

# The Orphan Peanut

The Chronicle of the Atlanta PCjr Users Group

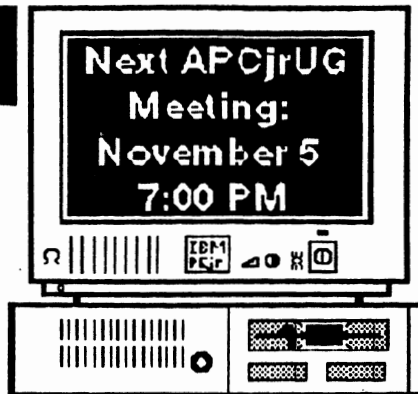
## Music, Music, Music!

by David Wilson

One of the aspects of the PCjr that is almost unique - well, it is unique in an IBM computer - is its sound system. In its creation as a "home" computer, the designers foresaw that Junior could be used as entertainment as well as for productivity in business applications, so they included the sixteen-color CGA and "three voice choir" sound capabilities. Let's stipulate that these facets of Junior's design were assets rather than liabilities, because that's the basis for the rest of this article and we don't want to get bogged down in a technical discussion.

The enhanced CGA color and the augmented sound capability made the PCjr an attractive choice to shoppers who had seen nothing but the obnoxious cyan-magenta-white color palette and heard nothing but the pitiful sound available on the PC and PC/XT of the day. IBM took advantage of these assets by commissioning the first interactive graphics adventure, Kings Quest I (and incidentally launching Sierra software in the process.)

IBM, however, in their wisdom, elected to pull the plug on the PCjr. We think it was a bad decision, made for the wrong reasons as far as we can tell, but that's not what we're getting



at here. What's pertinent is that with the discontinuing of the Junior line there was no market for the Junior-style advanced audio and video.

Critics such as guru John Dvorak insisted that there was no "home computer" market, that the PCjr, because of some design flaws and

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## What's In The Peanut Shell This Month



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*The Orphan Peanut*

## INFORMATION, PLEASE

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*The ORPHAN PEANUT* is the official newsletter of the Atlanta PCjr Users Group, a distressingly non-profit organization dedicated to the health and well-being of the first Orphan and first "clone" from IBM - the "Peanut". The Group's single purpose is as stated in Article 2 of our Constitution:

*"...to provide a forum for members to share information, experiences, and techniques of use that will help other members derive maximum benefit and enjoyment from their PCjr."*

*The ORPHAN PEANUT* is designed, laid out, and entirely created on a PCjr with 736 KB of RAM or 8 MHz of clock speed (but not both together), a Microsoft Mouse, a second floppy drive (3.5") from PC Enterprises, and two 20-megabyte hard disks from RIM via Paul Rau Consulting. There's other stuff as well, but we forget. Software used includes **TEXTRA** word processing and **QEdit** text editor, **PFS:First Publisher** desktop publishing, and sundry other programs of varying usefulness.

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## Music, Music, Music!

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foolish mistake. They said no one needed sixteen colors and enhanced sound.

They were wrong.

The Tandy Corporation, discerning what the gurus missed, introduced the Tandy 1000 line of almost-PCjrs, with (guess what?) sixteen-color displays and three-voice sound.

Unfortunately, they used a different chip set to achieve the color capability, and that's why you need the "Tandy Mod(ification)" in order to achieve the full color palette available in many games and other applications. Except for a few game publishers, the enhanced audio, while available on Tandy 1000s, was not well exploited and most of us didn't realize what we didn't have.

(Tandy has sold a million or so of their Junior clones, and the market is still there. Take that, John Dvorak!)

Now, however, a two-person company called Harrison Software has created a number of disks using these advanced audio abilities to produce truly amazing results. Bruce Harrison and Dolores Werths have put a selection of mostly Classical music onto a series of "concert" disks that they are offering for

surprisingly low prices: \$5.00 to \$10.00 each. For the first time, your Junior can be a source of music as well as a help in balancing your checkbook. The disks will run on any Junior with 356 KB of memory and can provide more than 30 minutes of music per disk, depending on which concert you select.



Offerings include pieces by the most familiar Classical composers - Bach, Mozart, Beethoven, etc. - as well as one comprised of Revolutionary War Period marches and other pieces extracted by Dolores from the Library of Congress archives. Many of these last have been

unknown for two hundred years or so, and you get the feeling that you're hearing pretty much what those stalwart men and women heard so long ago. It's an interesting experience and one I recommend to any Junior user with a love of music and enough RAM to run it.

Harrison Software has provided a Sampler disk containing examples of their offerings, and it's available on the *PCjr WORKSHOP* under the name *HS\_MUSIC.ZIP*. You should also be able to get the Sampler from our Disk Library by contacting Len Brown. (Sorry, I don't know the disk number.) A catalog of all disks offered by Harrison Software is included with the music file. Try it - you may well like it!



## What a PCjr User Must Know, Part II

In Part I, 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.

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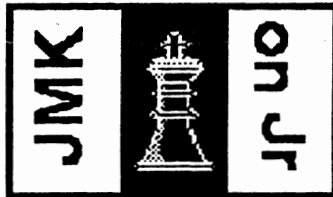


## What A PCjr Owner Must Know, Part II

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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".

You can use this to check that all memory is recognized and find out how much memory is available, or "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 our Disk Library. We'll cover how to use it in the next section on the CONFIG.SYS file.

### 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 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 for your word processor on how to do this.

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## What Every PCjr Owner Must Know, Part II

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The special configuration commands are described in the DOS manual in the section titled "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.

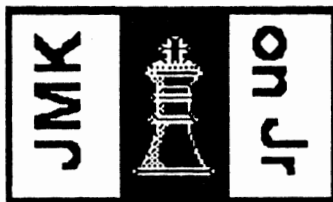
```
COPY CON: CONFIG.SYS(Enter)
DEVICE=JRCONFIG.DSK -t3 -j
-s100(Enter) FILES=20(Enter)
BUFFERS=20(Enter) BREAK=ON(Enter)
(Fn 6 Enter)
```

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 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 Fn 6 Enter when you are done. The new version will overwrite the old one and take effect when the system is rebooted.

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## What Every PCjr Owner Must Know, Part II

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### AUTOEXEC.BAT

After the CONFIG.SYS file has been read during boot up, 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 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 for 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 (*Go to Page 8*)





## What A PCjr Owner Must Know, Part II

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(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: copies 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 lots of utilities for the PCjr in our Disk Library, but I'll only mention 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.

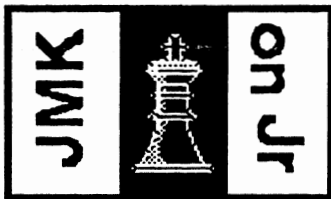
COMSPEC.COM (for DOS 2.1 only) comes with the JRCONFIG program and eliminates the annoying "Insert COMMAND.COM disk in drive a:" message. For other versions of DOS use the SET COMSPEC command.

SWAPCOM2.COM solves communications problems with external modems. If you use JRCONFIG, the -j option fixes this problem.

HUSH.COM reduces disk drive noise under DOS 3.0 and higher.

NOBEEP.COM stops the beeps when you type during disk access. It also corrects other keyboard problems.

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. Wordprocessors, spreadsheets, databases, graphics, games, and communications programs are all available to you. Pick what you want and keep learnig.







## A>DIR

by David Blagg, President, APCjrUG

Back in the early days of the APCjrUG our editor, David Wilson, published a challenge to the membership titled "Where Do We Go From Here?" Our group had grown rapidly, and his apparent intent was to provoke some thought. I wrote a response in which I outlined some facts about our group. Among other things I noted that we were diverse in background, had different reasons for owning and using a computer, and so forth. My concluding observation was that we all had the basic PCjr in common, and that our purpose was to further its use and enjoyment.

We have accomplished that purpose over the last two years or so. But could it be that we should ask the question again?

To be sure, our group appears to be robust. Our membership is holding at a rather steady level after a period of growth. Attendance at our meetings is staying at a consistent level. Most members seem to attend meetings that interest them and skip those that don't. We have the *Orphan Peanut* Newsletter and the *JrWorkshop Bulletin Board System*. And both are recognized outside our user group for their respective accomplishments.

Consider, however, the reality of what we do. The PCjr is a fine computer. It has capabilities which were not recognized early on,

but are now fully exploited. Personally, I intend to keep mine for a long time. But computer technology has changed. If you doubt that, I would encourage you to come to the meeting on November 5th. Steve Mark, an IBM employee and a charter APCjrUG member, will demonstrate the new PS/1 Home Computer System. It is impressive, and it comes with a "built-in" user group through the Prodigy Service.

Consider, too, that if we do not meet our members' needs we will eventually disappear as a user group. This has already happened to a greater or lesser degree in some parts of the country. Indeed, at our October meeting we discussed the notion--but took no action--that we expand our membership to include other computer users.

Of course, none of this means disaster for the APCjrUG. But it does mean that your participation is critical to our future success. We are well underway in the process of nominating and electing officers for next year. In fact, the Nominating Committee will present its report at the November meeting. There is no doubt in my mind that next year's officers will be challenged. Please attend and make your thoughts and needs known. It's the only way something can be done about them.



## The PCjr WORKSHOP

The Official BBS of  
The Atlanta PCjrUG

(404) 740-1916

300/1200/2400 at N,8,1





## RANDOM ACCESS

*(Fevered ravings from a disordered brain)*

As President David Blagg mentioned in his A:>DIR column on page 9, there's a demonstration of the IBM PS/1 scheduled for the November meeting. It'll be done by long-time APCjrUG member and loyal Junior owner/user Steve Mark, and it might be worthwhile for those members who are considering upgrading to a more powerful computer. The PS/1 has predictably taken a bashing from the mighty and influential gurus of the industry, but it has features that might make it attractive to a new computer user. Take a look at what Steve has to show us and decide for yourself.



Elections are upon us. The Nominating Committee appointed last month will present its slate of recommendations at the November meeting, but nominations from the floor are solicited. If you want someone to fill the elected offices who isn't on the slate, now's the time to

offer their name as an alternative choice. And don't forget - we could use assistants for the Secretary and Treasurer, as well.

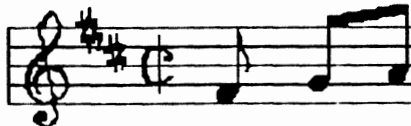
Something else that could use some volunteer attention is our Beginner's Kit. I put it together more than a year ago, and those of you who have purchased it have been very positive in your assessment of it, but I think it

is in need of review and revision. The best way to accomplish this, I think, is to have several Junior users evaluate and classify the available material and decide what should be included, what should be printed, and what

should go on disk. I don't think I should be the sole judge of the content because I have my areas of

interest (and bias), and I've been doing this Junior thing so long that I have forgotten the problems - or at least, I don't remember them well. Anyhow, I'd like to divide the process of evaluation up among several members and remove myself as much as possible from the process. If you'd like to know more of what I have in mind, contact me either on the BBS, my Voice line (255-2731), or in person at a meeting. I'd like to kick the process off sometime around the first of 1991, so talk to me in the next six weeks or so.

We didn't get much interest expressed in my last brainstorm, the beginners' DOS class - only two people said they'd like to participate - so I guess that is effectively canceled. Sorry, guys.

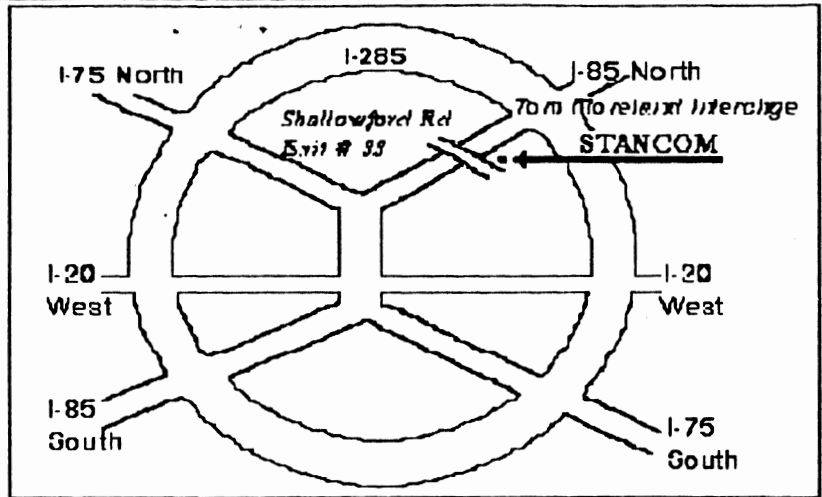


*(Try the Harrison Software Sampler - It's free and you'll like it!)*



# GETTING THERE

***If you're outside the Perimeter (I-285):***  
Just follow I-285 around Atlanta until you reach the Tom Moreland Interchange (I-285 and I-85 North). Go South on I-85 toward Atlanta until you reach Exit 33, Shallowford Road. Exit onto Shallowford Road and turn left to cross over I-85. Immediately past the traffic signal on the East side of the



overpass you will see a building on the left with STANCOM in large letters on the front of it.

***If you're inside the Perimeter (I-285):***

Get on I-85 heading North from the city. Watch for the Shallowford Road exit, Number 33, and leave the Interstate highway there. Turn right on Shallowford Road, get in the left lane and prepare to immediately turn left into the STANCOM parking lot.

## The Orphan Peanut

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6575 Amberglades Lane  
Atlanta, GA 30328

