of the DOS 2.1 manual. It contains the additional instructions you want to give your computer at start up, and you write it yourself, just as you wrote the CONFIG.SYS file.

The AUTOEXEC.BAT must also be plain ASCII text, so, if you use a word processor, you must save the file in ASCII format. You can use the COPY CON: method as described for the CONFIG.SYS file and in the DOS 2.1

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manual under Batch Files on pages 2-15 to 2-16.

Unlike the CONFIG.SYS, the commands in the AUTOEXEC.BAT are in the same form that you would give them at the DOS prompt. There are also a few special batch file commands such as REM, ECHO, and PAUSE that you may want to use. These are described under Batch Commands starting on page 2-13 of the DOS 2.1 manual.

Here is a simple AUTOEXEC.BAT file you can try. A boot disk must be in the drive.

```
COPY CON: AUTOEXEC.BAT (Enter)
DATE (Enter)
TIME (Enter)
MODE CO80 (Enter)
REM Howdy! Ready to Go (Enter)
(Fn 6 Enter)
```

DOS will respond with "1 file(s) copied", and the AUTOEXEC.BAT file will be written to disk.

Here's what this AUTOEXEC.BAT file does. When you boot up, you will be prompted for the date and time, MODE.COM will set 80 column color mode, and the AUTOEXEC. will end with a friendly greeting. Of course, if you used JRCONFIG to set the 80 column mode, you wouldn't have to do that again. You could add some instructions for yourself or others or the name of a program, and that program would start automatically. With the CONFIG.SYS and AUTOEXEC.BAT files, you can have it your way, just like hamburgers.

If you want to read what is in an AUTOEXEC file, use the type command as described in the CONFIG.SYS file. To change the file, repeat the COPY CON: instruction. Remember, the new version will overwrite the old one.

## RAMDISKS

Every PCjr owner with more than 128K RAM needs to know about ramdisks. Why? Because a ramdisk can speed up your PCjr by 50 percent and overcome many of the disadvantages of having only one disk drive. Most memory expansions come with ramdisk software and instructions on how to use it. The CONFIG.SYS example showed how to create a 100K ramdisk using JRCONFIG.DSK.

A ramdisk is simply a portion of the RAM memory which pretends to be a disk drive. That is, you can copy files to it and run programs which are on the ramdisk. Typically, the ramdisk is drive C, so you just substitute C for A or B in any disk command. For example, DIR C: shows the directory, or COPY a:myfile C: to copy a file called "myfile" to the ramdisk. Remember to copy anything new from the ramdisk to a floppy before turning the computer off. Without power, the ramdisk evaporates and everything on it disappears.

For the speedup effect, the ramdisk must fill the rest of the first 128K of memory not filled by DOS and the

video buffer.

With DOS 2.1, a 90K ramdisk is large enough, but you might want to make it bigger to hold more files or larger ones.

## Utilities

Utilities are small programs which make computing easier. They add functions which DOS forgot and fix problems that cause programs to run improperly. There are a lot of utilities for the PCjr in our Software Store, but I'll mention only a few here.

LIST.COM replaces the DOS TYPE command for reading text files. You can scroll forward and back through a file or search for words. (LIST is on Disk #103)

COMSPEC.COM (for DOS 2.1 only) comes with the JRCONFIG program and eliminates the annoying "Insert COMMAND.COM disk in drive a:" message. For other versions of DOS use the SET COMSPEC command. (COMSPEC is on Disk #65)

SWAPCOM2.COM solves communications problems with external modems. If you use JRCONFIG, the -j option fixes this problem. (SWAPCOM2.COM and JRCONFIG are on Disk #65)

HUSH.COM reduces the disk drive noise under DOS 3.0 and higher if you are not using JRCONFIG with the -x option. (HUSH is on Disk #65)

NOBEEP.COM stops the beeps when you type during disk access. It also corrects other keyboard problems which prevent some programs from running on the PCjr. (NOBEEP is on Disk #56)

That does it. With just this much information, you are now a PCjr Qualified Expert. You are in control of your machine and can venture into running all sorts of programs. Word processors, spreadsheets, databases, graphics, games and communications programs are all available to you. Pick what you want and keep learning.

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## How To Tell If Your PCjr Has Socketed or Soldered Chips

This tip from Computer Reset, the PCjr specialists in Garland, Texas, will enable you to tell whether or not the chips in your PCjr are soldered or socketed. Not all PCjrs are the same!

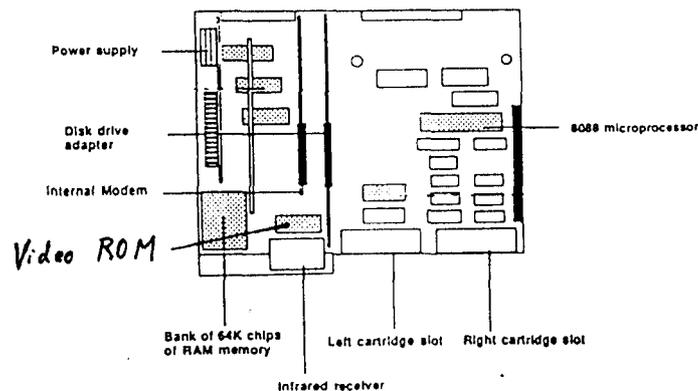
This is an important consideration if you are interested in enhancing your PCjr with a jr Hotshot, V-20 chip, or Thin Font ROM chip, all of which replace an existing chip in the PCjr. If the chips in your PCjr are soldered you'll probably need to have the new chips installed by a technician. If your chips are socketed, you can do it yourself. Luckily, most PCjrs have socketed chips.

Here are Computer Reset's instructions for finding out whether your chips are socketed or soldered:

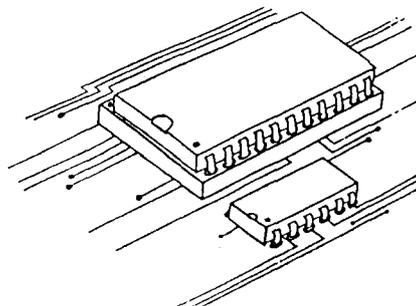
**Step 1** - Remove the top from the computer.

**Step 2** - Look at the Infrared Receiver (it is about two inches square and has a silver top).

TOP VIEW OF THE PCjr WITH DISK DRIVE REMOVED



Video ROM



Socketed Chip

Soldered Chip

**Step 3** - Look at the large chip behind the Infrared Receiver in the lower portion of Figure 1. (This is the Video ROM Chip)

**Step 4** - Observe: IF this large chip is socketed it will appear as illustrated and be taller than the nearby smaller

chips. IF this large chip is socketed you have the socketed type of system board and the 8088 microprocessor which is located under the disk drive will also be socketed. This means it can be easily replaced with the NEC V-20 chip or the jr Hotshot.

However, if the large chip and the nearby smaller chips are the same height and both appear to be soldered to the system board then the 8088 microprocessor and ROM chips are also soldered to the system board and will have to be removed by a skilled technician and a socket installed before the internal upgrades can be used.

We recommend installation of the NEC V-20 microprocessor when a socket is installed for the 8088 microprocessor rather than replacement with the 8088 micro-

processor. The V-20 speeds up the computer in many applications and consumes less power.

The jr Hotshot is a very reliable memory expansion unit which is installed in the socket normally occupied by the 8088 microprocessor. The jr Hotshot adds 256K or 512K to a 128K PCjr, with an optional clock/calendar and/or diskette controller for a second disk drive.

There are two types of font chips for PCjrs. The single font, or thin font, ship replaces the original video ROM chip and makes the text image that appears on the screen slightly thinner and easier to read. The dual font chip provides either a thin font, or a simplified font, with out the PCjr's usual serifed letters. A switch on the chip is used to change between the two styles.

---

## New Utility Runs Large Programs with Much Less Disk Space

One of the problems facing everyone with a floppy-based computer system - and, to a lesser degree, those with a Hard Drive as well - is disk space. For those of us with the old 360-KB, 5.25" floppy drive, the problem of just what goes on a disk can be frustrating and irritating. When you have large "executable" files (.EXE and .COM), you necessarily have less space to store the data and configuration files that are needed to make your application run smoothly. RAMdisks can help alleviate this problem, but you have a trade-off in the amount of RAM you can allocate to the RAMdisk without crippling your ability to run your program. As the King in the great musical comedy, "The King and I," succinctly put it, "Is a puzzlement!"

Well, some help is at hand. A clever Frenchman has devised a way to compress certain executable files and run them without decompression. In other words you can cut the size of the file by 50% or more, without damaging its performance, thus leaving that much space for data and support information or for another program. The process doesn't work on all programs; .COM files are not compressible by this method and some .EXE files won't work properly after compression, but the majority of .EXE files can be shrunk significantly and run without a hitch. (For example, in one test, Qfiler compressed from 115.5K to 54.4K.)

The value of such a program is obvious to PCjr owners, who fight a constant battle for disk space. The name of this little marvel is LZEXE.EXE, and the latest version of it as of this writing is contained in a file called LZEXE91.ZIP, which is available on Disk #112 in the jr

Newsletter Software Store. (For you linguists, there's a French version of the documentation as well as an English translation.)

The LZEXE91.ZIP file contains a couple of other utilities by the same author: a program called COMTOEXE.EXE to convert some (but not all) .COM files to .EXE format, and an undocumented utility called INFOEXE.EXE which seems to analyze your .EXE file and tell you whether it is a candidate for compression or not. I say "seems" because, unfortunately, the readout is in French and I took Spanish in college. I think I have it figured out, but I'm not ready to swear to it as yet. Finally, the LZEXE91.ZIP package contains a mysterious (to me) utility called UNPACKEXE.EXE, which appears to translate some .EXE files, that won't work as they are, into a usable form for compression.

LZEXE doesn't delete files after it compresses them; instead it assigns the original file the extension .OLD and retains it until you can check the operation of your new .EXE file. After you have run the new version for a while and are satisfied that it performs as well as the old one, you can delete it and have all that lovely space you saved.

Take a look at this program if you have a need for more disk space (and who doesn't?). All of those discussed above are in the Public Domain, so you don't even have to think about a registration fee. You can't beat that price, and the benefits could be considerable.

*(This article was originally published in the Orphan Peanut, the chronicle of the Atlanta PCjr Users Group)*

# Reader Feedback

(Continued from page 7.)

## What Do CGA, EGA, and VGA Mean to the PCjr User?

I have an IBM color monitor model 4863. In looking at various software, I find the notation, "Requires CGA, EGA, or VGA." What do these initials stand for? Do I need one of them with my monitor to run programs that call for one? If so, where do they come from and are they easy to install?

*W. D. Roy, Randallstown, MD*

EDITOR'S NOTE: All those abbreviations for video standards ARE confusing. But here's what you, as a PCjr user need to know. PCjrs can run software written for CGAs (Color Graphics Adapters). PCjrs will not run software written for EGA (Enhanced Graphic Adapter) or VGA (Video Graphics Adapter) machines. Your monitor is the PCjr Color Display, which is an RGB (Red Green Blue) Intensity monitor. That is the standard PCjr monitor, so you can see all the (16 maximum) colors your PCjr is capable of producing. That's it in a nutshell. Now for the longer answer...

Just to confuse you, PCjrs contain a special hardware circuit called a Video Gate Array (VGA), which performs many video display functions and, in effect, makes the PCjr compatible with CGA standards. However, because of the unique way the PCjr handles video routines, some software intended to run on CGA computers will not run on PCjrs, or will not run without a patch or without increasing the size of the PCjr video buffer.

Problems are caused when software developers take shortcuts in their programming and write directly to video as opposed to going through BIOS, (which is considered the best programming practice). If the software developer has adhered to good programming standards, the software will run on PCjrs, but you know how tempting it is to take shortcuts. That's why it's always best to make sure you can return software you buy if it won't operate on your PCjr.

Keep your fingers crossed, though, because PC Enterprises is working on a card that may provide PCjr compatibility with all current video standards.

## Search for the Perfect PCjr Index

Needless to say how much I enjoy jr newsletter. It has helped me on numerous occasions. My biggest problem is remembering in what issue I read something.

Do you have or do you envision having some sort of database listing the table of contents of each issue or a list of articles alphabetically arranged with the issue it appears in? I keep all my back issues and, although I hi-lite something I want to remember, I find it cumbersome to search through my old issues until I find the particular article I was looking for.

Thank you so much for jr newsletter.

*Norman W Brodus, Melrose, MA*

EDITOR'S NOTE: We have often thought about making an index to past issues of jr Newsletter, but frankly, we've always put it on the back burner because making a really useful index requires a lot of time. What we've done instead is to provide a way for your PCjr to do the job for you. We've put most of the articles and letters that have appeared in a year's worth of jr Newsletters on disks called "Best of jr Newsletter." There are now three of them and the fourth will be available in July. We put some very powerful search utilities on these disks, along with instructions on how to use them. That way you can quickly search the entire disk for a key word and you'll find what you're looking for. Many of our readers have told us how helpful these disks and the search utilities have been, so we think this alternative to a printed disk is a good one.

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## Jr Newsletter Reader Survey

In order to make sure jr Newsletter keeps on serving you well, we ask readers every year to tell us about themselves. Please join with your fellow jr users and provide us with information we need in order to plan future articles:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ ST: \_\_\_\_\_ ZIP: \_\_\_\_\_

1. Please describe your PCjr - (Memory, drives, modem, etc.)
  
  
  
  
  
  
  
  
  
  
2. Please list what software you use and like best.
  
  
  
  
  
  
  
  
  
  
3. What subjects would you like jr Newsletter to cover in future articles?
  
  
  
  
  
  
  
  
  
  
4. What do you use for PCjr for? (Personal letters, games, business, study, telecommunications, etc.)
  
  
  
  
  
  
  
  
  
  
5. Do you plan to expand your PCjr and if so, how?
  
  
  
  
  
  
  
  
  
  
6. Have you had any hardware problems with your PCjr?
  
  
  
  
  
  
  
  
  
  
7. What software, if any, have you had problems with?

**Please use the other side of this page for questions and comments you would like to add.**

**PLEASE USE THIS SIDE OF THE  
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**After you have answered the questions on the other side, please cut out this page and send it to**

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Thank you

## Play Scrabble On Your Jr

At last we've found a good shareware game of scrabble in full color that's PCjr compatible! We've added it to the jr Newsletter Software Store this month as Disk #113.

This game, written in Turbo Pascal by Chris Hall, is designed for up to four players. You play just as you would play the real board game, but your PCjr will keep score for you and will select new tiles for each new turn.

Scrabble is such a good game it has become a classic. It's educational for both kids and adults and it's fun to play. It also has the advantage of being playable at very simple or very advanced levels, depending entirely upon the skills of the players.

When the game starts, it asks for the names of the players. You enter them and then press F2 (Fn2 on the jr keyboard) to pick tiles. The score board will show the current player. After tiles have been picked, press F4 to play each hand. It gives you a chance to pick up tiles if you change your mind before the next person plays, or even to discard your tiles for a new selection.

After a word is placed on the board, the program will check the built-in dictionary to verify the word. The dictionary starts out very small and it will often ask you to verify that the word placed is a valid word. If you have any doubts, just look it up in a dictionary (the book type). Once you answer "yes", indicating that a word is valid, that word will be added to the dictionary and you won't have to validate it again.

The game keeps track of all the special squares on the board for double and triple letter and word scores. The only thing it doesn't do is make sure you've placed your tiles in a "legal" position. So it will give you a score no matter where on the board you place the tiles. But that's easy enough for the players to do for themselves.

The other thing it doesn't do, which commercial Scrabble games for computers will, is allow you to play against the computer. We found, however, that it's fun for a single player to play two players at once.

The disk also contains WORDWHIZ, an excellent vocabulary building game. The game is high school to college level with many more volumes of words and questions available from the shareware author.

Please see page 23 to order Scrabble, Disk #113.

---

## Overcoming PCjr Compatibility Problems

The most important step to take when you have problems running software on a PCjr is to use a config.sys file on your boot disk that reserves at least 32k for video. This is done in different ways depending upon the brand of memory expansion unit on your PCjr. Here are some examples:

**IBM Expansion Units** -- If you have expanded your PCjr with IBM sidecars, try using a config.sys setting: `device=pcjrmem.com /c` This creates a video buffer of 96K and makes all graphics modes operable. Using this setting does, however, mean you will have about 128K less memory to run the software. Some software, especially when paging is involved, will run better with the /e setting.

**Other Expansion Units** -- For other brands of memory expansion, use the config.sys setting that does the same as the IBM description above. (check your manual) Or Use jrconfig, which is available on jr Newsletter's Jr Power Packs (Disks #52 and #65). Jrconfig is easy to install and works well with all types of memory expansion units. Installation instructions are on the disks.

With jrconfig use -t3 and either -v32 -v64 -v96, depending upon how demanding the software is. You may have to experiment a little. Try making a few boot disks with different config.sys and autoexec.bat files. You'll soon learn which to use for which types of software.

With large database or integrated software, it some-

times helps to add `FILES=20` to your config.sys file.

If you don't know what a config.sys file is or don't want to make these changes yourself, PCjr Autoseup (Disk #99 in the jr Newsletter Software Store) will automatically make boot disks with the right config.sys and autoexec.bat files for you.

**NOTE ON DOS:** If you are using DOS 2.1, it should be patched to fix a few of its bugs which can cause your computer to lock up. Patches are on jr Newsletter's Disk#40. Using DOS 3.1 or higher can solve some problems, but takes more memory.

**NOTE ON SPEED OF OPERATION:** Software will run faster when it's loaded into "high memory" -- that is, above the 128K "lower memory". So, filling up low memory with a ramdisk, or large video buffer can speed slow running programs up considerably.

**NOTE ON KEYBOARD/ JOYSTICK PROBLEMS:** Often, if one has problems, you'll find that the other works ok, so try switching.

**NOTE ON MEMORY REQUIREMENTS:** As a rule of thumb you can figure that it takes about 128K more memory to run a program on a PCjr than on PCs. Not always, but often enough to be careful when you buy.

**NOTE TO HACKERS:** For information useful in patching software that won't run right out of the box, refer to the PCjr Compatibility Guidelines published in the Sept-Oct 1989 issue of jr Newsletter.

# Random Thoughts on PCjr

Continued from page 1.

Manufacturers continue to dangle new mouth-watering carrots in front of me. And I have bitten. (Sometimes to my wife's chagrin.)

The "If only ..." mentality easily sets in. You probably know well what I mean.

--> "If only I had 256K of memory."

--> "If only I had a second drive."

--> "If only I could get it to run in 16 colors like a Tandy."

--> "If only ..."

--> "If only ..."

I am hooked. A genuine, dyed-in-the-wool Junior Junky.

And last-but-not-least:

\* Companionship. With the feeling of abandonment by IBM in 1985 came the need and desire to band together with other PCjr orphans. So I helped start our local users group, the Eugene PCjr Club.

Our club, for me, has turned into a social support group as much as an orphaned computer support group. There is commonality among us that both attracted us to the PCjr and has kept us interested in using it ever since.

Our "oneness" as PCjr orphans has made the monthly meetings, the frantic calls, and the shared gallows' humor very enjoyable. The bonding that resulted has led to deep life-long type of friendships.

And so, here I sit. Staring at the beige box I have stared at so many times over the past five years. I wonder - "How much longer will this 'Junior love affair' go on?" I wrestle with - "When will I stop putting money into Junior and buy a 'real' computer?" I worry - "Will Junior crash in the middle of something important?"

I don't, however, have a crystal ball. So I'll just have to go on - waiting, worrying, working, and playing. Looking forward to another day of staring at that little blinking white rectangle on a 14" IBM PCjr Color Display. Wondering what will be in store for me and this orphan that is so much a part of my life.

## Parallel Printer Card Installs in PCjr Modem Slot

Legacy Technologies has developed a parallel printer card that plugs into the PCjr internal modem slot. The card allows PCjrs to interface with any standard parallel printer with a standard connector (Type DB25).

Legacy reports that the card can also be used as a parallel input/output port for digital TTL signals. The card comes with cable, software and an installation/user's manual. Legacy is offering the cards at the discounted price of \$49 with the purchase of a printer. Regular retail price for the card is \$69. Legacy can be contacted toll free at 1-800-228-7257.

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**PCjr**

**JRTELE V2.1.** Excellent, easy-to-use telecommunications software made especially for PCjrs, and the PCjr modem. Ideal for beginners, but has enough power and features for most users. Supports 300 and 1200 baud. PCjr internal or Hayes compatible external modems. 128K ok. (Disk #86)

**JR MUSIC MACHINE.** If you want to write and play music on your PCjr, this program allows you to do it. Displays music as you write it using jr's 16 colors, and plays music back in three voice harmony. Features allow you to adjust key, tempo, note values, etc. Color Display required. 128K ok. (Disk #62)

**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)

See also "Need Help?" on page 22.

## Metro PCjr Group Still Going Strong

It's been a while since I've written with news of our user group here in the Washington area, the Metro PCjr Users Group, so I thought I'd send this along. The group is going strong and has grown from about 160 members three years ago to about 250 today.

Membership has held steady at about 250 for two years; about 75 percent renew their membership and the balance is made up by new members.

We continue to receive large number of inquiries from people who have just bought used jr's. Seems our little friend will never die! We now have three meeting areas. The regular meeting is held at the Gaithersburg, Maryland Library (G'Burg is a D.C. suburb) on the 3rd or 4th Tuesday and a bimonthly meeting is held at the Belle Haven Country Club in Alexandria, Virginia. The latter benefits PCjr users in the Old Dominion who would otherwise have to fight rush traffic on the Beltway. These meetings feature presentations -- we had WordPerfect last year and tables where PCjr parts and group discount purchase items are available. Our third meeting site is at the headquarters of the Capital PC User Group in Rockville, Maryland on the first Saturday of each month, except in the summer. The CPCUG supports us and gives us the room free of charge. This is a three hour "workshop" session where users can bring nonfunctioning machines or questions too detailed for the regular meetings. Some people have brought in broken machines they've been given by a relative and, after struggling with bent pins, corrupted boot disks, and disk drives with dirt on the rails, we've sent them home happy with a working jr and a new PC Enterprises catalog. It's an enjoyable day.

For the past four months, we've been installing the Tandy mod free to all members. Member Al MacCracken has installed the mod in over 60 PCjr's. This has made a lot of members happy and it certainly makes the old \$20 annual dues worthwhile. Our software library is up to 150 disks and librarian Jim McHarg keeps the latest versions of everything in it; our members like knowing that the stuff obviously runs on a jr. John Dimsdale has been doing great things with our newsletter, the Journal, which is now being produced on a laser printer at CPCUG and looks really sharp.

Users who haven't heard about our BBS will want to know that our SYSOP Jeff Perriens runs the JRBBS in Rockville, Maryland at (301) 4680984. This computer bulletin board is dedicated to the PCjr. It has 80 megabytes of online storage, runs at 300 2400 baud, and is up 24 hours a day. There are few restrictions and no download limit. We hope that this BBS can serve as place for PCjr users to share information and hope to hear from as

many users as possible. Also, please upload your favorite jr programs!

Finally, we're happy to offer assistance to anyone thinking about starting their own PCjr group. Write us and we'll send you a full package of our information, newsletter samples, etc. If you seriously wish to begin a group, we'll also be happy to send a basic PCjr software library of about 50 disks. We've done this several times in the past for new junior groups. For more info, write: Metro PCjr UG, 11732 Cherry Grove Drive, Gaithersburg, MD 20878.

*Carl Haub, President*

## SFPCjr UG Disbands And Forms SIG of PC Group

Due to lack of volunteers to fill officer vacancies, the San Francisco PCjr Users' Group has dissolved and reformed as a Special Interest Group of the San Francisco PC Users Group.

The last meeting of one of the most active independent PCjr groups was held on April 1. As John King, president of the group for the past four years, wrote in the group's newsletter, "Pay no attention to the fact that (our

*(Continues on page 18)*

	<b>Software Store</b> <b>SPREADSHEETS.</b> <i>Please Use Order Form on pg. 23.</i>	
--	--	--

**PC CALC PLUS.** V2.0 More advanced than PC Calc (Disks 5 and 6), this is a very powerful spreadsheet program which includes graphing features. Excellent. 512K (Disk Set #2 (2 disks) \$10.)

**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)

**MINICALC.** A small, easy to use, spreadsheet program. 11 columns by 22 rows. On-line help function and manual on disk. In addition to performing calculations, will generate bar graphs. (Disk #27)

**AS-EASY-AS V.4.00** This is a MAJOR upgrade of the popular, powerful Lotus 1-2-3 look-alike spreadsheet software. Many useful features have been added to an already full-featured program. Earlier 256K version (2.05) is Disk #67. This upgrade requires 384K. Reviewed 2/90 (Disk #107)

**AS EASY AS.** Excellent, easy to use, spreadsheet program. Works like Lotus 1-2-3, with all spreadsheet functions. Can load and operate 1-2-3 files. 256K ok (Disk #67)



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Kit with instructions \$9.95 plus \$2.50 shipping.

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last meeting) is on April Fool's Day. We have all enjoyed being members of a great users group and the support and opportunities the group has provided."

Members of the group will continue to meet under the auspices of the SFPC Users Group. In fact, their first meeting as the PCjr Special Interest Group was held two weeks after their last meeting as an independent group. The SFPCjr Group's BBS will cease operating soon, but members hope to form a message area devoted to PCjrs.

It's sad to see such a valuable PCjr resource as the SFPCjr UG go, but there are many active PCjr SIGs operating within larger PC groups, so we hope the San Francisco area will continue to be served in this way for many years to come. The new meetings will be structured much as the former meetings were -- with a PCjr on hand for problem-solving and discussions of software and hardware.

On behalf of all PCjr users, we thank John King for his years of support for PCjr users in his role as president of this group as well as for his exceptionally thoughtful, well-written monthly columns which appeared first in the group's newsletter and were often reprinted in jr Newsletter.

John Waite, vice president; Ed Jackson, secretary; Francis Farina, treasurer; Larry Buoncritiani, SYSOP; Richard Barton, newsletter editor and Lenny Bailes, public relations, along with many others who played active roles in the group over the years, also deserve a round of applause. When you have people like these who are willing to do these jobs, and do them well, you have a first class users group. When these people get burned out, or turn to other things, and there's no one to step forward and take their places, no user group can survive.

To end on a positive note, PCjr users who want the type of support and friendship that a user group can provide should consider following the example of the San Francisco users. Most larger groups are open to suggestions of this kind and would be glad to offer meeting locations, space in their newsletter for PCjr news, message areas on BBSs, and other forms of assistance. All it takes is a handful of active, interested PCjr users to make a good group.



Software Store  
Music



Please Use Order Form on pg. 23

**JR MUSIC MACHINE.** If you want to write and play music on your PCjr, this program allows you to do it. Displays music as you write it using jr's 16 colors, and plays music back in three voice harmony. Features allow you to adjust key, tempo, note values, etc. Color Display required. 128K ok. (Disk #62)

**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)

# Questions and Answers

*Continued from page 4*

**mat for import to other graphics programs for further development. We have tried no less than nine conversion programs with no success. Is it because this is a cartridge-based program or is the jr's graphics mode at the heart of the problem. We are at a standstill. Can you help us? M. Nowell, Moylan PA**

A. Because the program is cartridge-based has nothing to do with your problem nor does the jr's video abilities. The format of the file is the ONLY thing which could be giving you trouble. Had you sent us a copy of a SIMPLE graphics ( a square or circle, for example) we might be able to read the header, read the data, then relate that to the image and try to determine how the data is used. This is not an easy procedure and there never can be a guarantee about success. As this is a school, we are asking our readers for help. If any of you already have a solution for this conversion / import / export /whatever, fire it as quickly as possible to: Michael L. Nowell The School in Rose Valley School Lane Moylan, PA 19065 Please drop us a card as well so we can also get the information out to the rest of you. We really rely on our readership for input, and here's your chance to contribute to an excellent cause!

**Q. Recently got disk #56 to patch Prodigy. The screen driver works fine. My problem is with the other patches, NOBEEP.SYS and NOBEEP.COM. My understanding is that these patches prevent "hang-ups" which can be experienced with Prodigy. I have tried both versions of NOBEEP without luck. I have booted with JRCONFIG.NRD and .DSK and PCJRMEM.COM. A member of prodigy says that there must be at least 580k of available memory to work otherwise there is an error code of INTHNDL BEND 0026. G. Nefferdorf, Warminster PA**

A. We recently had the opportunity to do the patch for a Boston Computer Society member. The patches he had were archived using ZIP and he was having trouble with his UNZIP program. It turned out to be a faulty copy. Anyway, the technique there was to boot with PCJRMEM.COM /C which positions the video memory just right. It seems the screens actually only need 32k but WHERE that 32k is positioned by the config.sys file is most important. With JRCONFIG use -v96. We did not have to use NOBEEP at all. In NO case boot with a ramdisk. Set either high in memory or low a ramdisk can cause glitches with the present versions of Prodigy. No TSRs (Terminate and Stay Resident programs) at all, either. In other words a clean start with video memory positioned correctly does it. Of course you ARE using a correctly patched copy of DOS (if 2.1) and you ARE configuring with INT9.SYS or .COM, right?

# TSRs, Paths, and Memory

*By Alan Jay*

Recently while playing with my AUTOEXEC.BAT files I discovered an interesting phenomenon. If you load all your memory resident programs before adding a long path or using the allocated environment you can save a few bytes of memory . On my system the results were as follows:

Standard System

574304 bytes free memory

482786 bytes after loading SK

Modified no SET, PATH, PROMPT before loading SK

574560 bytes free before loading SK

483280 bytes after loading SK

483008 bytes free after PATH etc

Saving 222 bytes of memory

Although not much of a memory saving, often reducing the overhead of your standard configuration, even by a few bytes, can make a substantial difference in running some applications. Does anyone know why this occurs?

Editor's Note: Sure! Every program that is run gets a copy of the current environment for it to use. The environment uses a portion of memory and its size is equal to how much information it contains. If you have set some long paths, prompts, etc., then the environment is proportionally larger. Many Terminate but Stay Resident (TSR) programs do NOT release their environment when they make themselves resident, and thus use up valuable memory space saving something they never use (some well written TSRs do release their environment block). If you use the SET command before loading your TSRs, then they will save the larger environment. If you load a half dozen TSRs, you could see a loss of 1k or more of memory. Take home lesson: Set your paths, prompts, etc. after you load your TSRs!

*[Reprinted from Bits N' Pieces, newsletter of the Madison, WI PC Users Group Jun, 1989]*

## Eugene PCjr Club Members Love Their Jrs!

A recent issue of the Eugene (Oregon) PCjr Club reported that the members of the club were given a survey. "One question in our recent survey was what our members would do if their Junior broke and the cost of fixing it was more than it was worth. By far, most said they would either fix it anyway or purchase another Junior."

"Junior will survive as long as we feel this way. Our clubs will survive too, when we think of the club as a family. Most of us would do anything we could to help members of our family. One of the best things IBM did when they manufactured this fine piece of equipment was to name it "Junior." It instantly became a member of the family."

## \*\*\* PCjr CLASSIFIEDS \*\*\*

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IBM PCjr 640K, IBM color monitor, Racore Drive II w/ DMA, 1200 baud external modem w/cable, 2 joysticks, both IBM keyboards, cartridge basic, Quicksilver cartridge, DOS 2.1, manuals, parallel port, clk/cal, V-20 chip, Silver Reed EXP5000 dw printer. \$850. Call George Alexiades at (607) 723-7817 or (718) 657-9468.

PCjr - 128K, PCjr color monitor, Internal modem, keyboard cable, basic cartridge, \$250 +shipping. IBM PC 5151, AST 6-pack card, serial & parallel ports, clock 640K, 30 meg hard drive, PSG color monitor. \$775 + shipping. Call Don 217-496-3007.

IBM 5140 Laptop, 2 - 3.5 diskette drives, 512K, display adapter, parallel printer adapter, IBM convertible mono display, Power adapter for auto, DOS 3.2 and all manuals. \$650 + shipping. Call Don 217-496-3007.

PCjr Misc. 128K sidecar, \$60.00; Power Sidecar & xfmr, \$30.00. Printer port sidecar \$30.00 2 joysticks, \$10.00 each, Datadesk Turbo 101 keyboard, \$70.00. TV modulator, \$5.00. H.J. Swier, 10945 SW 84 Ave. Ocala, FL 32676 (904) 854-1794.

FOR SALE IBM PCjr. Tecmar 2nd jr Mate Clock, Printer Port, with New PCjr color monitor, keyboard with cord, cartridge basic with manual, Scuba Adventure cartridge, computer will not boot. \$200.00 Will pay shipping. Tom Messner (216) 828-2585.

PCjr-640K, Racore Drive II with clock/cal, jrHotshot memory, Tandy graphics, V-20 CPU, IBM PC keyboard, enhanced PCjr keyboard, PCjr color display, serial adaptor, joysticks, DOS 2.1, 3.1, much software. \$600 or best offer. Rob Kienle, (312) 781-1700 days, (312) 769-4880 nights.

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IBM PCJR - 640k, M/S sdcw with mouse, PCjr Color Monitor, IBM graphics printer, PC Enterprises jrExcellerator speed switchable from 4.77 MHz to 9.54 MHz, 2nd 5.25" drive by Creative Firmware, PC Enterprises Config. cart., Cart. Basic & DOS 2.1 w/manuals, Inforcom & Sierra games, PCjr ColorPaint, MineShaft, Crossfire, \$950 + shipping. (313) 476-8560.

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BANK RIGHT Right Arrow

## ELEVATORS

NOSE DOWN Up Arrow  
NOSE UP Dn Arrow

## VIEWS

AHEAD Fn-ScrLk then Up Arrow  
REAR Fn-ScrLk then Dn Arrow  
RIGHT Fn-ScrLk then Rt Arrow  
LEFT Fn-ScrLk then Lf Arrow

## MAP

SHOW IT Alt-Fn-N  
ERASE IT Alt-Fn-N - Fn-N

Ahead LEFT Fn-ScrLk-Home Rear LEFT Fn-ScrLk-End  
Ahead RIGHT Fn-ScrLk-PgUp Rear RIGHT Fn-ScrLk-PgDn  
STRAIGHT DOWN Fn-ScrLk then Shift-5 (with Num Lock ON)

## THROTTLE

CUT Fn-1  
LESS Fn-2 or Fn-PgDn  
MORE Fn-3 or Fn-PgUp  
FULL Fn-4

## FLAPS

UP Fn-5  
15 Deg. Fn-6  
30 Deg. Fn-7  
40 Deg. Fn-8

## TRIM

NOSE DOWN Fn-Home  
NOSE UP Fn-End

## NAV / COM

Toggle DME NAV 2 / 1 B key  
Toggle DME Spd / Dst F key

NAV SELECT	N then 1 or 2	COM SELECT	C then 1 or 2
Tune xxx.	N then + or -	Tune xxx.	C then + or -
Tune .xx	NN then + or -	Tune .xx	CC then + or -

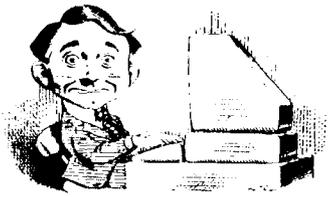
OBI SELECT V then 1 or 2  
Rotate V then + or -

ADF SELECT 5 (Nav/Com menu), E, Esc, 4, Space  
Tuning is NAV 2 ONLY

## TRANSPONDER

XPNDR SQUAWKT then + or -  
TT then + or - etc.

*(Contributed by Rene Waldron)*



# Need Help?

The following disks from the jr Newsletter Software Store can help you to get the most out of your junior. To order, see the coupon on page 23.

**PCJR AUTOSETUP.** A beginner's dream: Just select from a menu to make separate boot disks especially for each type of software you use. Automatically creates the right config.sys and autoexec.bat files for RAM disks, games, word processing, telecommunications and other software to run at maximum power and efficiency on your PCjr. Designed especially those who haven't mastered the art of customizing their computers. This one does it for you! 256K (Disk #99)

**JR TOOLKIT.** A collection of 25 upgrades, modifications and repairs that PCjr users with a little soldering experience can perform quite easily. Includes PCjr to Tandy 1000 modification, memory and power supply upgrades, disk drive additions, many useful diagnostic and repair tips and more. (Disk #110)

**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)

**JR POWER PACK II.** Disk full of programs to make your PCjr more useful and powerful. Fix compatibility problems, set up ram disks, tiny word processor, set up 3.5" drives, use DOS easily, and more. Need 256K for some, 128K ok for most. (Disk #65)

**PCJR COMPATIBILITY DISK V3.5.** Lists hundreds of software titles, along with info on how they run (or don't run) on PCjrs. Includes many tips on how to make software PCjr compatible. Powerful search feature finds titles quickly and easily. 128k ok. Updated April, 1990. (Disk #60)

**PCjr PATCHES V.5.0** Patches to fix software that ordinarily won't run on PCjrs. V.5.0 adds patches for Prodigy, Telix V.3x, Bard's TaleII, Maniac Mansion, Designasaurus, California Games, and F-19. Also patches for Flight Simulator V.3.0, Loderunner (V-20 chip), Arctic Fox, Managing Your Money V.3, Autocad, King's Quest IV (early 512K version), KQ II (PC ver), Turbo C, Quick BASIC V3-4, Starflight, Advanced Flight Trainer, Double DOS, Bard's Tale I, Turbo BASIC, and BASICA. (Disk #56)

# jr Newsletter Software Store

The software in the jrNewsletter Software Store is the best public domain and user-supported software for the PCjr we've been able to find. All software has been tested on our PCjrs and is highly recommended. Some of the programs are equal to or better than commercial programs costing hundred of dollars. These are offered for you to try at \$5.95 per disk. Some shareware requires additional payment if you continue to use it.

All the programs are listed on the order form on page 23. Please refer to the following for further listings:

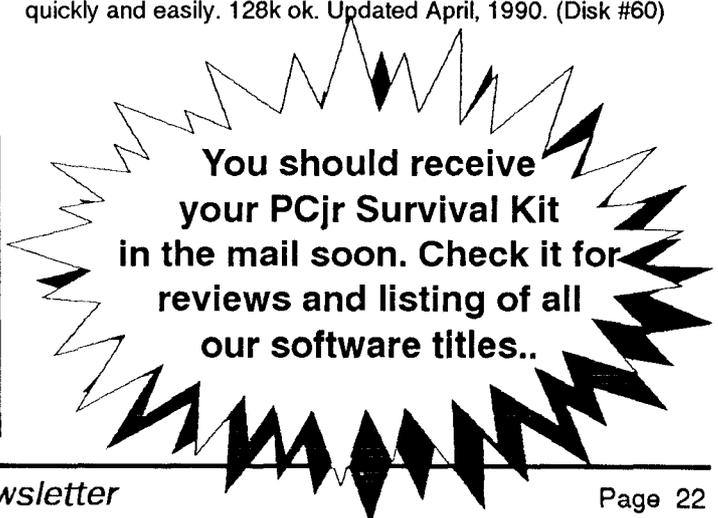
- Art & Drawing - Page 4
- PCjr Reference On a Disk - Page 7
- Educational Software - Page 10
- Especially for Jr - Page 16
- Spreadsheets - Page 17
- Music on the Junior - Page 18
- Databases - Page 20
- Need Help for Junior? - Page 22

See also the March and April issues of jrNewsletter

**Software Store**  
**Recent Additions**

*Please Use Order Form on pg. 23*

- \* **NEW** \* **LZEXE.** Cut down dramatically on the disk space required for software. LZEXE compresses EXE files into 2/3 to 1/2 their original size and allows them to be run from compressed form. Great for keeping RAM disks small and memory free. Utility will also convert COM files. 256K (Reviewed 5/90) (Disk #112)
- \* **NEW** \* **SCRABBLE.** At last, an excellent Scrabble game that runs in 16 colors on PCjrs! Plays just like the board game. Expandable dictionary checks words. Keeps track of all premium score squares and scores for up to four players. Also contains WORDWHIZ, a nice vocabulary building game. 256K (Reviewed 5/90) (Disk #113)
- \* **NEW VERSION** \* **PCJR COMPATIBILITY DISK V3.5.** Lists hundreds of software titles, along with info on how they run (or don't run) on PCjrs. Includes many tips on how to make software PCjr compatible. Powerful search feature finds titles quickly and easily. 128k ok. Updated April, 1990. (Disk #60)



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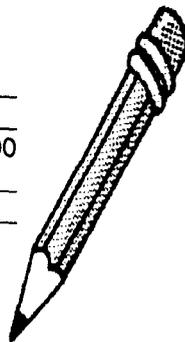
## # TITLE

- 1 PC-WRITE V2.5 (128K)
- 2a PC-WRITE V2.7 (256K), Disk 1
- 2b PC-WRITE V2.7 (256K), Disk 2
- 3 PC-FILE III. 128K
- 4 PC-FILE III. 256K
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- 29 MORE SUPER UTILITIES
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- 31 BOARD GAMES

- 32 PLAY AND LEARN
- 33 FAMILY HISTORY (128K), single
- 33A FAMILY HISTORY (256K), need both
- 34 GAMES II
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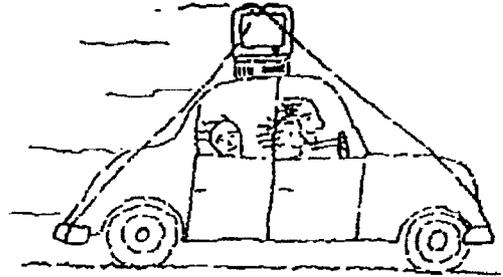
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