

jr Newsletter

March, 1990

Would You Believe A PCjr With 80 MB Drive, EGA, And Fax?

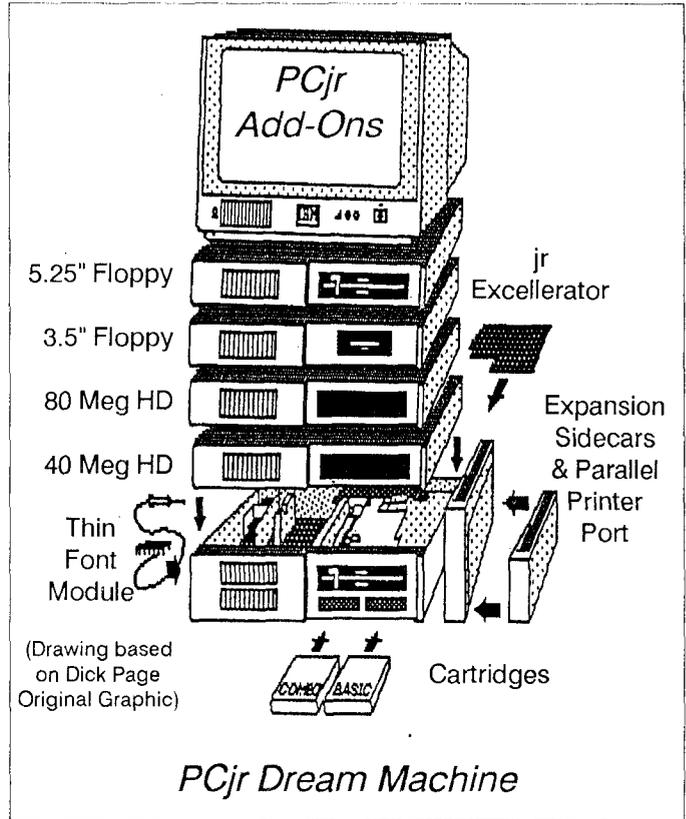
We'll admit, it's hard to imagine a PCjr with an 80 MB hard drive, an EGA card, and a fax card -- but the folks at PC Enterprises have just about got it.

The huge hard drive is no problem, they've had that for months now. The EGA card..... Well, they haven't decided whether to build a sidecar that supports PGA, EGA, and other standards, or whether to focus on the EGA alone. The fax card is currently being tested.

There may be some people out there who have given up on the PCjr, but there aren't any of those people at PC Enterprises. They've been supporting PCjr users with new products every year since 1985 and they don't see any reason to stop now.

"We don't really see an end to the PCjr market for the next 10 years, and probably not even then," says Pat Calabria, PCE's chief PCjr products engineer. So he and his staff keep cranking out the products they think PCjr users want. In fact their latest catalogue gives you the opportunity to vote for the PCjr enhancement you'd like to see them make next.

PCE already provides a barrel full of things to keep power hungry PCjr users happy. If you go crazy with the PCE catalogue, you could, for instance, have more than 1



Meg of RAM, two 5 1/4 inch disk drives, a 3 1/2 inch disk drive, two hard drives, a 9.54 MHz speedup board, speech attachments, and a 2400 baud modem, and a Thin Font Module -- all attached to your PCjr and powered by a 150 watt power supply.

For now, but probably not for long, you'll have to wait for the 2400 baud internal modem (just about ready) and a high density floppy disk drive, which PCE sold for awhile, but withdrew for retooling.

Though these enhancements aren't ready for you yet, you shouldn't have much trouble finding something you want from the more than 200 items in PCE's Winter 1990 catalogue.

9.54 jr Excellerator

One of the hottest items PCE has come up with lately is the jr Excellerator, which will boost your PCjr's processing speed from 4.77 MHz to 9.54 MHz (double the normal speed). Although some of the first versions of the jr Excellerator had problems, PCE fixed them for no charge and the current versions run smoothly. A speedup board like the jr Excellerator or the Nickel Express, which is sold by Paul Rau, is a real treat if you want to use large application soft-

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PCjr Lives!

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Letters From A Power Learner

By John King

A little over a year ago I began correspondence with a PCjr owner in New Zealand. She writes eloquently about what owning a computer can mean, and I'd like to share her words with you. Here are excerpts from her letters, starting with the very first one.

Dear Sir or Madam,

I have recently bought a P.C.jr to replace an old typewriter. I am a 59 yr old lady who has been introduced to computers in the course of my work as a Nurse in the management field and have got hooked. I am due to retire next year and have some great ideas for the use of this machine, I just love using it and find lots of excuses to sit in front of it.

I bought the computer second-hand from the first owner and am learning fast its potential. But I seem occasionally to come up against a few problems, when this happens I approach some of our local computer shops and it gets very frustrating when their only advice is to get a bigger one. I have become quite fascinated by the P.C.Jr and know that it will be capable of my needs.

Here are my problems...(Several problems with DOS commands and BASIC were listed.)

I would be grateful for any information on cost and availability of programmes and cartridges.

Yours Sincerely,

Miriam Murray (Mrs.) New Zealand

Of course, I responded with answers to Miriam's questions and asked some questions of my own about her system. Here is her reply.

Dear John,

I was very happy to hear from you and most grateful that someone at last has responded to my letters...I was just beginning to give up hope...I am retiring from Nursing in November and hope that I will have more time to spend with his little machine.

I will first answer your questions... I only have 128k memory... Yes I have "Guide To Operations" and DOS 3-2 and Manual...My copy of P.C. Write is 2.55 (the 128K version) so I have got something right.

I am going to send over one of the programmes I have bought here on Family History which I am very interested in. I have managed to print the Manual but when I try to use it I get..."programme too large" even though the Disc label says it can be used on 128k.

Am enclosing...\$20 U.S. to join the Club...

Miriam

With Miriam's membership, we became the "International" San Francisco PCjr Users Group. Her Family History problem was easy to solve. I sent a patch from our library to use the BASIC version of this program which runs on 128K machines.

Miriam responded.

Dear John,

...(After) I opened and read your instructions I spent most of the night with this machine, since then I have been busy at work and at a conference in the North Island.

The Disc on Family History is just great...I seem to have a block on making working disks...Perhaps I just need another little jolt to start me off and a bit more time.

I am sending you a New Zealand diary for next year to show you a bit of the country in which we live...I have also enclosed a copy of the magazine which some of your computer mates may be interested in. My eldest son Gavin is the editor of Computer Pals a school magazine which I believe goes worldwide...

Miriam

Success is so powerful. With the genealogy program, Family History, up and running, Miriam was on her way; and the diary reminded me that New Zealand is beautiful! Now, how can I arrange a trip there?

In November, I heard from Miriam again. She had received the library catalog disks and was ready to expand her collection of programs.

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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. Sometimes I can get a program to run OK, then another time the program will start, but will either crash after a short time and/or the screen will fill with multi-colored trash and the game or program can't be continued.

A. This question still arises and we have a number of new readers who have asked about these symptoms. The most common reason for the above screens and/or crashes, lock-ups etc. is that the PCjr has not been configured with enough video memory. If you're a beginner, that must sound like mumbo jumbo, but keep reading....

Here's what goes on: Every time the jr is started up some memory must be reserved for what you see on the screen. The config.sys file on your boot disk will determine how much or how little memory is reserved. For example, if you use jrconfig.sys with -v16 in the config.sys file, 16K will be reserved for video. IBM, Tecmar, Racore, jr Hot-shot and other brands of PCjr memory expansion software all have their own methods of reserving different amounts of memory for video. Pixel by pixel, locations in memory must hold the information. The screen must continually be refreshed from this memory, so it obviously cannot be used for anything else. The more elaborate the screen, (lots of colors, higher resolution) the more memory needed. When the jr is started up some memory is put aside strictly for video use. This memory is "marked" as "in use" and will not be used for anything else by normal, well-behaved programs. If you boot up and do not reserve at least an amount of video memory required by a given program, SOME memory that the video screen needs is not marked as "in use" and is free to be used by DOS and the program you load and run. In other words, the same memory loca-

tions will try to be used by both the video screen and the program itself, perhaps to store math results, or some such thing. Usually, these numbers are the "trash" you see on the screen. If the program crashes or locks up it is usually because the video controller puts video information in the same memory spots; when the program reads these as program instructions or data, well, that is a mess! So if this has happened to you, try booting up with a larger amount of memory reserved for video. (If you don't know how to do this, check the instructions that came with your memory expansion unit, or get PCjr Autsetup (Disk #99) which will do it for you.)

You gain more in performance than you lose of free RAM when you boot up with plenty of video memory reserved. The jr runs faster and there is no conflict if less video memory is needed by a program.

For lock-ups not related to the video the other thing all our readers should be doing in the CONFIG.SYS file is; FILES=20 and BUFFERS=16. This is the least you should have. In some cases even more files are necessary, so read the documentation.

Q. I am unable to use the Listen & Learn software on my jr. I have the Echo PC Synthesizer from Street Electronics and the adapter cable for serial devices. The jr gives me a "Device Timeout" even when I try to run the BASIC Text-to-Speech tutorial from the Echo manual. I have discussed this with the local IBM personnel and they have not come up with any solution. Any Ideas? -- A. Swiergul, Chicago, IL and others...

A. The only information we don't have from you is the way you have configured the addresses of the jr's two serial ports. There is one internal and one external port and each has its own address. Because the Echo Synthesizer and other similar devices use the Serial cable, we immediately start thinking of this as a COM 1 and COM 2 conflict.

Here's the idea: Whenever we plug into the serial port in the back of the jr we will call this COM 2. To insure that we are addressing COM 2 we also force the INTERNAL address to agree with the address which the software expects for COM 2. If we don't do this, the jr is probably trying to read the wrong port which has nothing connected to it, therefore the "Device Not Ready" or "Device Timeout" message. By forcing the internal port address, we can simply ignore that complicated business about the internal

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Questions and Answers

(Continued from page 3)

modem being installed or not on COM 1. We can do this with a number of programs which swap the port addresses in the jr to agree with the standard PC. One easy to use program which you can use is COMSWAP.COM or SWAPCOM2.COM, which is available on Jr Power Pack II (Disk #65) from the Software Store. Another method is to use one of Larry Newcomb's JRCONFIG (also on Disk #65) because the corrected COM port address swapping is built-in. We have found that nearly all the incompatibility problems having to do with the serial ports can be solved by simply swapping the internal addresses and setting up our software to expect and use COM 2, and just NOT using COM 1. This is the case for modems, rodents, printers and other peripherals plugged into the external serial port. Baud rates and the rest of it require no changes. Give it a try.

Q. My son recently been gave me a program called World Class Leader Board. When the program asks for "input video mode", none of the selections are for the PCjr. By using selection (1) I get poor, grainy video that at times will break up. With selection (2) I get beautiful color, but with horizontal black lines. Can I get this to work on the jr properly? John Gunsett, Bountiful, UT.

A. Yup! Here's another set of programs by Access Software Inc. which need the PCjr-to-Tandy video chip fix. We have tested this series of programs and the hi-res video screens work with the Tandy video selection if the jr video is set up as a Tandy. Check with our advertisers for this fix as some of them will make the adaptation to your motherboard. You may want to do this yourself if you have some experience with printed board soldering or you can have it done locally once you have the directions. The directions were published in the April 1989 issue of jr Newsletter and are also available on the new Jr Toolkit (Disk #110). The single chip to add is available from B&G Micro, P.O Box 280298, Dallas TX 75228. Remember, PCjr-specific software will be totally unaware of this video change and will still run perfectly! Boot up and configure your system for maximum video memory reserved with this arrangement. With Access Software Inc. programs we suggest you test with and without the use of the sound effects, as the stolen clock cycles to do the sounds can cause some timing and other problems. This is so even on some IBM clones, so test it and watch for glitches.

Q. Has anyone else out there had a problem with PC Tools Deluxe from Paul Mace? I'm new to your publication so I don't know about this problem. I have 640k, two floppies and the RIM hard disk from Paul Rau. PC Tools deluxe trashed my hard disk! I tried installing it again,

carefully and by the numbers and it trashed it again... DOS and most everything else was wiped out. Raymond Ellis, Granbury TX

A. There are a couple of things which may cause this to happen. PC Tools expects DMA (for speed) and will probably merrily continue on with the program even while the jr is reading or writing to disk and still using the 8088 CPU. The second thing, and this is only a surmise, is that some hard disk utilities do not always recognize a SCSI interface. Peter (the Guru, himself!) Norton's Integrated is one of the sinners. The software manufacturer will be the best source for this information.

Q. I can only seem to access one of my two floppies with the hard drive installed; it is the unit from Paul Rau. I have written to him and he feels that there should be no conflict and that all three drives should be able to be accessed. I now recognize the second drive with the software which came with it from PC Enterprises. I am satisfied with the quality of all of the equipment but I need to get it to work all together. Nancy Blair, Truckee, CA

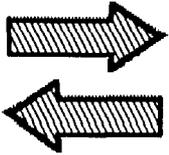
A. We can only think that it is the ORDER of the device drivers in your CONFIG.SYS file in combination with whatever drive you are setting up as the default. Our working order, in spite of what the documentation may say is this: Recognize floppies, then memory, then the hard drive and last a RAM disk... now do the BUFFERS and other stuff. The floppies will be A: and B: and the hard disk C: with the RAM-disk D: Here's one of our own config.sys files which works with all DOS versions: (Yours may be different if you are using different software, but this is a working example that should be useful to you.)

```
device=dvr2c.com
device=pcjrmem.com /c
device=scsijrfd.sys
device=ramdrv.com
buffers=20
files=20
break=on <--this is optional
```

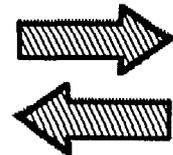
Q. I am thinking of getting enhancement cartridges such as Quick Silver, Keyboard Buffer etc. Do I leave these in all the time or do I only put them in the slot(s) when needed? Will my CONFIG.SYS file be affected or will it affect the above? Howard Litz, Williamsville, NY

A. They can be left in the slots at all times, just the way your BASIC Cartridge is now, if you have one. You are right to be concerned about the wear and tear on the contacts from plugging and un-plugging cartridges, (The gold plating on the contacts is unbelievably thin!) but the above family of cartridges would be removed only rarely, if at all. The only cross-affect between cartridges and a CONFIG.SYS file would be if the cartridge specifically replaces the file or is meant to complement what the

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Reader Feedback



The PCjr Compatibility Campaign Continues--With Help From A Motivated Reader:

Enclosed is a letter I sent to MicroProse Simulation Software requesting, for the second time, that they consider support for the PCjr. I don't expect that my correspondence alone will change corporate policy, but if jrNewsletter publishes my letter and encourages other PCjr owners to write, perhaps MicroProse will realize that the PCjr is not only easy to support, but worthy of it, as well.

There's certainly no need to go into the detail or length that I did - just a couple of lines requesting PCjr support and your name and address will suffice. And remember, every letter DOES count!

John M. Dho, Redondo Beach, CA

Ms. Kimberly A. May
Microprose Simulation Software
180 Lakefront Drive
Hunt Valley, MD 21030

Dear Ms. May:

In July of 1989, I wrote to MicroProse regarding the support of the PCjr 16 color graphics mode in **Red Storm Rising** and other MicroProse products. I appreciated your prompt response and willingness to pass on my request and the information provided (on the Non-masking Interrupt problem) to Mr. Bill Stealey, the president of MicroProse. Frankly, I didn't believe that my letter, alone, would be enough to change corporate policy. I'd hoped, however, that it would at least make the MicroProse technical staff aware of the very simple modifications to the already supported Tandy sound and graphics drivers that would allow full PCjr support as well.

Since that letter was written, an enterprising gentleman, Mr. Tony Cooper, developed a hardware patch (using a 74S86 chip and a couple of jumper wires) which allows the PCjr to run full Tandy 16 color graphics, without software modification, using the Tandy driver supplied with the program. The modification is simple enough that several thousand PCjr owners have already modified their systems at home (and created a nation-wide shortage of 74S86 chips!). In addition, three commercial companies specializ-

ing in PCjr support, OOwl Software (Columbus, OH), Paul Rau Consulting (Galt, CA), and PC Enterprises (Belmar, NJ) are now modifying motherboards for PCjr owners reluctant to solder the chip and jumpers themselves.

It was, therefore, with great anticipation that I loaded **Red Storm Rising** for the first time after modifying my system only to find that the program still would not run properly on the PCjr in the 16 color Tandy mode. Although I'm not a programmer, I suspect the problem is related to the Non-masking Interrupt TSR that must be active if the program is to run at all.

I recently purchased **F-15 Strike Eagle II** and discovered that it has exactly the same problems as TSR. In fact, it appears the same basic software "engine" is used in both programs and that if a patch was developed, it would likely work correctly with all MicroProse products.

Of course, both games will run on the PCjr in the 4 color CGA mode, but the lack of contrast makes many of the features that set MicroProse simulations apart from many others on the market virtually unusable.

Please note that every other program I have tested now runs in Tandy mode on my modified system, with no other patches or software required. This includes **Deluxe Paint II**, **Microsoft Flight Simulator** (versions 3.0 and 4.0), **Test Drive II**, and all **Tandy DeskMate** software. and, of course, Sierra On-Line now includes direct PCjr support that requires neither hardware nor software patches.

It's my understanding that full PCjr compatibility is a very simple matter to include, especially if the Tandy color and sound drivers are already in the program. I have included a copy of PCjr Compatibility Guidelines, published by the jrNewsletter which details the differences, and similarities between the PCjr and "standard" IBM and Tandy systems. I would appreciate it if this information was passed on to your technical and management staff for consideration.

MicroProse simulations are among the very best, in my opinion. I respectfully request that MicroProse consider the possible courses of action, listed below in order of desirability, that will allow PCjr owners to fully appreciate and enjoy MicroProse's excellent simulations.

1. Develop modified 16 color and 3 sound drivers for the PCjr, patch the NMI problem, and advise that upgrades are available to PCjrs via MicroProse's normal upgrade policy.

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Reader Feedback

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Include PCjr support as long as the Tandy 16 color, 3 voice modes are supported. (Similar to Sierra On-Line's policy.)

2. Develop modified 16 color and 3 sound drivers for the PCjr and patch the NMI problem. Distribute the modifications via CompuServe's **Gamers, Gamepub** and/or **IBMJR** forums as soon as possible. The modifications may be in the form of complete drivers or DEBUG scripts that will enable PCjr owners to modify existing program code.

3. Develop a patch that allows a "hardware-modified" PCjr to run MicroProse products in Tandy mode without additional modifications. Distribute this via MicroProse's normal upgrade policy. (Consistent with other programs that include Tandy drivers)

4. Develop the "hardware-modified PCjr patch and distribute it via CompuServe's forum(s).

I am a great fan of MicroProse Simulation Software and an admirer of Sid Meier's programming talent (the new F-15 is a great action simulation). I sincerely hope that this letter will prompt MicroProse to take the relatively minor steps necessary to ensure that PCjr owners, too, can fully appreciate the "MicroProse Experience."

PCjr owners nation-wide await your favorable response.

Relative Merits of PCjr Speedup Units Discussed

PC Enterprise indicated in their latest catalog they have several new projects in the works, e.g. an EGA card, a 1200 baud internal modem, etc. If so, jrNewsletter might answer specific questions about new products to assist us in deciding which specific product or company we would choose to obtain or use.

I do have a few questions. I am looking for an add-on to increase my processes. There are several available on the market; I don't know if you are familiar with the products or the differences between them. First there is the Nickel Express; this will increase the speed of the jr to about 8 Mhz, by increasing the power or changing to a faster crystal. PC Enterprise's Excellerator plugs into the microprocessor, with a 16K cache, produces a 0 wait status. This unit will speed up the jr to 9 Mhz or register 3.3 on the Norton Scale (a PCjr will register 1 on the Norton scale with no adjustments or alterations as far as I understand). Finally the 286 accelerator (Mesa 286jr) not only increases the speed of the jr to 12 Mhz (9 on the Norton Scale) but it also has space for a math co-processor.

As a manufacturer you would think, "Hey, they'll go nuts when they can see how fast they can go!" However,

not all needs are the same; there are times when you need more options than a snail's pace or at warp speed. If the unit only goes one speed, fine; but can it work with another speed-up product installed? The 286 accelerator jumped forward a long ways, which is what we needed; but since not all programs require a 286 or better, I think that we need to cover the speeds in between.

Ernesto Molina, Minneapolis, MN

EDITOR'S NOTE: We do try to keep up with new products as they are being developed, but we don't usually write about them until they're ready for PCjr users to purchase. That's because many dreams do not become reality. In fact, as was the case with the MESA 286jr, some dreams that become reality, have to return to dreamland. So PCjr users who want to speed up their machines are left with the Nickel Express or the Excellerator. These units cannot be used together, if that was your question. You can use them at different speeds, though.

Reader Suggests PCjr "Wish List"

If you are open to suggestions, I would propose a section devoted to a "Wish List." Such a list might inspire your talented readers, or advertisers, to develop software and hardware to make life easier for us "hackers."

Should you ever consider adding such a column, you might start with some of my dreams:

1. A protective shield for the cartridges. (An accidental bump can be disastrous.)
2. A device (cartridge perhaps?) that at boot up time will display the last file name worked on.
3. A "Gothic" font either Italian or Old English with normal character size. Something that could be resident and called up to be used with most word processors. (like "Propop").

Thanks for a tremendous publication!

Henry A. Gleich, West Hurley, NY

EDITOR'S NOTE: How about an effective drawing pad for use with PCjr's light pen? Or an EGA/VGA card? Or some expansion slots like those on XT's and AT's? The list could go on and on

How to get "Lakers vs. Celtics" To Run Using a RAM Disk

I received **Lakers-vs-Celtics** basketball (Electronic Arts) for Christmas only days after reading in jrNewsletter that it was incompatible but I thought I would try it anyway before returning it to the store. My PCjr is Racore upgraded with dual disk drives, 640K, joystick and Logitech mouse. My disk drive would spin off and on endlessly but the pro-

gram did not boot up. Then I tried configuring a 360K Ramdisk and loaded all the files from the game disk into RAM and tried again but only got a "Program too big to fit in memory" error. After looking at how much total memory all the files took up on the game disk (which was only 228K), I configured a 230K ramdisk and tried to boot again. To my surprise, the title screen appeared on the monitor. After asking for some basketball trivia (The non-disk copy protection method now commonly used), it asked for the disk drive which the Team Data Disk would be used. After typing in my answer, the program works like a dream. My only complaint is that the game does not keep track of the points scored by each player (unlike the amazing stats that John Madden football has) and that it runs in 4 colors.

I also received **Ferrari Formula One** (Electronic Arts) which works well but I have had trouble with some of the various "software switches" which set sound level, data disk path, mouse riation response, etc. These can be set manually once you are in the program but would be nice to do in a batch file at start-up. It only runs in 4 colors.

I read your review on Lotus 2.2. For all you "legal" Lotus 2.01 owners, do you know that Borland is selling **Quattro Pro** for \$99.00 (plus S/H)? Supposedly it incorporates features of Lotus 2.2 and Lotus 3.0 but only requires 512K to run. I am waiting for a copy at work and will try it on my jr. Will let you know if I don't see it appear on the compatibility list in the meantime.

Bob Fukano, Bothell, WA

Recommendations for "Serious" PCjr Users and Some 3.5" Drive Tips

I am a new subscriber to jr Newsletter and let me say that I am quite pleased with the content and quality of your publication. In addition, I have purchased disks 54, 66 and 91 (The Best of jr Newsletters, I, II, and III) and have found the information contained there to be truly invaluable. I would recommend to all new subscribers that they buy these disks first if they are serious about upgrading or just keeping jr in tune with the times. (I would, however, comment that some of the articles on volumes II and III contain some ASCII type codes which did a number on my Epson printer and prevented it from issuing line feeds after each text line. Needless to say I could not print quite a few of the articles on those disks using the copy filename.ext prn

It's Not Only AS EASY AS.....

If you need a powerful, easy-to-use spreadsheet that works just like you know what Lotus software, you need the shareware program As Easy As (Disk #107 in the jr Newsletter Software Store). It's not only "as easy as", it's just about as good as. And you can try it for \$5.95!

command format. I would recommend that you consider removing the codes as they also make screen viewing cumbersome.)

The newsletter disks had many articles on adding a 3.5" disk drive to my jr. I decided on the Toshiba 3.5" disk drive and would use PC DOS 3.3 to run the system. The disk drive I used is a series ND352 and is a true IBM replacement drive. My setup is a two drive system with 640K. The second drive and memory are provided via Racore (no DMA).

I first replaced the drive in the Racore unit and set up the drive so that DOS addressed it as B: and C:. The drive worked like a charm but I didn't like having to reconfigure all my software to run from the B: to C: drive. I then did a swap and replaced the original jr 5.25" drive with the Toshiba and returned the Racore back to its 5.25" status. I set the drive up so that DOS addressed it as A; and C: and am now quite satisfied with this setup. I copied all my programs onto 3.5" disks and can run them from the A> prompt. The new drive is much quieter and has enabled me to cut down significantly on disk swapping. For instance, I can run Dbase 3+, SPFPC and DOS (command.com) all from one disk and save all my work to the 5.25" disk in drive B: The drive cost me \$75 from a local computer store called

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Mixed-Up Mother Goose

By James Prossick

A child's walk through a world of color, music, and rhyme, and an introduction to new friends or a new look at some old familiar faces. Mixed-up Mother Goose puts an interesting new slant on one of the oldest of childhood traditions: The Nursery Rhyme. Sierra-On-Line, the publisher of Mixed-up Mother Goose, has put together a graphics action-adventure, in the Kings Quest tradition, that can be shared and enjoyed by child and adult alike.

Mixed-up Mother Goose is recommended for ages four and up, but my three-year-old, Jamie, can move her character and pick-up objects with little trouble. She does need an adult to set-up and exit the game for her, and a helping hand moving around Mother Goose's world when frustration sets in.

This software allows children who have not developed reading skills the opportunity to play by themselves.

The familiar Sierra game interface has been simplified to allow a child more ease of access, and it works well. Coming near an object, character, or door initiates an automatic response. The object will be collected and displayed in a small on-screen-window, each character will tell the player which item he needs with words and pictures, and the doors open without even an "Open Sesame". There is no facility nor need to enter any text commands during game play. This icon based system allows children who have not developed reading skills the opportunity to play by themselves.

Sierra and Roberta Williams, Mixed-up Mother Goose's designer, understand the essentials of creative play, and have put them to good use by making the child player the focus of the game's action. With each new game the child is allowed to choose the character closest to his or her likeness, in essence putting the child on screen and within the game. Several of the characters' verbal exchanges are customized to use the child's name, increasing the feeling of being part of the game. That personalizes the game play making the reward of uniting character and object and hearing the lyrical rhyme all the greater.

The game is based on - You guessed it! - Mother Goose Rhymes. Eighteen of the fabled favorites are recited and played for your enjoyment as you deliver the goods to each character. Now if you could just get your kid to pick-up his toys as quickly as he picks-up these objects. Well,

anything for a song and some of the graphic sequences are down right cute. The visuals, words, and music all follow the traditional Mother Goose Rhymes very closely.

This is an advantage if your child has already read and is familiar with the rhymes. As one might expect, the game's difficulty factor is low. The player is only allowed to hold one item or character in inventory and the Mother Goose World is smaller than in other Sierra programs.

That is all in character for the game and its intended audience, as is the printed material that accompanies it. The manual covers the basic mechanical operations and indexes the various rhymes with the appropriate character and missing object. A nice poster with all eighteen rhymes printed-out as they are presented within the game is included, along with a Mother Goose World Map equipped with those tab windows children love to open and rip off. All the clues you need to complete your quest are there in one package.

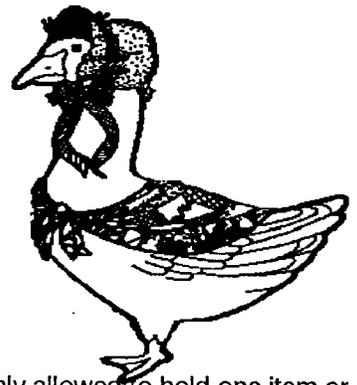
To show how on target the print media is: My daughter has the poster on her bedroom wall and always wants a rhyme or two recited each evening before bed, and the map is always asked for during and after the game.

Mixed-up Mother Goose's graphics and sound round out the package nicely. Junior's so often forgotten color and sound capabilities come shining through, and add a great deal to the charm and playability of the game. The game interface accepts the keyboard and joystick as control devices, but not the mouse. That's a shame because the game's mechanics are all accessible through pull down menus, and for certain age groups a mouse would be an ideal choice to get around Mother Goose's world.

Both 5 1/4 and 3 1/2 inch disks are included in the package. With 5 1/4 inch drives, like my present configuration, it is a two disk step to reach that world. The good news is that there is no copy protection to get in the way of customizing your boot disk with your choice of memory configuration drivers. A minimum of 256K is required to get the goose flying, and this game is fully junior compatible even though it isn't listed on the package.

For my daughter's ease of use, I have set up her boot disk to utilize the Muppet Learning Keys. It makes her travels in the Rhyme Lands simpler, and with only four widely spaced arrow keys it makes it easier for this old back seat gamester to call out directions in times of confusion: Up, Down, Left, Right. Besides I paid enough for the convenience and I want to use it.

In all, Mixed-up Mother Goose is a game that is crea-



tive, a pleasure to see and hear, and easy to use for its younger audience. Is it educational? Not in the hard sense of teaching your child letters, numbers, facts, or figures. But it does put the child alone on the computer using the keyboard, and teaches some basic movement, direction, and spatial concepts that will help with future learning pursuits on and off the computer.

Make no mistake Mixed-up Mother Goose is a game first and it's fun. Your child will ask to play it again, and again, and again. That playability combined with its use of junior's graphic and sound capabilities make it an excellent choice for any parent with young children and a PCjr. And with a street price under \$20.00 dollars its also an excellent value at just a little over a dollar a rhyme.

Procomm Plus Test Drive

Procomm has for many years been a leader in its category both as shareware and as a commercial program. Procomm Plus Test Drive, version 1.1, which we've put on Disk #108 in the jr Newsletter Software Store, gives you many new features and improved ease of use.

On-Line, context-sensitive "HELP" is always available. The screens are always related to the part of the program currently operating.

Included in Procomm's many features are:

- * Fully automated dialing directory which includes transfer parameters.
- * Thirteen standard file protocols, including X-Modem.
- * Allowance for use of other, "external" file protocols.
- * Chat Mode that splits the screen for on-line conferencing.
- * Simple instructions on transferring data for users of earlier versions of Procomm.

In addition Procomm Plus Test Drive offers some advanced options which will make it a favorite:

- * Two user-definable hot keys to allow execution of two specific programs from within Procomm without exiting the program. Or, you can operate the program with true multi-tasking in Windows, TopView, DESQview or TASKVIEW
- * Automatic dialing with a complete log of all your calls, with connect and hang-up times. This can be printed to verify against your phone and on-line information service bills.
- * Sixteen different types of terminal emulations to allow you to run mainframe applications using your PCjr as a remote terminal.
- * Full automation of out-going calls through user-defined scripts. You can set up files for automatic dials & log-ons that can call a BBS during the night when phone rates are lowest. Your script can even specify which files to download. The scripts are written via a new scripting language, ASPECT. It's easier to open and close files, and allows the user greater flexibility in editing and manipulating data while you're writing the scripts.

* Improved host mode lets callers, if they have been given the proper security level, to not only upload and download programs, but also operate programs remotely. The Host Mode allows you to set up a mini BBS with individual user ID's, passwords and security levels. You can offer electronic mail, both public and private.

Registered users of the program receive new disks, which include a keyboard re-mapping system. They also get sample scripts for logging onto various on-line services and lists of BBS systems throughout the world. A 350 page manual and tutorial is supplemented by 90 days of free voice line technical support.

Procomm Plus Test Drive is Disk #108 in the Software Store and requires at least 192K of available RAM.

Climbing Your Family Tree Can be Fun! Genealogy Software Makes it Easy to Keep Track of Your Relatives -- Put Them In A Family History Book!

Want to keep a family history, but interested in more than just date and place of birth, death and marriage? Family Tree, Disk #109, is a relatively simple to operate program which enables the user to tie information together into a meaningful family history. Family Tree enables you to keep track of five categories of notes where you can list such things as accomplishments, organizations to which your relatives belonged, schools, occupations, etc. It also allows you to write a free-form biography and list reference sources of up to 450 lines per person.

The program prints blank forms which list all the information you need for an individual entry with blank lines to fill in the information. You can print up a bunch of these blank forms to take with you to the local town hall or research library. Each entry in the family database has space for name and all pertinent birth, marriage and death data, as well as the name of parents. When you get back to the computer, you can easily type in the data from the blank forms. When the individual's parents are added as another



(Continued on page 10)

Genealogy Software

(Continued from page 9)

entry, Family Tree begins to compile family history and relationships.

The program keeps track of relatives and their relationships to others--parents, siblings and spouses, etc. in the program. You can ask it to determine relationships between two individuals. Or you can print out family charts of ancestors or descendants. Family charts are printed three generations to a standard letter-size page.

You can print a "booklet" -- a printout for one person, his ancestors, descendants, biography, etc. But the real power of this program is in the compilation of a complete family history book. Even in today's world of computer information, books are still the best way to share and save information. This program makes it happen with ease and accuracy!

Ease is obtained through a logical menu system. Accuracy is promoted through warnings when you enter data that doesn't match previous entries. There is also an audit that will give you a printout of missing information. More importantly it calls your attention to impossible or improb-

able date combinations. If you type a birthdate that is after the date of death, for example, the audit will point out this blunder. It compares birthdates with those of the parents to verify that they aren't born before or more than 100 years after their parents. This audit is a boon to those who aren't perfect typists. The inconsistencies are pointed out, and you can make the necessary changes.

When you are ready to put it all together, you select the "Write a Book," option. Just answer some questions and sort the name list in the order you want. The program will print out a complete book of all the information you have compiled in your database and give your book a title. The program prints a book with:

- * cover sheet and title
- * numbered pages
- * table of contents.

The program allows you to flag an individual within the database, and print out only the information pertaining to their ancestors and descendants. So you can print out a book for just the in-laws' side of the family.

The program also allows you to export a set of data files for a subgroup so that you can give relatives all the information of their family, plus a copy of the Family Tree software, so they can work on the family at home as well.

Family Tree is Disk #109 in the Software Store. It requires 256K of memory.

PCjr Owners

Everything you'll ever need!

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- o 20 MB hard disk drives which are DOS compatible
- o ROM's which make your display easier to read
- o Upgrades which expand 128K sidecars to 512K
- o Speed up & pseudo DMA cartridges
- o Clock modules, printer ports & speech attachments
- o Joysticks, optical mice & light pens
- o Adaptors to use your PCjr monitor with a PC
- o Switching boxes for monitors and/or serial devices
- o Full size keyboards & numeric keypads
- o Keyboard, modem, printer & monitor cables
- o Basic manuals & other PCjr books
- o Game cartridges & other PCjr software

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Byte Your Tongue!

If you've ever wondered if software companies have a patron saint, you won't be surprised to learn that they do.

It's the "holey version". You can't possibly continue using NovaDud ver. 1.57B, when release 1.60 is now shipping. It's like wearing six inch ties or bell-bottom jeans.

I've always been wary of "new - improved" labels on packages. Is it really a scientific breakthrough or just a gimmick to boost sales? Sometimes when I've compared the ingredients or performance of the old with the so-called new, I've found no difference.

And the jagged-edge circles on the package corner flashing "contains K9-P." I never knew what that was until I got a puppy. I'm not too sure that some new versions of software are any different.

Just when you think you've mastered the ins and outs of a program, moving right along with speed and grace, the news arrives of a new version. Of course version x (it's always just one higher than you've got) will do things that your version won't unless you've put in those hundreds of hours of late-night toil finding ways the documentation didn't mention.

The complaints and suggestions of fellow users have gone into making the new version easier to learn and use, and with new features you've needed all along. So what's

the big deal, just fork up the kilobucks for the upgrade and get all of the new horsepower.

Oh, if it were only that easy. Here I am with the new package, slickly bound and only twice as many disks, and after a week of evenings reading the new manual, what have I got? Confusion. It seems the 8MB of data files I've originated in the old version aren't compatible with the new one. There's a conversion program, but in very fine print, it says that some files may not successfully convert.

I'm the one who wants to convert - to another program.

The monumental effort of getting all the files into the new version (which puts me way behind on the work that this program is supposed to speed up) is done. I'm ready to dance my fingers on the keyboard and relish the miracles of technology and take advantage of all these new features.

Look at that screen flash: "Not enough memory to run this program."

What I need is a computer Alka-Seltzer: Oh boy, what a release it is. I never thought my RAM would eat the whole thing!

*[Mike Roechipp, PConnection, The Newsletter of the Hawaii PC User's Group, March 1989.
Reprinted from PCUGR Newsletter of the IBM PC User's Group of the Redwoods, June 1989]*

Power Learner

(Continued from page 2)

Dear John,

I have just printed off the 2 Disks that Richard has sent and chosen some of the Disks. If I have not made suitable choices could you check and change same. I would like to buy a new Word Processor, especially with spelling checker.

...I am having lots of fun with this computer of mine. It is not nearly as frustrating as it was before I heard from you. Many thanks. I have now retired (last Friday) and will be spending much more time with it.

I am enclosing a Bank Draft...

Miriam

On the disk order form, Miriam had selected a database, spreadsheet, paint program, back articles from the newsletter, several games, and an astronomy program. I substituted PC-File III for her choice of database and sent Jr.WordPerfect which has an excellent spelling checker. Both of these run in 128K.

After Christmas, I received the following letter:

Dear John,

The package arrived safe and sound, and I am afraid a few disasters happened in the kitchen while I went through the contents. It was fun.

Over Xmas and most of January most people in N.Z. have their holidays. We had our son and his family from the south and our youngest daughter from Wellington staying with us. All the games were high priority. Jennifer stayed up 'til 2:30 a.m. to achieve the board of honor in one game.

I have been very busy, since I retired, as the convener of a Nurses Reunion, 100 Years of Nursing Education, in this area. We are bringing together approximately 1000 nurses from many places, and my PCjr is a godsend. I enter all requests as they arrive, list their names and addresses and am just starting to use the Data Base as they pay the fees...

I really must close now. The paper knife (enclosed) has our flightless bird, the Kiwi, and an inset of Paua shell. This shell is found on our beaches and is the home of a fish delicacy. I am very proud of my country and take every opportunity of advertising its beauty to others.

Miriam

The paper knife is lovely and unlike any other that I have. Even nicer were the words which indicated Miriam's increasing pleasure and confidence with her computer. This was spelled out further in the next letter.

Dear John,

Here I am again, yes, I am receiving the newsletter and look forward to it. I am copying it for the local High School since I showed it to one of the teachers and they are keeping it in their library...

I am having lots of fun with PC-File III especially in organizing the reunion...I was not to know how trustworthy this machine was until I started using PC-FILE...It is a great programme. It also helped in understanding other programmes...

Being able to use this programme fully has given me the confidence to experiment...it has become my friend, having over 900 names (in the database)...it is a lot of fun being able to put them into districts and decades and knowing it is all on one disk, with backup of course.

The winter is setting in, we have had our first frosts this week. Although it is cold in the mornings and nights, we are having lovely sunny days, and spring will not be far away especially if I spend time on PCjr...

Miriam

Power, power, power! It's when you can make the computer do what you want it to with confidence. Here's just a bit of Miriam's most recent letter.

Dear John,

Our reunion is over and it was a great success by the number of complimentary cards we have received. I ended

up by putting over 1000 names and addresses on PC-File...the label programme was a godsend...computers make life very easy when running reunions and conferences. This is going to be ongoing as I have already been conned into helping with a school reunion.

My husband Jim and I are off tomorrow to Australia for 21 days to see our grandchildren over there...

I recently received the (new catalog disks)...am sending the money for the following six disks...What is the difference between a lightpen and a mouse? Can I use a mouse on the machine? If so are they universal?...

A number of people are wanting me to change (to a larger machine) but I am very resistant and really haven't seen anything better to service my needs...

Best wishes,

Miriam

It has hardly been one year since Mrs. Miriam Murray of New Zealand purchased a PCjr. Less than one year from typewriter to being at home with word processors and databases. I wonder what the next year will bring? Well, I owe her a letter to go with the six new disks. I'd better get writing.

(The above article was originally published in the San Francisco PCjr Newsletter, a publication of the San Francisco PCjr Users Group. John King, president can be reached at (415) 472-7035.)

Reader Feedback

(Continued from page 7)

PC Micro. The following is briefly how you could install the Toshiba as the A: and C: drive or as the B: and C: drive:

A: and C: Jumper DS2 and add the following line to config.sys file:

```
DEVICE=DRIVER.SYS /D:0
```

B: and C: Jumper DS1 and add the following line to config.sys file:

```
DEVICE=DRIVER.SYS /D:1
```

Don't worry about the disk change jumper (it's not used on the junior). Incidentally, I have absolutely no problem with the step rate in either drive with this setup.

For my next project I would like to add some additional memory to break the 640K barrier and bring my jr up to 736K. Ultimately I would like to also add some EMS memory. In this regard here are two questions:

1. I can get a used IBM 128K sidecar and attach this to my Racore and with the proper switch setting and software get the extra 96K. However, instead of doing that, can I add memory directly to the mother board and internal memory card by replacing the existing memory chips with 256K

DRAMS?

2. As for the EMS memory, can I add a fully loaded (modified) IBM sidecar to my current 640K system and then access the additional 512K memory with a software package such as ADJRAM or Softlogic Carousel?

David A. Young, Jr., Jackson, NJ

EDITOR'S NOTE: This seems to be the issue for letters about adding 3.5: drives to jrs and we thank you for your contribution to the subject. As for replacing the memory chips on the PCjr motherboard, the answer is that it's not possible. This is why there are so many alternative ways to expanding PCjr memory, all of which would not be necessary if you could do it all on the motherboard.

We're sorry to say there's no easy way to create your own EMS memory either. That's why PC Enterprises' Megaboard, which can boost total PCjr memory to nearly 1.8 MB is limited to use as a large RAM disk rather than DOS addressable memory. The Megaboard was discussed in some detail in the November 1989 issue of jr Newsletter, if you want more information on it.

Also, we will go through the old Best of jr Newsletter files to remove the code characters. We thought we'd caught them all, but apparently some still remain. Thanks for alerting us to this problem.

PCjr Do-It-Yourselfer Has Many Tips, Questions

I've been tinkering for over a year--some successes and some failures. Maybe you could share the experiences you feel might be helpful to others.

1. In response to some letters in the January issue concerning the 3.5" drive configured as A:, I modified my controller card (per OOwl Soft Jr Power Pack instructions) and installed a 1.44 3.5" drive as A: I would read and write 720K (also boot with a 720K disk) as A: Drive, but would only format 720K to the higher logical drive created by 3.3 DOS. This still baffles me, but it worked out pretty good.
2. Also in January, Carl Haub's "Beginners' Corner," I understand how you got 368,640 for a 5.25" disk, but mine have been 362,496 since day one. Please explain.
3. The MESA 286J did not work with my PC Enterprise 512K sidecar -- a major disappointment.
4. The review on Test Drive II was good, but it does require the Tandy 100 video modification and the -S1 switch has to be removed from the jrconfig.nrd.
5. Another excellent game is 688 Attack Sub. CGA is really lacking and I almost gave up on Tandy 16 color. It does work, but this is what it took:
 - a. Select Tandy 16 color video on the first menu.
 - b. Select 1 or 2 on sound menu
 - c. Leave DOS in A:

d. Swap play disks through B:

What a shock when 16 colors came up. The Tandy modification is worth its weight in gold.

6. The jr's power supply problem was a challenge. But I believe my solution was a good one (An XT power supply (150 watt) can be had for around \$45. I mounted mine (after removing the parts from the XT box) on the left side of my Racore "snap on top" box. The jr motherboard has 10 contacts:

1 +12 VDC
4 +5 VDC
4 grounds
1 -12 VDC

I cut off a scrap circuit board and drilled and soldered 10 leads (1 to each tab on the card edge). End result -- one power supply with more than enough +5 and +12 for any add-on drives at half the cost of PC Enterprises 150 watt supply.

Technical Question: I have little ones at home who I want to start on my PCjr. I need to position the CPU high on the bookshelf out of harm's way. How long a keyboard cord can I use without causing any problem?

Secondly, I hope no one is holding their breath for a high density controller for floppy drives. PC Enterprise 1.2 Meg 5.25" "slow" drive that won't read 360K disks was on extended "engineering hold" last I checked. It must be a lot more complicated than it seems to outfit jr in this manner. Ed Strauss is the smartest jr expert I know of, and even he didn't think it would ever come to pass.

Craig Cooper

EDITOR'S NOTE: Very informative letter, Craig. And you raise some interesting questions.

We have no explanation for why DOS will only format your 3.5" drive as the higher logical drive, but that's the way it is. If you check the article on installing 3.5" drives in the August 89 issue, you will see some more information on this. In effect, you can make DOS think it's Drive B if you set the path in your autoexec.bat file. Our guess is that in computing the number of bytes available on a so-called 360K floppy you end up with a lower number after the diskette is formatted, even though it's "empty" because DOS has used some of it in the formatting.

Yes, we were all disappointed that the MESA 286j bit the dust. Ed did a great job of designing it, but apparently could not take into account all types of PCjr expansion units that are being used. At least it was a success for a few jr users who had the right systems for the MESA 286j. This shows that Ed's ideas were basically sound. But we already know that from his excellent jr Hotshot.

As for Test Drive II, we had no trouble running it without the Tandy mod. But by now we've heard from several jr users (including you) that they could not get it to run with-

out the mod. Perhaps, as is often the case, there are several unmarked versions out there, some of which run fine without and some of which require the mod.

We have not tried extra long keyboard cords on our jrs, but the infrared feature of the jr keyboard might provide a way for you to solve your problem. That works from a distance of 20 feet or more. Just make sure your batteries are still good if you haven't used your keyboard in this mode for a while.

We have also been told by PC Enterprises that the 1.2 meg drive has been withdrawn from marketing. It may be a while before we see them again, because PC Enterprises has many other new products in the works and this one seems to have stumped them.

Yes, the 192K Internal Memory Board Does Exist!

I have had my PCjr since early in 1984. I use Andrew Tobias, Managing Your Money on cartridge as the excuse for having my computer. It is a single disk drive, external modem, proprinter, color monitor, and standard keyboard. I have increased the memory to 640K via the Paul Crumley route. All was good. Then about a year ago I found out about and subscribed to the jr Newsletter. Wow. I am learning more with each new letter. I am a Customer Engineer with IBM. Many IBMers have a jr, though most are still in the

(Continued on page 14)

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Reader Feedback

(Continued from page 13)

box in a closet taking up space. They don't understand the power sitting there, unused.

I have a question about the article in the December letters. On page 16 you referred to New Internal Memory Unit from PC Enterprises. You stated it was a 192K internal memory board that fit in the slot currently occupied by a 64K board in the PCjr. I called PC Enterprises to order it and they did not know what I was talking about. Where can I learn more about this extra memory. Can I do the upgrade to my own 64K board? Does anybody out there have instructions? What software will it use? Where can I go to learn about this extra memory? Any help you can give me will be greatly appreciated.

Thanks and keep up the good work.

Jim Williams, Jefferson City, MO

EDITOR'S NOTE: The 192K memory board does exist--it's just that PC Enterprises decided not to market it as a separate unit. Instead it is installed in the 256K PCjrs they are selling for \$299. And, no, we don't think you could make your own internal expansion board--but who are we to suppress your genius? If you do it, we'd like to be the first to know!

Using Escape Codes to Set Printers

I enjoy the newsletter so much, even though some of it is above my head. I own a small business and use my jr at work. I added 512K with the Hotshot. It is so fast now, and has so much more versatility. For word processing I use the Superwriter from Sorcim.

I have a Canon PW-1156A printer. It can print various kinds of data (character, numeric, and graphics) sent to it by the computer. It can also act as a terminal printer. At least this is what the book says. My problem is that I do not know how to give the computer the commands to do any of this.

I can read the basic syntax: CHR\$(H1B);"M": CHR\$(27);"M"; but I don't know what to do with it. I tried putting it on my DOS (my DOS is 3.2), but I can't seem to make it work. I guess I don't know the correct commands. I tried it with and without the "BASIC" cartridge. A friend once set up my program to do "Enlarged Mode" and that is the only thing I was able to do with my printer except regular printing. Unfortunately he moved, and I have no other help -- except my jr Newsletter. I hope you can tell me how to put these commands onto my DOS or onto my word processing program. The instructions in the printer manual say to enter the ESC Codes but does not say how to do this. Perhaps there are others of us who are having the

same problem. I must confess that I do not know basic, and this is probably the problem.

Your newsletter is probably the best thing about my PCjr. Without all the help I have received from it, and some of the programs I've ordered from you, I would still be in the dark ages-128K.

Elaine Bounds, Oak View, CA

EDITOR'S NOTE: We've found that the easiest way to set a printer's various type sizes, spacing, density and so forth is to use printer control software. We provided two excellent programs of this type on Typewriter (Disk #91). However, if you understand a little about BASIC, you can send the codes to the printer yourself. Most of these start with the ESCape code CHR\$(27) which tells the printer to expect an instruction rather than information to print. So what follows the ESCape code is the instruction which sets the printer in a certain way. In your case, you could write one line in BASIC:

```
10 LPRINT CHR$(27);"M";
```

and then run this program whenever you want to set the printer to that setting. You say you put this on your DOS disk, but did you use BASIC to write it and run it? And did you include LPRINT, which is the BASIC command to send information to the printer? If the answer is no, you should be successful if you try it.

3.5" Drive Installation and High Praise for Eight-In-One V2

I have a 640K Hotshot-expanded jr with the Hotshot second drive circuitry and an outboard second 5.25" drive. It has its own 120vac power source. It was purchased from Solid Rock, now apparently out of business.

Because I now use a PS/2 at work, I can no longer transfer data disks from work to home, as the PS/2 uses only 3.5" disks. I'd like to retire the tired, original Qume 5.25" A drive and replace it with a modern 3.5", retaining the better quality added-on 5.25" second drive. I've seen advertisements for 3.5" drives that claim to replace the 5.25" originals within the jr A drive slot.

I'm mechanically handy, so I have no reservations about getting the old drive out and the new one in, but what considerations do I need to make concerning:

- a) which versions of DOS to use
- b) any required software for config.sys changes, or
- c) any additional hardware changes, such as a new or different disk driver cards?

When completed, I need to be able to read and write both 3.5" and 5.25" disks at their full capacities.

If such a change is not readily available, the days of my jr are limited. On the other hand, if this can be easily done, I will have no reason to abandon the Peanut to the kids!

On another matter, I can add that Spinnaker's **Eight-In-One** integrated program, for less than \$50 at discount, is an especially fine value in its latest version 2. I use it exclusively, both personally and for all my work at school as a biology teacher. It has become the science department standard with the chemistry teacher using it. The word processor is very adequate with a spell checker and thesaurus. We are using the spreadsheet to keep and calculate grades, and are entering student book report information in the database (to keep track of who wrote what from year to year). The desktop utility, especially the calendar and appointment reminder capabilities are often used. It's not a \$200 whiz bang top name program, but very closely approaches one. I highly recommend it. It's manual, on-line screen helps, and sample programs, are especially fine.

John A. Blakeman, Huron, OH

EDITOR'S NOTE: The subject of 3.5" drive installation was covered in an article on page 11 of the Jan. 90 issue; as well as in the Aug. 89 issue, page 8. Both hardware and software considerations were covered in these articles.

Drive Motor Lube Does the Trick!

I would like to comment on two recent letters in your publication. In the Sept-Oct 89 issue there was a letter about lubrication of guide rods on the disk drives. I did this and it seemed to help, but the noise came back, only different.

Your Jan. 90 issue about lubrication of drive motor bearing was right on target. Within minutes of reading that letter I was into the machine and, having verified the motor was dragging, I lubricated the upper drive motor bearing and upon booting, all noise was gone.

Carl E. Burger, Bella Vista, AR

Can You Speed Up "Colonel's Bequest"?

I recently got **Colonel's Bequest** by Sierra for Christmas. I have 640K and one drive. I am booting up with my memory expansion. The game runs at a snail's pace. Any ideas to speed it up? Thank you.

Mrs. Ann Scherblin, Bloomfield, NJ

EDITOR'S NOTE: Depending upon what the software's true free memory requirements are, you may be able to speed up its operation by booting up your PCjr using a small RAM disk to fill the lower 128K and thus forcing the program to operate in "higher" memory which runs faster. If you use

(Continued on page 16)

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Reader Feedback

Continued from page 15.

jrconfig with no ram disk specified, it will do this automatically. We included such a setup on PCjr Autoseup (Disk #99) for just this purpose. Most of the latest Sierra games, however, suggest you boot with their own disk, which is designed to recognize PCjrs. We don't know whether or not this is the case with Colonel's Bequest. Please let us know if our suggestions work. We're sure other readers will be interested.

Reader Installs 3.5" Drive and Runs WordPerfect V5.1

I particularly enjoyed this month's article on upgrading the internal 5.25 disk drive to the 3.5 720K disk drive. I had been told by authorities that this was even impossible on XT's unless the BIOS chips were changed. Thanks to your article I installed a 3.5" drive in jr (which also has a systems peripherals 10 meg hard drive and 640K memory via a MASYSTEMS multi board that needs no extra power) and another 3.5" drive in my XT at work in less than two hours. Now I'm transporting between work and home twice as much data, in half the space, and in a safer format.

I've also recently upgraded WordPerfect from version 5.0 to 5.1 and you will be pleased to know that this new version is totally compatible with junior.

Alexander Ball, Dundas, Ontario

Would You Believe....

Continued from page 1.

ware or play graphics intensive games. The jr Excellerator sells for \$129.

In addition to its many PCjr upgrade products, PCE has found that its 128K and 256K PCjrs are selling well. Pat Calabria points out that if you buy a 256K PCjr from PCE as a backup for your current jr, you have a new motherboard, disk drive, and 256K of internal memory for \$299, which would give you a 736K PCjr if you now have a 640K PCjr with a 512K sidecar and the central system failed. This is possible because their 256K units come with a 192K memory card instead of the usual internal 64K memory card.

Incidentally, we should point out that these 192K internal cards are not being marketed separately by PCE, although we reported a few months ago that they were. According to Pat, PCE felt that they would not be able to provide adequate technical support for the installation of these cards, which can be a little tricky. So they're just selling them already installed in their 256K jrs.

For your copy of the new catalogue or to order a PCjr product from PC Enterprises, call 1-800-922-PCJR.

The Latest On Compatibility

The latest version of the PCjr Compatibility Disk, with tips on nearly 1,000 software titles, is now in the Software Store. See Disk #60.

25 Different Upgrade Projects In Jr Toolkit

Jr Toolkit, Disk #110 in the Software Store, has a collection of more than 25 upgrade, modification and repair instructions for PCjr users.

Jr Toolkit has instructions for upgrading your PCjr by performing the PCjr to Tandy 1000 modification, adding disk drives, more memory (for IBM and Microsoft sidecars), more power (upgrade the 7 inch PCjr power supply, or add an XT power supply), getting the right box for a second disk drive, and adding a serial port.

Most of these projects are quite easy to perform if you have a little experience with a soldering iron, while a few (the power supply upgrade for instance) are more appropriate for technicians.

If you missed the step by step instructions for

cleaning and/or lubricating the PCjr 5 1/4 inch disk drive so it runs more quietly, they are included on this disk.

Jr Toolkit also has several files which provide diagnostic and repair tips from people who have tinkered successfully with their PCjrs when breakdowns occurred. These tips could save you money and aggravation by showing you how to make easy repairs. Some not so easy repair tips for the more experienced do-it-yourselfers are included as well.

Most of the instructions were written by amateurs, PCjr users sharing their experiences with other PCjr users, so we cannot guarantee their accuracy or completeness. However, the sources for these instructions have, in our experience proved to be quite reliable, so we feel they are worth making available to all PCjr users who wish to make use of them.

See page 23 to order Jr Toolkit (Disk #110).

Questions and Answers

(Continued from page 4)

CONFIG.SYS file does. In that case the instructions for what kind of changes are recommended or suggested for the file will be included with the cartridge.

Q. Can't seem to get DOS 3.3 operating for reasons unknown. Possibly due to incorrect booting from dependence on DOS 2.1 config.sys boot disk? Using Larry Newcomb's jrconfig. Stewart's Camera Craft, Monument, CO

A. You can use the same config.sys on DOS 2.xx through 3.3. Because the two hidden files, IBMDOS.COM and IBMBIOS.COM are the ones with the major differences between DOS versions, you must be sure that the new booting disk was made from a totally EMPTY diskette and that the first command (with a DOS 3.3 diskette in A:) was `FORMAT B:/S <Enter>` or `FORMAT B:/S/V <Enter>`. This insures that the two hidden (SYStem) files will be written to the new booting diskette. Only after this has been done can you copy your old CONFIG.SYS file to this new booter. You cannot take a DOS 2.1 diskette and expect to do a SYS.COM transfer from a DOS 3.3 diskette. The whole procedure must be started from scratch. All the other files, such as COMMAND.COM, GRAPHICS.COM, SYS.COM, PRINT.COM and MODE etc., which are supplied with the DOS 3.3 system have just enough changes (improvements?) to make them also totally incompatible with the files of the same name on in the DOS 2.1 system. Moral: Don't mix 'em! Once using any DOS version, hide, sell or dump the other(s).

Q. I run BASICA with the cartridge. In reading the jr Newsletter I get the feeling that there is some way to run the disk version of BASICA. If this is true can it be loaded on a ramdisk for faster execution? Henrik Straub, Mercer Island, WA

A. Let's see if we can clear this up a bit.

1) The Cartridge version LOADS faster than ANY version, no matter what, including disk versions from a ramdisk.

2) With the Cartridge installed, ANY command which starts with "BASIC" will cause the BASIC Cartridge to be the version which runs. If you want to check this, try loading by typing BASIC and typing BASICA from DOS, then look at the version number and information at the top of the screen when BASIC loads each time...

3) With the Cartridge in the slot, you can run disk BASICA by renaming it anything at all, provided it does NOT begin with "BASIC"! Name it DSKBASIC.COM for example,

and use that name to run it. Here, the version number and information will be different from the above test.

4) Jr. Cartridge BASIC is a much more advanced language as compared to disk-based BASICA, all versions including 3.3 or even GW-BASIC and is only a tiny bit larger in memory. (So why would anyone want to run BASICA if the Cartridge is available?)

5) The execution speed of a program, once written, will not be affected by having loaded the BASIC interpreter from a ramdisk.

6) The speed of ANY program can be improved if all of the first (low) 128k of memory is marked as "used" or is reserved before the program loads and runs. This applies to the BASIC(A) interpreters as well.

7) The information we have published about BASICA is that this disk-based version of the interpreter CAN be run without ANY cartridge in the slot. If there is a shortage of Cartridges or they are too expensive, this saves the day. Normally, the Cartridge must be in the slot for ANY version to load in the jr. The disk version, named BASICA, must be patched however; to do this get Jr Patches, Disk #56 from the Software Store.

Disk-based BASICA will NEVER need 96k of video memory because it can't do any screens other than 0, 1 and 2 which are the original CGA standard screens for the standard PC!

By the way, the file BASIC.COM which is also included on the DOS disk is NOT another version of BASIC. The size of the file should tell you that. It merely loads BASICA or jr Cartridge BASIC for you, much as a batch file would. If you want to check this out, just rename it something else, as above and see what version of BASIC loads when you see the first screen. You need never use this file so you can regain some disk space by, well, you know... it begins DEL...or ERA...

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-- Disk #62, page 23 --

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Getting Great-Looking Printer Output at an Affordable Price.

ImagePrint (Disk #50) in the software store has been a favorite among our readers, and now there's an improved version that any one with a dot matrix printer will want to own. Version 3 gives you a choice of 24 fonts, which can be printed in draft, medium, high, or laser quality. The high quality output is created by three passes of the print-head over the line of text, and the laser quality is made by six passes over the same line. For most purposes the high quality is as good as any reasonable person could want. The laser quality takes a bit longer to produce, but it really does have nearly the same quality output as a laser printer. Compare the fonts listing on the opposite page to the headline of this article. The quality of the larger types produced on a cheap Panasonic printer is very close to that produced on the much more expensive laser printer used to lay-out this jrNewsletter. Granted, the dot matrix printer is slower, but it's affordable.

ImagePrint can be used with any standard word processor which produces ASCII text. After you save the file, you exit the word processor and send it to the printer through the ImagePrint menu or directly through a command line at the DOS prompt. How does the printer know which fonts and features to print? It reads dot commands and backslash commands you include in the text file.

A dot command is a period (located as the first printable figure on a line) followed by a two-letter instruction

code and sometimes an optional variable. Dot commands set margins, justification or centering, line spacing, etc. For example, the line below tells ImagePrint that the line feed (spacing) should be set at 2 (double-spacing):

```
.LS 2
```

To select fonts, bold, bold or underline, backslash commands are included in the text. Backslash commands can select the printer output quality, italics, underline, double-width, superscript, subscript, ten or twelve characters per inch, proportional spacing, and even colors for those using JX-80 printers with color printing. Backslash commands are simply typed in as you write your file. For example, a "\b" turns on bold, and a "\c" turns off bold. So, an ASCII text line written as:

```
\bThis will print in bold, \cand this would not.
```

will appear in an ImagePrint print-out as:

This will print in bold, and this would not.

The registered version of ImagePrint comes with 24 font styles, shown on the opposite page, and a complete instruction manual.

Newsletter publishers: The dot matrix printer can do something the laser printer can't: make mimeograph & ditto masters.

Newsletter publishers will be happy to hear the dot matrix printer can do something the laser printer can't: Make a master for a mimeograph or ditto machine. Printing on mimeograph costs only about one-third as much as using a copier machine. And it's faster.

ImagePrint, Version 3, works on IBM, Epson and compatible computers, including:

- * IBM Graphics Printers and Proprinter (and compatibles)
- * Epson EX, FX, GX, JX, LX, and RX printers (and compatibles)
- * Panasonic 1080, 1091, 1092, 1093, 1095, 1592, 1595
- * Star Micronics, NL/NP/NX/SD/SG series
- * Tandy DMP 130/132/430
- * Okidata 92/92 and Okidata 192/193 (IBM compatible versions) and 320/321
- * Canon PW-1156A, PW-1080A, PW-1088A
- * Citizen SP series
- * ALPS P2000, ASP 1000
- * Brother M1509, M1709
- * NEC Pinwriter
- * or any other printer which recognizes the following printer codes:
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 - * ESC"L"-double density graphics mode OR ESC"Z"-quadruple density graphics mode.

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OCRB abcdefgh ABCDEFGH 0123456789

Small abcdefgh ABCDEFGH 0123456789

Pica abcdefgh ABCDEFGH 0123456789

Block abcdefgh ABCDEFGH 0123456789

Graphics abcdefgh ABCDEFGH 0123456789

Spreadsheet abcdefgh ABCDEFGH 0123456789

Clifton abcdefgh ABCDEFGH 0123456789

Helv-18B abcdefg ABCDEFG

Helv-20 abcdefg ABCDEFG

Helv-20B abcdefg ABCDEFG

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IBM PCjr computer with 640K memory, Acorn RGB color monitor, Datadesk AT style keyboard + jr keyboard and jr modem. Basic and combo cartridges (clock/calendar, jr video, MYM). DOS 2.1 and various operations manuals. \$575.00 + UPS shipping. Call after 5 p.m., EST 1-404-425-9583.

PCjr - 640K, Microsoft Sidecar with mouse, color monitor, internal modem, 2 joy sticks, parallel port, clock/calendar, DOS 2.1, BASIC cartridge, Lotus 1-2-3, Cables, all manuals and original boxes, \$650 plus shipping (419) 885-1938 evenings.

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(Continued on page 20)

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(Continued from page 19)

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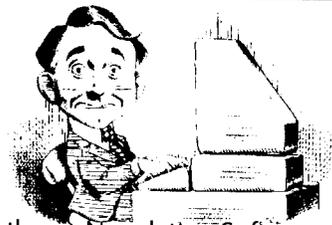
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JR POWER PACK. A collection of particularly useful programs for PCjr owners. Set up RAM disks, address memory to 736K, turn a joystick into a mouse, set screen colors, keyboard click, scan and search text files, screenblinker, print spooler, and more. 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 V3.0. Lists over 800 software titles, along with info on how they run (or don't run) on PCjrs. Also tips on how to make software PCjr compatible. 128K ok. Updated October, 1989. (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

This software 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 these 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. (Date after "Reviewed" indicates issue in which review of that disk was published.)

* **NEW** * **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. (Reviewed 3/90) (Disk #110)

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* **NEW VERSION** * **IMAGEPRINT V3.33**. Produces near letter quality print on dot matrix printers. IBM Graphics Printers, Proprinters, Epsoms and compatibles. Contains many format features, three quality levels, interfaces with word processors. 128K ok. (Reviewed 3/90) (Disk #50)

* **NEW** * **THE WORLD V.2.6** Fascinating way to see the world on your PCjr! Just use the pointer to move over full screen map of world and press Enter to zoom in on any region, country or city. Many features. Even shows you hurricane tracks by year. 256K (Reviewed 2/90) (Disk #105)

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

4DOS V2.21 - This is the "ultimate utility" since it replaces almost all DOS commands with new, improved versions. And it adds 35 more useful commands of its own! It will replace many of your favorite enhancement utilities. For example, 4DOS allows 40 character file descriptions, more flexible wildcards, multiple commands per line, handy conditional commands, command stacking, alias commands, faster batch processing -- and MUCH more! A must for all serious computerists. Reviewed 1/90 (Disk #102)

ADVENTUREWARE. Six different text adventures with titles like "Island of Mystery," "Terror in the Ice Caverns," and "Moon Mountain Adventure," all test your wits and take you to strange mysterious places. 128K (Disk #14)

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

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)

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)

BAKER'S DOZEN. 13 powerful utilities by shareware star Jim Button. Recover zapped files, save screen to files, print sideways, sort files, file management, locate text, pop-up calendar, powerful one screen spreadsheet, set screen colors, and more. (Disk #73)

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

COMPUTER JOKER. Disk full of jokes, wisdom, and visual tricks to play on your computing friends. 128K ok (Disk #64)

COMPUTER TEACHER. For those who want to learn how to use DOS commands and to understand basic computer hardware terms, this interactive software will help you become computer literate. Helps you better understand those manuals and computer magazines, as well as how to do more with your computer. 128K (Disk #77)

CROSSWORD CREATOR V3.30. Make your own puzzles up to 36 columns by 22 rows. Many helpful sorting and placement features. Prints out on virtually any printer. 256K (Disk#71)

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

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

DOUBLE TROUBLE. Two of the most challenging, highest quality arcade style games we've seen -- Amazing Mazes and Willy the Worm. Ten different mazes and five levels of play will tie your brain in knots. And Willy, who is the fastest, jumpingest worm you'll ever see, will beat you for sure! You can even modify Willy to give yourself more (or less) trouble. 128K ok. (Disk #68)

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

EARLY LEARNING. A collection of colorful educational games for ages 6-8. Sing-along alphabet, letter match, counting game, maze, pattern matching and more. 128K, need Cartridge Basic. (Disk #48)

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)

EQUATOR. An excellent way to learn and review 35 basic equations used in math, finance and science. Learn to compute the

volume of a cylinder, compound interest, or average velocity and much more. Manual on disk. 128K (Disk #20)

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.

FILE EXPRESS. (V4.22) Very easy to use database manager. Extensive menus and prompts to guide you. Excellent choice for maintaining mailing lists, etc. Many powerful features. 256K (Disks #83 and #84)

GALAXY. One of the easiest to use word processors we've ever seen, Galaxy has all the features you need to write letters and do most word processing. It has many, but not all, advanced features. Its strength is its simplicity, with help menus always ready to assist you. You probably won't even have to read the manual. 128K ok. (Disk #69)

GAMES FOR EARLY LEARNERS Young children like Teach Tot's alphabet and counting games. Other activities teach spelling and telling time. For Preschool through grade 3. Cartridge BASIC, 128K. (Disk #63)

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

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

GAMES III. Kingdom of Kroz, an award-winning arcade action game. Go-Moku, a challenging Japanese strategy game, also known as Pente. Zigsaw, the first really good on screen simulation of a jigsaw puzzle. All three on one disk. 256K Reviewed 12/89 (Disk #101)

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

HAPPY GAMES. Written by a mother to help her own preschoolers learn on their PCjr, this set of colorful educational games makes learning fun. Teaches colors, shapes, logic, eye-hand skills. 256K and joystick required. (Disk #88)

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)

(This is an alphabetical listing of our disk descriptions. For the remainder of the list, please refer to last month's issue.)

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- 3 PC-FILE III. 128K
- 4 PC-FILE III. 256K
- 5 PC-CALC. 128K
- 6 PC-CALC. 320K
- 8 GAMES I
- 9 DUNGEONS & WARS
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- 24 PC DOS HELP
- 25 PC-CHECK MANAGER
- 26 BATCH FILE UTILITIES
- 27 MINICALC
- 28 SUPER UTILITIES
- 29 MORE SUPER UTILITIES
- 30 ARCADE GAMES
- 31 BOARD GAMES

- 32 PLAY AND LEARN
- 33 FAMILY HISTORY (128K), single
- 33A FAMILY HISTORY (256K), need both
- 34 GAMES II
- 35 NEW KEY
- 36 PIANOMAN
- 37 PC-KEY DRAW
- 38 PC-KEY DRAW DEMO
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- 55 SUPER BOARD GAMES
- 56 PCjr PATCHES V.5.0
- 57 HOME BUDGET MANAGEMENT, 128K
- 57A HOME BUDGET MANAGEMENT, 256K
- 58 HOME INVENTORY
- 59 CHECK PROCESSOR
- 60 PC-JR COMPATIBILITY DISK, V3.0
- 61 BOYAN
- 62 JR MUSIC MACHINE
- 63 GAMES FOR EARLY LEARNERS
- 64 COMPUTER JOKER

- 65 JR POWER PACK II
- 66 THE BEST OF JR NEWSLETTER II
- 67 AS-EASY-AS, V.2.05 (256K)
- 68 DOUBLE TROUBLE
- 69 GALAXY
- 70 NAMEPAL
- 71 CROSSWORD CREATOR V3.30
- 72 LANGUAGE TEACHER
- 73 BAKER'S DOZEN
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- 100 WAR ON THE SEA
- 101 GAMES III
- 102 4DOS V2.21
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- 104 PKZIP V.1.02
- 105 THE WORLD V.2.6
- 106 GAMES IV
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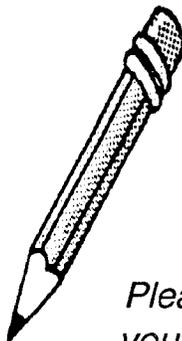
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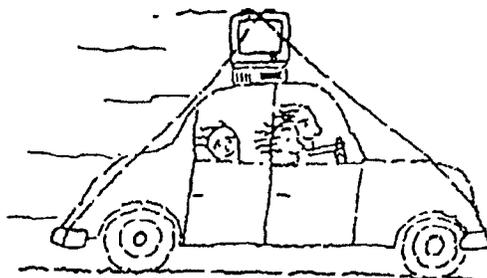
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