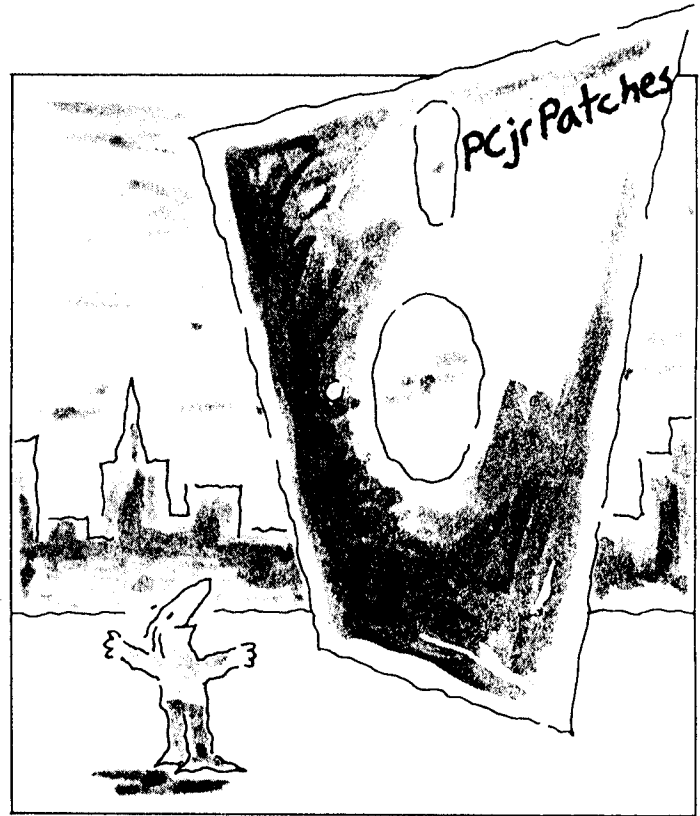# The Elves Are Working On New PCjr Goodies

Imagine Santa's Workshop with many elves tinkering with new PCjr products and you'll have an idea of what it's like at PC Enterprises these days. Several new hardware and software goodies which are sure to delight PCjr users are in the works at PC Enterprises, the PCjr product specialists in Belmar, New Jersey.

Pat Calabria, Chief Engineer of the company, is no pessimist about the future of PCjrs. He says he sees many years of use for the hundreds of thousands of PCjrs now in the homes and offices of computer users. So, as PCjr specialists, the people at PC Enterprises are focusing on the development of products that will enable PCjrs to keep pace with other computers available today — and in the future.

Speaking from his desk with his five drive PCjr in front f him (more about that later), Pat speaks with excitement about the bootable hard drive, the 1.2 megabyte floppy, the 3.5 inch drive, the function key pad, the speech attachment package — all PCjr products that are nearing completion at PC Enterprises. He also drops hints about other products on the drawingboards, but not ready to even mention outside the walls of his office.

Ingenious PCjr Users Fix "Incompatible" Software

"Although the label on the Starflight package reads "IBM AT, XT, PC, Tandy 1000, 1200, 3000 and all 100% compatibles', Starflight does not run correctly on a PCjr. Fear not, for you CAN run Starflight on your PCjr, if you have enough memory."

The above quote is from the introduction to a patch written by Lee Johnson, whose ingenuity now enables untold numbers of PCjr owners to enjoy a highly popular game whose manufacturer (Electronic Arts) had turned its back on those of us who own PCjrs.

Thanks to several computer-wise PCjr users, a great deal of software that is not supposed to run on PCjrs will actually operate on PCjrs.

Advanced Flight Simulator, Starflight, Quick Basic 3.0, Turbo Basic, Turbo C, and Double DOS — all supposedly incompatible with PCjrs, have now been fixed by PCjr users with the know-how to discover why they wouldn't run and how to get around the problems.

DOS for Beginners

By Delmar R. Mineard

Some of the members of our Elkhart PC Users Group have asked for help with reading ASCII text files found on our Public Domain Library diskettes. After helping a few members, I decided to write this article.

An ASCII text file may have a filename such as:

Readme   Autoexec.bat
Readme.1st   Config.sys
Readme.txt   ProComm.doc

All of these files can be displayed on your screen or sent to your printer. However, files with a file extension of ".com" or ".exe" are executable files and cannot be read directly on your screen. These files are unreadable due to the presence of non-alphabetic or non-numeric characters.

Viewing Files

To display the contents of an ASCII text file on your screen, enter either command:

COPY filename CON   (CR)

or:

TYPE filename   (CR)

(CR) means to push the Carriage Return or Enter key after typing in the preceding command. The word "CON" means the display monitor. With this command, you are telling DOS to copy the file to the screen/monitor. That is why you get the message, "1 file(s) copied" after the file is sent to the screen. I prefer the more simple "TYPE" command because it is shorter.

For example, if you want to read a file called "README.1st", you would type the following at the DOS prompt:

COPY readme.1st CON   (CR)

or more simply:

TYPE readme.1st   (CR)

Be sure that you use the full file name including the proper file extension.

Print a File

Sometimes the ASCII text file is long or you want to make a hard copy of the file, such as the documentation for a software program. To print an ASCII text file you want to send the file to your parallel printer. You use one of the following commands:

COPY filename PRN   (CR)
COPY filename LPT1   (CR)

The file will go to the printer and the message about one file being copied appears on the screen. If you have to halt the job before it is complete, just hit your "Fn", function, and "Break" keys.

For example, suppose you want to print the Documentation file for ProComm 2.4.2, "Prcm242b.doc", which is over 106 pages long. Issue the following command:

COPY PRCM242B.DOC PRN   (CR)

Another option is the redirect command "   ". To use this command, type:

TYPE PRCM242B.DOC   PRN

This will send the file directly to the printer. However, the following command does not work:

COPY filename CON   PRN

This command does not redirect the file to the printer, because the copy command is copying it to the screen and your screen is trying to redirect it to the printer. Instead, it just copies the file to the screen and sends the "1 file(s) copied" message to the printer. This is not a DOS problem. It is just a unique twist of DOS.

Global filename characters are not allowed in the filename or extension. If global filename characters are used in the filename or extension, the message "File not found" will appear. So anytime you want to read or print an ASCII text file, autoexec.bat or a config.sys file, just use the commands outlined in this article. Remember that DOS is a powerful tool that can make your life easier once you master all the commands.

*   *   *   *

We Greatly Appreciate Responses From Readers

At jr Newsletter we receive many letters from readers — questions, comments, (sometimes, even, complaints). The letters are much appreciated and we read them all. But our ability to reply is limited. We have a small staff and getting the newsletter out every month takes all of our time.

If we can, and if it seems necessary, we do try to respond to letters — but we are often very slow in doing so. We often try to answer questions submitted by readers in our questions and answers column, rather than responding individually. So, if you have written with a question, please look for the answer in that column.

We apologize for not being able to respond to each and every letter personally, but we do the best we can and we hope you understand if you do not receive a direct reply.

Questions and Answers

Q. How can I replace the clock-calendar battery on my Tecmar jr Captain ?

A. The exact replacement Tecmar clock-calendar battery must be obtained from Tecmar. You can get a replacement by calling or writing the company. To replace the battery, you have to pull the old one out and disconnect the leads, which are held in spring clips. You simply push the new one in. If you are unable to get one from Tecmar, or you are in a hurry, you can buy a 3 volt lithium battery from Radio Shack, or some other supplier, and solder two solid copper wire leads to the battery, using your old battery as a guide for placement. Try to keep the soldering iron in contact with the battery for as short a time as possible. Then plug it in place.

Q. Sometimes when I use DISKCOPY to copy disks, I get error messages and when the copy procedure is done, it says "target diskette may be unusable." What's the problem?

A. If you get "read error" messages, you could have problems with your source diskette, or your disk drive may be malfunctioning. Sometimes repeating diskcopy solves the problem. If you are getting "write errors", the fault could be in your target diskette or your second drive. Before giving up, you should try using the format command to format the target diskette. Then use the copy * . * command. The diskcopy command makes a "mirror image" of the source diskette, which may have some faults. It also get upset if the target diskette has faults. The copy * . * command not only will organize fragmented files for you as it copies, but it will pass over bad sectors on the target diskette, making a successful copy where diskcopy may have failed.

Q. I can't get PC-Paint to operate using more than four colors. I know it is supposed to work with 16. What's the problem? I also can't get it to print in color on my Okidata.

A. PC-Paint comes with a video driver, which you have to use to operate it with 16 colors. It only works in four colors unless you use their driver. As for printing, if you are using version 1.5, you have to upgrade to PC-Paint Plus, which has a driver for the Okidata 20.
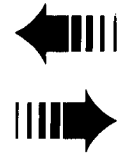NOTE: This type of question is asked often. Since our experience does not include all paint software or printers, we would apprecate hearing from readers on this subject.

Q. Can you get the spell checker in IBM Writing Assistant version 1.01 to run from a RAM disk without having to copy the whole program to the RAM disk and running it that way?

A. Yes, it is possible, but it can be tricky, and it's a big help to have a RAM-resident utility that includes DOS commands loaded when doing it. Here are the steps: first make sure your RAM disk has about 125K of free space and then copy the spell checker file, which is called WORDPRF.WDL, to the RAM drive. Then make the RAM disk the default drive. If it's C, for example, make sure you have a C > prompt. Then, with the Writing Assistant workdisk in your floppy drive (call it drive A) invoke the program from the other disk as follows: C > A:WRITE (ENTER). That will boot the program and everything will be fine. The spell checker will run like blazes. Saving your file to a floppy data disk will be fine as long as you put a drive designation before the filename as in B:FILENAME.EXT. Just follow the prompts. The problem comes when you try to exit the program. You will get a message telling you to insert the program disk in the default drive. Since this is a RAM drive obviously that's impossible. What you need to do now is to change the default drive before trying to exit. If you have a program like PC-DESKTEAM loaded, you can use its DOS commands feature to change the directory (drive) to A. Then you should be able to exit the program back to an A > prompt.

Reader Cites PCjr Experiences
And Reactions to Past Articles

Ever since receiving my first issue (Feb. '87) of the jr Newsletter, I have felt the urge to respond to something in each issue. Finally, the attempt is being made. Will try to be brief and to the point.

First, let me describe my configuration:
1. Enhanced jr with 128k onboard and one IBM disk drive.
2. TECMAR jr Captain 128k expansion unit.
3. TECMAR jr Cadet with 384k expansion unit.
4. Legacy Drive 2 only unit.
5. datadesk turbo 101 Keyboard.
6. Okidata microline 93 without IBM plug & play. (Does anyone out there know of mail-order source for this kit?)
Feb. '87

My TECMAR side car crash occurred in Nov. It took me a month to get to the bottom of the problem. Operating with cover off seemed to help which led me to suspect heat as the problem. Finally noticed that the regulator was not fully seated (from handling I thought.) Pressed back down and the problem has not returned since. Also blocked up Legacy Drive chassis about an inch to provide better ventilation.
Mar. '87

1. Was having IBM drive problems at the same time the TECMAR jr Captain was causing problems. Was forced to remove the IBM and install the Legacy drive in its place in order to keep operating. Ordered a replacement from IBM and restored the Legacy Drive to its proper place. There is still a problem with the IBM drive. It sometimes has problems formatting new disks. I avoid the problem by always formatting in drive b:. Haven't yet gotten the lube kit for drive rails, but this might have saved my earlier replacement of the IBM drive.
2. Mystery of clock gaining time explained but not solved. I find this annoying since a lot of my work is disk access intensive.
Apr. '87

1. Thanks for procedure to get full 640k from TECMAR jr Captain & Cadet. I use it with MS Fortran Ver 4.0 (need 384k free weth this version, but more is better.), and with PC-write ver 2.55 with Borlands Turbo Lightning. The latter permits usage of the flp*.* files on a Ram Disk. Cartridge Basic locks up my system with this configuration. I find this annoying since I sometimes want to run a basic program while in PC-write.

2. Will keep Chuck Holtst's comments in mind if TECMAR problems ever recur.
May '87

1. In response (late) to Craig Tregillus's interest in the datadesk keyboard. I think mine is the greatest thing since peanut butter for most applications. On the other hand it drives me up the wall in BASIC. The problem is that the top row of number keys cannot be used when Num Lock is On. The separate set of cursor control keys are not usable when Num Lock is Off. Quick basic will actually throw Num Lock out of sync when On during a Compile. Perhaps the same thing would happen with a Keytronics. I've had no experience with them.

Mine was one of the first units shipped and was configured for the Enhanced PCjr. I could not boot up with that version. Got it to run by plugging in after bootup. A phone call was all that was required to get a replacement chip which permits bootup and all leds are in Sync. (Re-synchronizing is no problem when required as in Q-Basic above).

2. My experience with IBM's service centers has been "Yes, we will look at it, but first remove all non IBM components. Those of us with expanded systems may as well find a secondary service shop who services most major brands for the dealerships to begin with. They are more likely to have hard to find parts, or can get them if anyone can.
Jun. '87
No comments.
Jul. '87

1. Thank Hendrik for the warning about the connections for the Reset Button Installation. That's a project that I keep intending to do. You mention using Basica when I suspect it's Cartridge Basic you are using. You would have to rename it something else, like Basicb.com, otherwise Cartridge Basic will be loaded (see May Newsletter). About the only reason to use Basica instead of Cartridge Basic is that the former supports Shell.
2. Was a little surprised that anyone would spend $75 for IBM Assistant series. I have Writing Assistant, and must admit it is an easy package to use. I became frustrated when I couldn't produce ASCII files with it. Also had Graphing assistant, but gave it away because I didn't really need it and didn't have time to learn how to

use it. My word processor of choice is PC-Write. It has powers that I haven't even discovered yet.

PROBLEMS:

1. Just about every Utility dealing with screen saving that I try locks up on me when I install it. The most recent was Back Scroll, a product of Kampro Group in Honolulu. I've seen it work on a pc compatible and would like very much to use it. What it does is buffer the screen scrolling so that the user may recall data that has been previously scrolled off the screen. The user specifies the number of pages to be buffered (up to 28 with a default of 4). Snapshot by Steve Holaner, a programmer for PC Mag, does work after a fashion. Am able to save the current screen, and recall with a simple combination key stroke, but cannot get it to display any of the 3 additional ASCII files created by a word processor which it is supposed to do.

2. I keep hearing about Dos 2.1 bugs, but have never heard what they were. Have decided to order the DOS 2.1 FIX in hopes that some of my unresolved problems will go away.

3. It is not clear which IBM memory board you modify in the article "Boosting Your Memory to 736K" of July issue. Is it the board that came with the enhanced PCjr or is it the side car? Whatever, I am ordering the JR POWER PACK for the other programs.

Robert F. St. John
Brown Deer, WI 53209

EDITOR'S NOTE: Just a few comments on this very informative letter: The bugs in DOS 2.1 have been covered in previous issues — before the writer of this letter started subscribing. Those articles are on "The Best of jr Newsletter" Disk #53, which has been added to the Software Store this month. It is the IBM sidecar that is modified to get 736k, not the memory inside your PCjr. As for the comments on a screen saver utility, we have screen blanking utility on Jr. Power Pack (Disk #52), but we erroneously listed it in our description as a "screen-saver". This utility blanks your screen when there has not been any input for a few minutes, which will save your screen in the sense of preserving the life of your video display tube, but it will not save screens of graphics to disk. We have corrected the error in our description.

*   *   *   *

Hints for Creating Ram Disks

If some of you have been trying to create a large ram disk (200-300K), but have been unsuccessful, then read on, it may prove helpful. I have a PCjr with a Quadram expansion chassis that includes a 2nd disk drive and

384k of memory. Using the software provided by Quadram I was unable to create a large ram disk with 200 to 300K of memory.

Even though it appeared that I had successfully created a large ram disk, copying files to it indicated otherwise. At some point during the copying process strange graphic characters would be displayed on the CRT. You don't have to be a computer genius to realize that this is not a normal condition.

Along comes Larry Newcomb and his JRCONFIG device driver programs. Still anxious to create a large ram disk, I tried Newcomb's program, and guess what? The strange graphic characters are gone. Now when I copy files to the ram drive I get the error message "31 files copied - File Creation Error". Per DOS, the definition of this error message is: An unsuccessful attempt was made to add a new file name to the directory or replace a file that was already there.

When all else fails, read the instructions, thoroughly. So I did and discovered option -e in the JRCONFIG.DSK program. Option -e will set the number of directory entries allowed on the ram disk. This option allows you to expand the directory listing size beyond the default setting. Selecting the value of 2 or 3 for this option (-e2, -e3) will allow you to copy up to 63 or 127 files respectively to your ram drive.

I don't know if this is technically correct, but from a

RAM Disk Hint

user's standpoint it appears that ram disk size is controlled by *two parameters*, memory allocation in kilobytes and directory entry size in quantity of files. Proper sizing of both with Larry Newcomb's system configuration programs has allowed me to create the ram disk size I wanted.

Ron Pyzik

* * * *

Reader Wants to Build Board

I am one issue new to the **jr Newsletter**. It's nice to bump into other folks who respect the jr. I would like to expand the memory of my jr to its maximum. If I am not mistaken, this has probably been a hot topic for your publication since its conception.

I am thinking of building my own board using wire wrap sockets. Has this been done successfully? Will I need a separate power supply? How do I rearrange the memory map for the most efficient use of the new memory? If you have access to answers to any or all of these questions I would appreciate hearing them. Thank you very much for your time and for doing the **jr Newsletter**.

Bernard Corwin
Phoenix, AZ

EDITOR'S NOTE: Yes, it is true that boosting PCjrs' memories to the maximum has been a hot topic since this newsletter started. But we do not know anyone who has built their own board from scratch and designed their own software to recognize the additional memory.

This would be a formidable task, which is why manufactured memory expansion units for PCjrs have been selling like hotdogs at a ball game. (Nobody we know makes their own hotdogs from scratch, either.) However, we don't want to discourage anyone with the energy and skill to make a memory board for their jr. In fact, like Bernard, we would be interested in hearing about anyone who has done so successfully.

* * * *

Three PCjr Family

I have enjoyed reading your Newsletter very much. We have three PCjr's in the family. My son and daughter use theirs in college and my wife and I use ours for home use. I have had no problems transporting work back and forth to my office 3270 PC and feel that my jr is a real bargain. My jr has been upgraded to 640K and I expect to do the same for my kids' jr's too.

I seem to have missed several issues of Newsletter and would like to get all back issues prior to April 1987 if possible.

I would encourage your subscribers to try a program called DBEdit sold through the "Directory." It is an outstanding high function data base and editor. It works great on a 256k jr and is very reasonable. I haven't found much that I can't do with it. (Not for the novice.)
Roger R. Hutcheson
Severna Park, MD

* * * *

Another Solution to Lock-Ups

After up-grading my PCjr to 512K and a second drive from Quadram via purchases through my local IBM dealer and all properly installed at the IBM service department, junior went through all the symptoms described in the March article, "Memory Sidecar Crashes" when I got home. I could not get to 512K on booting and lock-up would occur with "Error A". Also, formatting refused to format to the double sided capacity but stopped as if the drive was a single sided unit.

I took the machine back to the IBM service department where full diagnostics were run, not in my presence, and junior was returned to me as being perfect, and further they had found nothing wrong with it. Upon return home, junior went through the same antics as before. Back again to IBM where I left it and again it was returned to me as faultless. Again at home my machine refused to work—no memory showing beyond 128K, "Error A" and faulty formatting.

A phone call this time to IBM and a suggestion made that I might be trying to work with faulty disks. My service man sent a box of new Dysan disks out to me (I live

Lock-up Solution

35 miles from town) and I went at the problem again. No luck—same troubles.

Again a phone call and this time the IBM service man suggested I bring the machine in and that he would provide a place on his service bench where I could set up junior and run it there and duplicate for him what I was seeing at home. I did as he suggested and the machine ran perfectly on his bench. He then asked me about how I was set up at my computer desk and I described for him the configuration I was using. A plywood shelf for my Amdek RGB monitor with junior immediately beneath it. He said such a set-up with junior, which is unshielded against RF, radio frequency, just might be dumping RF into my machine and causing it to go through the gyrations I described. So back home again.

I took the monitor off the shelf, placing it on the desk top level. With plenty of room I was able to place junior on the same level next to the monitor and about five or six inches away from it. All troubles were immediately cured and have remained so now for many months.

I doubt dirty pins in mating the sidecar has anything to do with the symptoms described in the March article. They are all due to radio frequency or other spurious electrical signals penetrating junior's unshielded plastic case. Anyway, moving junior a few inches or more is a lot easier than trying to clean socket pins.

C. E. Tweedle
Limerick, ME 04048

EDITOR'S NOTE: Mr. Tweedle's letter points out one possible cause of system lock-up. And, since it is very easy to just move your monitor, that should be one of the first things to try if you have these problems. But we are quite certain that the causes described in other articles can also be the sources of lock-ups, so we do not agree with Mr. Tweedle that all lock-ups are caused by interference from monitors.

*   *   *   *

Speech Attachment a Good Buy

I read your article about the jr speech attachments, and went right out and bought one. The total price from Mendelson Electronics was $32.50 which included the shipping. It arrived within four days.

The first thing that I did after plugging it in, was run the jr's on-board diagnostic program to test the attachment (as the instructions that come along with the attachment tell you to do).

I became very concerned when the first test (Test Tag N : Vocabulary Speech) failed.

I tried the other two tests (Test Tag O : Tone, and Test Tag P : Record/Play Back) and found both tests to pass with flying colors.

I then went ahead and keyed in the Basic Tool Kit programs and the first example program as instructed by the attachment's Programming Manual, and found the attachment to work very well.

The speech is quite impressive, especially in the Record/Play Back mode. The voice coming over the loud speaker was actually my own.

Please alert other readers who purchase the attachment, not to stop and pack up the attachment for return shipment when the first test fails. It's not the attachment that's faulty, it's the diagnostics.

I feel that the $32.50 was well spent.
Phil Knarr
Rochester, NY

*   *   *   *

New User Column Appreciated

Please, please, please make Diana Fisher a regular in your newsletter. I wonder how many others out there identified with her as I did. Unlike Diana I still haven't had time to read, or I read and don't have time or material to use what I've read. (Practice definitely makes perfect!!)

It took me numerous calls to IBM to find out what was

New User Column

wrong with my jr because it would only print 40 characters across the screen. I called every 800 IBM number I could get my hands on—and there are quite a few—before someone told me to type in MODE CO80. I'd rather be spoon fed by someone like Diana than search for days for what I need. I don't know anybody else that has a jr and the place I bought it has gone out of business. I don't regret having an IBM instead of an Apple except for the help I could get locally with an Apple.

Thank you so much for jrNewsletter. Even though a lot of your articles are over my head, others are very helpful. Articles like "Tips for the New User" make me feel not quite so dumb.

Louise Forrester
Gainesville, GA

Recording on a VCR

Regarding the April issue:

Recording on a VCR. Most VCR's have a video and audio input jack. The jr has video and audio output jacks on the rear of the machine. Recording can be done using these jacks without the need for a TV adapter. What is needed is a 75 ohm cable with phono jacks on both ends.

Panic button. If you have any cartridges on your system you can cause an ipl by simply popping the cartridge in and out.

Joe Tate
Cherry Hill, NJ

PCjr Compatibility

In the most recent edition of **jr Newsletter**, Brit Hume wrote an excellent article entitled "But, Will It Run on My jr?"

I, too, have found that just about anything will run on a jr if it has enough memory and two disk drives. My jr has 640k of memory (Tecmar) and two disk drives.

There is a game that I am interested in buying, but I am in doubt about it running on my jr. Supposedly it won't. It is called "Balance of Power" by Mindscape. It requires 512K, which should not be a problem.

Do you know of any jr user who has tried running this game? If so, what were the results? If you know the answer, it might be worthwhile publishing it in the newsletter as the game is well recommended and probably many jr users would be interested.

Roy W. Fee
Farmers Branch, TX
EDITOR'S NOTE: We don't know anyone who has tried Balance of Power on PCjr, but if a reader responds to this letter, we'll let you know.

Have a Comment or a Tip?

Share your experience with other PCjr owners by writing to: jr Newsletter, Box 163, Southbury, CT 06488. We'd like to hear from you.

Educational Software That Makes The Grade!

This selection of educational software scores high marks with teachers and students alike. We are offering these award winning programs to you at 20% off the retail price.

Math Blaster
Grade level: 1st-6th

Blast your way through to math proficiency! This best selling package teaches addition, subtraction, multiplication and division in the context of a fun-filled circus. An "Outstanding educational product" says Parent's Choice Magazine. Requires Basic cartridge. 128K

Retail $49.95   Our Price $39.95

Spell It!
Grade Level: 5th-adult

This award-winning program has activities geared for spellers of all abilities — from the youngest reader to the college graduate. Spelling rules are reviewed and reinforced the effective way by introducing words and practicing them. Over 1000 of the most commonly misspelled words on 50 word lists of increasing difficulty. Play the scrambled word game. Have a spelling match. Reinforce it all with a fast-action arcade game, feeding a friendly frog correctly spelled words as they shower down on him. "Critic's Choice" — Family Computing Magazine. Requires Basic Cartridge. 128 K

Retail $49.95   Our Price $39.95

Award Winners

All Games PCjr Compatible

Early Games for Young Children
Grade Level: Preschool — 1st

Your child will love this wonderful introduction to the use of a computer. It teaches concepts in early math and language skills through colors, shapes, letters and numbers by using stimulating sound, brilliant colors, and high-resolution pictures. Best of all, the operations are so simple that your child can work this program all alone. Requires Basic Cartridge. 128K

Retail $34.95   Our Price $27.95

Alge-Blaster!
Grade Level: 7th-12th

Helps pre-algebra and algebra students understand algebraic fundamentals and problem solving. It contains more than 670 problems covering 21 concepts of algebra, from negative numbers to factoring equations. If you're having trouble, easy to follow prompts and help screens provide assistance. 128 K

Retail $49.95   Our Price $39.95

Speed Reader II
Grade Level: 5th-adult

Speed reading techniques, ideally suited for computer presentation, are well taught by this self-paced program. Choose from 6 different types of practice to sharpen perception and improve eye movements. A built-in grade level analyzer evaluates the difficulty of your lesson. Award winner — Classroom Computer Learning and Learning Magazine. 128K

Retail $69.95   Our Price $55.95

Chem Lab
Grade Level: 4th-12th

A complete computerized chemistry lab that simulates more than 150 chemicals and all the necessary equipment needed to conduct hundreds of experiments. There's no mess, no fuss, no danger. Young scientists can indulge their creative fantasies without parental fear. 128K

Retail $39.95   Our Price $31.96

Software Title	Amount
Sub-total	
CT Residents add 7.5% tax	
Shipping/Handling	$3.00
Total	

Send order with payment to:

jr Newsletter, Box 163, Southbury, CT

Name_____

Address_____

City_____ State ___ Zip_____

Canadian orders add $3.00. All payments in U.S. funds.

How to Deal with Gnomes, etc.

KING'S QUEST I:

Q. What is the Gnome's name?

A. On a piece of paper, write the alphabet from A to Z. Then directly below it, write the alphabet backwards from Z to A. In order, find each letter of the name RUMPLESTILTSKIN on the top line and write down the letter you find directly below it. Type in this word when the Gnome asks for it.

Q. How can I capture the Goat?

A. Get a carrot (where do they grow?), go into the corral, shutting the gate behind you, then SHOW THE CARROT and the goat will follow you most anywhere.

KING'S QUEST II:

Q. How do I get past the ghosts at the castle?

A. Wear the cross you got from the monastery.

Q. How do I get the maiden out of the tower?

A. Hold the amulet and think "home".

BLACK CAULDRON

Q. How do I get out of the cell?

A. Make a racket with a cup like any upset prisoner.

Q. How do I free Fflewddur Fflam?

A. Fly fast, fetch the keys, swing your sword, slap the guard silly, and open the door.

* * * * * *

SOFTWARE FROM JR NEWSLETTER MAKES A GREAT GIFT!!

Tips From a PCjr User

By John Yessis

Here are a few tips on using your PCjr that I have found useful:

1. When using QMODEM boot-up with (mode co80) and you see it.
2. To keep PFS WRITE and WRITING ASSISTANT in color, boot the same way.
3. To run PC PAINT and PCPG you need 192k free. If you have Tecmar equipment, boot up with conpcjr -p2 to utilize the extra memory. Run (chkdsk) to see the memory available.
4. To run some software i.e. Hangman2 or Trivia, boot your junior with (conpcjr -p7) to move the video memory to a higher location in the first 128k of memory.
5. Hayes modems at 2400b work on the junior.
6. Turbo Lightning works fine on a junior with 256k. Following is my autoexec.bat file to configure my junior to work with Turbo-Lightning and PFS WRITE.

WP.BAT

pause...Place Lightning System disk in drive

light

envi c

rem...Place PFS WRITE disk in drive. To use Lightning, place sys. disk in drive when you begin typing.

rem...Press "shift Fn 8", after the above, and type "s" & "d" to set the Thesaurus the environment.

pause...always address the dictionary once, before using the Thesaurus.

write

(Reprinted from the Westchester PCUG Newsletter.)

* * * * * *

New PCjr Cartridge
Allows Hard Drives To Boot

Paul Rau has announced the development of a cartridge that will allow hard disk drives installed on PCjrs to boot.

The cartridge is made to work with Rau's hard drives, which operate from the internal modem slot. The cartridge will not work with hard drives that run off the side port.

Without the cartridge installed, most hard drives will not boot. Users have to boot their systems with a floppy disk and then access their hard drives.

Price of the new cartridge is $79. For more information, contact Paul Rau Consulting (209) 745- 9284.

PCjr Goodies
Continued from page 1

One PCjr product that can be mentioned since it is nearly ready for production is a function key pad which will provide one key for each of the function keys and the other Fn key combinations on the PCjr keyboard. It will also send correct scan codes to your PCjr, solving one of jr's nagging compatibility problems.

The function key pad will, for example, send a true Ctrl-F8, which is good news for WordPerfect users. And since it will send the release code for function keys (which the jr keyboard doesn't), games that use function keys for things like shooting won't lock into the shooting mode when you press the function key.

The function key pad is a modified numeric key pad, which will sit next to your jr keyboard and is similar in appearance. The company also sells a numeric keypad that can provide number and cursor keys for use with AT and XT style keyboards with Racore keyboard adapters. Another keypad does the same for PCjr keyboards.

Speech Attachment Software

As we talked about his new PCjr products, Pat's computer suddenly started laughing. That's right, it went "Hah, hah, hah." For those of us to whom computers already seem human, the PCjr speech attachment will clinch it. It has 121 words programmed into it, which it will speak to you in a robot-like voice. But it's capabilities are limited unless you have software to make it work.

PC Enterprises has developed software which will allow you to record messages with your own voice, which will be stored on disk as a .com file. The file can then be executed as any other .com file is executed. So, you could put a line in your autoexec.bat file which will prompt your PCjr to say "Late to work again, huh ?" or perhaps something more uplifting, whenever you boot your computer.

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

According to Pat, another speech attachment utility called "Sentence," brings up a menu of the words already programmed into the speech attachment so you can make sentences by selecting each word in the order you want them spoken. You then save the sentence as a .com file to be invoked whenever you want to hear it. The people at PC Enterprises are working on a way to add words to the limited vocabulary that comes with the speech attachment.

The 5 Drive High 'World Trade Center' PCjr System

Getting back to that five drive high PCjr sitting on Pat's desk, on the bottom is a run-of-the-mill 5 1/4 inch floppy disk drive. On top of that is a not-so-run-of-the-mill 1.2 megabyte 5 1/4 inch floppy disk drive. It's a high density drive that will hold more than three times the amount of information that the 360K disks (the ones most of us use) can hold. Developed as an inexpensive alternative to a hard disk, the 1.2 meg drive will serve as a second or third drive and will sell for under $300 when it's ready. It will both read and write AT disks, Pat says.

Ok, that's the first two of the five "floors" on Pat's five drive system — which has become known as the World Trade Center jr. (Someone once asked him if the lights in the city go dim when he powers up.) The next level above the 1.2 meg drive is a 3.5 inch drive, similar to those that come with the new family of IBM computers. PC Enterprises started marketing the 3.5 inch drives a few months ago as third drives for PCjr owners who already have two drives. Now the 3.5 inch drive is available as a first or second drive for PCjrs. Since these smaller diskettes hold twice as much information as 5 1/4 inch drives and are standard on the new IBM computers, they are quickly becoming prevalent.

40MB of Storage On Top

The last two "floors" of the World Trade Center PCjr are two 20MB hard disk drives, which is a nice climax to an already astounding system, since you can just back one hard disk up with the other (copy *.* E:).

The PC Enterprise elves are working on a side by side 20MB hard drive and 1.2MB floppy drive combination that will sit on top of the first or second disk drive units on PCjrs. The floppy beside the hard drive might also be a 3.5 inch drive.

Pat says they have solved one of the hard drive problems with PCjrs by working out a way to make their

jr Newsletter Software Store

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GAMES

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

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

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

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

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

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

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

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

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

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

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

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

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

EDUCATIONAL SOFTWARE

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

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

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

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

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

* * * * * * * * * * * * * * * * * *

jr Software Order Form

Please circle the disks you want:

1	2A	2B	3	4	5	6	7	8	9	10	11
12	13A	13B	14	15	16	17	18	19			
20	21	22	23	24	25	26	27	28	29		
30	31	32	33	33A	34	35	36	37	38		
39	40	41	42	43	44	45	46	47	48		
49	50	51	52	53	54	55	56	57	58		

1-3 @ $9/disk   4 or more @ $7/disk

_____ disks @ $9.00 each = $_____

_____ disks @ $7.00 each = $_____

Add 7.5% sales tax in CT _____

Total _____

Name_____

Address_____

City _____ State_____ Zip_____

Prices are U.S. funds.
Make check payable to jr Newsletter. Send to:

jr Newsletter • Box 163 • Southbury, CT 06488

* * * * * * * * * * * * * * * * * *

New PCjr Goodies

drives bootable. Some have to be booted from floppy drives first.

PC Enterprises currently sells the 20MB hard drive in a cabinet that sits on top of PCjr drives for $695. If you buy a second 20MB drive to go with the first, the second will cost you $349. The price of the hard drive - floppy drive combination, which is still in the works, has not yet been set.

640K Sidecar

Still another new product is a 640K sidecar which, when installed on a 128K PCjr, will bring the total usable memory up to 736K. The sidecar comes with a power supply and is currently available for $395. Other ways of bringing PCjrs up to 736K involve modifying a 128K sidecar and adding it to a system that has 640K already. (See article in July 1987 issue.)

The new PCjr products cited above are the ones that PC Enterprises has most recently developed, tested and are either available now or will be shortly. As for the others, a few steps behind in the workshop, we'll just have to wait.

But PCjr users needn't fear that the creation of new PCjr enhancements will cease any time soon. Pat points out that business is still strong for those who support other discontinued computers, such as the TI99, which don't have nearly as much to offer as PCjrs. In his view, the PCjr is like a Ford Bronco — it has been succeeded by newer models, but it's a good model in its own right and there's no reason to get rid of it as long as it runs well and serves your needs.

For more information on products from PC Enterprises, call 1-800-922-PCJR.

PCjr Patches

The people responsible for creating the patches have generously shared them with other PCjr owners, usually by uploading them to public bulletin board systems where they can be downloaded by those who want them.

Electronic Arts now makes Lee Johnson's Starflight patch available to irate PCjr owners who call their technical assistance number. And Borland International has apparently responded to PCjr complaints by patching recent versions of Turbo-C (those with the letter D in the serial number should be compatible). According to the Metro PCjr Journal, the people at Borland plan to buy a PCjr so they can test future products for compatibility.

Patches on New Disk

We have collected all the patches we could find and put them on a new disk (#56), which we've added to the jr Newsletter Software Store.

The Quick Basic patch was written by John Bongiovanni. He made a .com version to put in an autoexec.bat file as well as a .sys program to use as a device driver in a config.sys file. He says he is working on a fix for the 8087 version of Quick Basic 3.0.

The Turbo Basic patch was written by Lou Davidson of MSC, a PCjr enhancement and repair company in Baltimore, MD. Lou notes at the end of his patch, "Please note that even though this appears to work, you will get no help from Borland as they do not support Turbo Basic on the jr." But things may have changed at Borland since they apparently decided ignoring PCjr owners was not nice.

The Double DOS patch, written by Roger Gomes, enables PCjrs to use the keyboard "hot keys," which don't work without the patch. Just run jrddos.com before running Double DOS.

The Turbo C patch is one you type in yourself using DEBUG. Developed by Lee Johnson, author of the Starflight patch, the Turbo C patch seems to work, but extensive use may turn up some quirks. If it does, perhaps you should contact Borland and ask for their patched version.

The Advanced Flight Simulator patch is a memory resident routine that blocks the program's checks of Drive A for copy protection. It requires two disk drives to work.

The Starflight patch by Lee Johnson modifies Starflight so that it will set up the video chips properly for your PCjr. Without the patch, Starflight produces a wild scattering of lines and pixels on the display, somewhat like a tv set with horizontal hold problems.

Although all the patches we have mentioned seem to

* * * PCJR CLASSIFIEDS * * *

ASSISTANT SERIES for sale. Like new versions 1.0 of IBM Filing, Planning and Reporting Assistants. $40 each prepaid or all 3 for $100. Larry Haas, 1037 E Crystal Lake Rd., Burnsville, MN 55337 (612) 435-5758. (10)

IBM PCJR INTERNAL MODEM — 300 baud. $50. Jerry Johnson, 6 Guy St., Salem, N.H. 03079 (603) 898-4579 after 6 p.m. (10)

IBM PCJR 128K— One drive, monochrome monitor, letter quality printer, DOS 2.1, Homeword Word-processing, Visicalc, DAC Easy Accounting, Keytronics keyboard. Basic system, but all software runs beautifully. $1,000. (313) 679-4480. (10)

IBM PARALLEL PRINTER ATTACHMENT — $50, with instructions. Peter Zdenek, 8 Terrapin Lane, Trenton, NJ 08619 (609) 586-5860. (10)

IBM PCJR ITEMS: Connector for television (IBM) new $15; IBM PCjr Internal Modem, incl. operating instructions $45. Al Flores, 2817 Shady Hill Dr., Temple, TX 76502. (10)

PCJR: Color monitor, joystick, Legacy serial card, jr synchro cartridge, cartridge basic, DOS 2.1, KB5151jr, plus 2 extra keyboards, and serial cable. Legacy II 512K, clock cal, parallel port, 2nd drive. All software, tech ref manual, documentation. Have all original boxes. $950. Will split up. Dennis Widdows, 9658 E

PCjr Patches Continued from page 14

work well, we have not tested them extensively. They are all included on Disk #56 in the jr Newsletter Software Store, page 13.

When more software is written without PCjr owners in mind, we expect that the wizards in our midst will come to our rescue again, keeping our PCjrs alive and fully functional in spite of software producers who chose to ignore us.

By the way, if you would like to remind software companies of the existence of PCjr users you could write to the ones who seem to have written us off. Here are a few of the most prominent offenders:

Borland International
4113 Scotts Valley Dr.
Scotts Valley, CA 95066
(Turbo Basic, Turbo C not PCjr compatible)

Electronic Arts
1820 Gateway Dr.
San Mateo, MA 94404
(Starflight, Amnesia, Radio Baseball, Grand Slam Bridge, World Tour Golf, Advanced Flight Simulator, Arctic Fox, Marble Madness, not PCjr compatible)

Microsoft
call (800) 426-9400
(QuickBASIC 3.0 not PCjr compatible)

Colette, Tucson, AZ 85748 (602) 721-4770 after 5 p.m. MST. (10)

IBM PCJR Internal Modem $20; Power Expansion Attachment, $20; Adapter Cable for Serial Devices, $10; Add $2 shipping ea. or $3 for all. Ronald Baux, 432 Bristol Ct., Scranton, PA 18509. (10)

TECMAR JR CAPTAIN 128K memory sidecar with sotware and manuals for. $100. IBM PCjr parallel printer attachment $40. Financier jr and Home Budget jr financial software packages $10 each. Bob Feak, 202 Ridgewood Dr., North Syracuse, NY 13212 (315) 458-4593. (9)

IBM SERIAL COMPACT PRINTER in working condition $35 plus delivery. Al Palumbo 199 Senate Dr., Pittsburgh, PA 15236 (412) 655-2368. (9)

IBM PCjr 128K with color monitor (bad flyback), parallel port, DOS, games, plus 2 joysticks. $350. Sim Smith, 1932 Queenswood Dr., Tallahassee, FL 32303 (904) 562-1451. (9)

PCjr ROM CARTRIDGE KITS Integrity Technology, 105 Serra Way, Suite 230, Milpitas, CA 95035-0604. (9)

*Classified Ads are free to subscribers of **jr Newsletter.** Just send us your typewritten ad (no more than 5 lines on an 8½ x 11 typed page) and we'll run it for you for two months. Ads for $10 per issue for non-subscribers. Send to **jr Newsletter,** Box 163, Southbury, CT 06488.*

jr Newsletter
P.O. Box 163
Southbury, CT 06488