Flight Simulator 3.0 Takes Off (At Last)

By Carl Haub

If carbon-fiber components, "fly-by-wire," and canardtype wings define the state of the art in real aircraft, menudriven programs with windows must now do the same for CRT-bound pilots.

Yes, Flight Simulator fanatics, FS 3.0 has finally arrived. The good news is that with a patch it will run on PCjrs in 16 colors. But there is some bad news:

A major part of the bad news is that it is still distributed for IBM's and compatibles by Microsoft -- NOT by Sublogic, Inc. and its creator, Bruce Artwick. Sublogic has fully supported the PCjr for years with all of its "Scenery disk" releases, and we PCjr users thank them for that. Microsoft, however, treats you, the jr user, like last century's news (yesterday's would have been nice). Sooo...why write about FS3? Because, mirabile dictu, it runs on jr despite Microsoft's lack of attention! Does it run well? Pretty much.

FS3 comes on two floppies (the 3.5" version is available, but you have to send for it). A single disk drive will present no problems. The non-copyprotected program is

(Continued on page 10)



Joe Schmidt after he suggested to his wife and kids they they sell their PCjr.

More Cartridge Slots Boost PCjr Computing

"With all the wonderful cartridges available for PCjrs, it's too bad you can only use two at a time," a PCjr user once said.

Someone must have overheard that remark because now there are two new units that will expand the cartridge capabilities of your PCjr.

Synectics has created something called "Siamese Slots," which plugs into one of your cartridge slots and allows for two cartridges to go into the new unit. And PC Enterprises is working on a unit that sits in back or beside your PCir and allows four cartridges to be plugged into it.

What's so great about more slots, you might ask. To put it in a nutshell, with more slots you can have more of

(Continued on page 15)

Get Organized with PC-Outline

By Richard Spencer

In the use of computers, there have been several programs that have been extremely useful. Almost everyone will recognize the names like Lotus 123, dBase III, Word-Star, and many more. Now there is another. It is called PC-Outline. (Disk #17 in the Software Store, page 23.)

This program is a very efficient organizer of thoughts for your written documents or notes or lists or of anything that you would like organized. The following will give you an idea of what it could do for you.

What You Can Do With PC-Outline

PC-Outline is an outlining and planning program. It allows you to randomly enter information of almost any type (thoughts, plans, ideas, etc.) and then organize it into a hierarchical structure. Once in the hierarchical structure, you can view the information in many powerful ways. For example, using the hide/unhide feature, you can view just down to any level of detail in the outline that you want. With a single keystroke, you can go from viewing the lowest level of detail to a view that shows only the highest, most important topics.

With another few keystrokes, you can print the outline, send it to a file compatible with your word processor, copy it into another outline, or paste it directly into your word processor.

PC-Outline is particularly appropriate for list making. Tasks like making to-do lists or planning a project are ideally suited for PC-Outline.

For an example of how the hierarchical structure works and how you can hide and unhide parts of the outline, start PC-Outline and load the outline titled *Hiding*. The text in the outline will help show you what PC-Outline can do.

PC-Outline Facts

For those of you who like statistics or lists, here are a few about PC-Outline.

Standard PC-Outline outlining features include:

- * hierarchical outline structure
- * structured indenting
- * hide/unhide (collapse/expand) any portion of the outline
- * powerful outline rearrangement functions
- * easy, pull-down menus

Advanced PC-Outline features include:

- * automatic numbering, including choice of numbering style (alphabetic, numeric, roman, bullets, or none)
- * multi-line outline entries

- * automatic paragraph reformatting
- * margin control
- * centering, left and right justification
- * hanging indents
- * search and replace
- * on screen page break display
- * conditional and hard page breaks
- * block copies, moves, and deletes
- * tab stop settings
- * send printer control strings
- * printer formatting: underline, boldface, italics, sub/superscript, double strike
- * windowing: up to 9 outlines open/on screen at once or in user defined windows
- * zoom any window to full screen with a single keystroke
- * copy or move outline or text directly between windows
- * customizable printer drivers
- * sorting
- * user defined macros/key redefinition
- * live date and time stamps
- * full support for DOS 2.0 and above
- * read/write other file formats, including ASCII, Wordstar, Think Tank/Ready!
- * data transfer with other programs including cut and paste to other active programs (like SideKick, ProKey, etc.)
- * freely mix outlines and text: titles, skip numbering, start new numbering, move placement right and left
- * return to DOS without leaving PC-Outline.

PC-Outline requires DOS 2.0 or greater, one floppy disk drive, 128K RAM, and an IBM PCjr/PC/XT/AT or compatible, and can be configured to occupy as little as 80K when memory resident.

The above article was originally published in the OKC Jr Orphans Chronicle

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Questions and Answers

By Rene Waldron



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

Q. Is the jr. Hotshot compatible with the Tecmar jr. Captain?

A. Yup. Our suggestion is to use Larry Newcombes's configuration system to recognize all that memory. Get it on disk #65, JR Power Pack II, available from The Software Store in this issue.

Q. The patches disk was a great help for DOS 2.1 but whenever I try to do the patch for BASICA.COM I get various file error messages. Also will I be able to run BASICA without a disk? I don't understand what this does.

A. This patch allows the disk version of BASICA to run without the BASIC Cartridge in the slot. Some users do not have the cartridge and would like to have some kind of BASIC to use. This patch allows them to use the "free" BASICA.COM which came on the disk with DOS 2.1 even though it does not have the graphic enhancements of Cartridge BASIC.

To prevent the errors you are getting you MUST have ALL the the following files and programs on the diskette: DEBUG.COM, BASICA.COM, PATCHBAS.BAT, and PATCH.TXT. Be sure to follow the instructions in PATCHBAS.DOC. The program called DEBUG.COM is on the Supplemental DOS diskette which came in your package with DOS 2.1. Copy it to the active diskette you are using for the patch before you start the patching routine.

Q. In spite of the explanation in the article about inspecting cartridges I still don't understand the reason the Cartridge always takes over when BASIC or BASICA is typed.

A. Sorry! When the machine boots up, and there is a BASIC Cartridge installed, the name or names in the ROM of the cartridge are put into memory along with the addresses to begin the program. (This is almost exactly the same as internal DOS commands such as COPY.) Control then returns to DOS for normal continuation such as autoexec.bat files, etc.

Normally, whenever you type any command at all, DOS scans all the names in memory BEFORE it tries to find the command or file on disk. If the command is BASIC or BASICA these ARE in memory and DOS is instructed to direct the command to activate the cartridge, so it never gets a chance to read the BASICA file on disk. If you rename the BASICA.COM file something else, such as "DBASIC.COM", you can run Disk BASICA.COM from the disk by typing DBASIC at the DOS prompt, WITH the Cartridge installed. Try it.

Now try it WITHOUT the Cartridge installed. It doesn't work without the Cartridge because there is a ROM version of BASIC (the original Cassette BASIC) in all IBM machines up to the AT. The jr, but not the rest of the IBM family, will configure itself for this BASIC in ROM during boot-up if a Cartridge is not installed, and the booting procedure will actually send control to this BASIC if there is no disk in the drive and there is no hard disk installed. Try it.

The two Disk versions are actually RAM enhancements of this ROM BASIC and complement it. One enhancement is needed because Cassette BASIC does not support disk drives, only an audio cassette tape drive!

The patch discussed in the previous question avoids or by-passes all of this to enable Disk BASICA to run as it does on a standard PC, i.e. without a Cartridge. Notice however, that it also must be re-named to prevent a name conflict with Cassette BASIC.

Q. Sometimes, when I try to run Public-Domain programs I am greeted with "Cannot Find A:BASRUN.EXE" and the programs do not run at all. Can you explain this? I think this has something to do with BASIC.

A. You are right on the mark about BASIC. The problem has nothing to do with either the Cartridge or Disk versions of the BASIC Interpreters, however. The programs you are having problems with are Compiled BASIC programs in .EXE format.

(Continues on page 4)

Questions and Answers

Continued from page 3.

There are two ways to compile BASIC programs. The preferred way (when there is only one program on the diskette) is to compile to a "stand-alone" .EXE program. This means just what it says. The program stands alone and can run without any other support.

The second way (and this is used if there is chaining or overlays of short programs or a number of separate small programs on the diskette) is to compile to a "run-time" version .EXE program. This method requires a run-time file called BASRUN.EXE or BRUNxx.EXE in order to have internal support for the .EXE program. (The xx is the version number for QuickBASIC programs.)

What is this all about? The compiled programs which need a run-time, (i.e. BRUN or BASRUN) file are very small and only one run-time file has to be accessible to run them all. On the other hand, each stand-alone program already has, in effect, combined and incorporated the same kind of support which the BRUN or BASRUN file will load into memory. These stand-alone programs are quite large; the smallest ones being in the neighborhood of 32K because some unnecessary support may be combined with the program.

For the run-time version however, BASRUN and BRUNxx are loaded into memory just once for any or all of the .EXE programs, so loading time and diskette space are reduced significantly.

One other point: Some years ago, when one bought (leased?) the original compilers from IBM or Microsoft, an additional charge for using the run-time BASRUN or BRUN file for commercial applications was made in the form of royalties because the BASRUN or BRUN file was considered to be the copyrighted property of Microsoft or IBM and was not to be sold by the programmer without this royalty payment. This had all carried over from the 'main-frame' mentality.

With the introduction of version 2.0 of QuickBASIC, Microsoft made the wonderful and highly appreciated announcement that there would no longer be any restrictions when using ANY BRUNxx version with QuickBASIC and that programmers could include these files without additional payment. This was shortly after their microcomputer versions of the compilers could make stand-alone .EXE programs. (BASCOM Version 1.0) We are sorry to say that we have lost contact with the information about present restrictions which may apply to the BASRUN files from IBM. We are working on it and will update as soon as possible.

Q. Is there some conflict about the information about using the Genius serial mouse in the July '88 issue? The Feedback column claims incompatibility with

the jr. while the Q&A column claims that this same mouse works. What is the configuration?

A. Our information comes from readers who write that they are successfully using the Genius Mouse and who have only had problems with the most recent versions of the paint programs bundled with it. Earlier programs work OK but remember to boot up your jr. with plenty of video RAM reserved when using graphics programs. As far as any other configuration information is concerned, the manual and the manufacturer are the best sources for information. As you mentioned in your letter to us, some serial mice need additional power (We think they have vacuum tubes inside instead of CMOS chips!) and they tap it from the light pen port in order to operate successfully. Readers interested in more information should contact advertisers in this issue; most of them sell excellent mice and cables specifically for the jr.

Another reader has recently told us that he has the Logitech C7 serial mouse installed with Plus Software which works great but has had problems with Dr. Halo. (He doesn't mention which version, but it bears repeating here that Version III does not work properly but Version II, where it is still available, does.)

Q. I use Generic Cadd 3.0 and Level 3 at work and have been successful at getting the program to work on my jr. at home, except for my Mouse Systems serial PC mouse. The mouse works well with all other programs I have. The best I can do is get erratic cursor movement and no button responses. Neither Generic Cadd nor the mouse manufacturer could suggest corrections.

A. Well, Major, we'll have to work on a little theory here and some reference to the Tech. Ref. manual. Let's start with the manual and consider the erratic operation. The information we read is that the serial port is capable of Baud rates of between 50 and 4800 and that an error of 1.291% per bit can be expected at the highest speed. In addition, receive Baud rates should not exceed 1200 Baud if they are overlapped with keyboard keystrokes. (Are we reading the buttons simultaneously and putting the data into the keyboard buffer?) Now comes the long-distance theory...

First we would use the DOS MODE command to try to adjust the serial port rate to the specs of the mouse driver, or try to adjust the port to within the limits above, or even reduce it step by step. If the configuration of the Cadd program will allow control of the serial port, especially the Baud rate, then again, step by step, we would try to match, adjust or reduce the rate until the erratic behavior disappears. If the driver for the mouse allows adjustment then we would also try to match to the speed of the Cadd program as well. If this does not correct the problem then we would once again contact both manufacturers to outline the specifications of the jr serial port. If the mouse driver

configuration is the culprit, perhaps it could be changed, and the same goes for the Cadd program. Admittedly this is all theory so we'd certainly appreciate hearing from others about problems and trials like this one.

Q. Do you have any thoughts as to why Popsicle indicates that my NEC Spinwriter is a parallel printer while it is connected to the serial port? The manual says that I should use "LPT1:" as if it were a parallel printer. I would like to know if this same printer could be used on a standard PC via the serial port because it seems to me a serial port is a serial port. The printer works fine on the jr. and when I called NEC they said this printer can only be used with the jr.

A. Yes, a serial port is a serial port and they are almost standard. Why Popsicle shows a parallel printer is beyond us because there should have been some software reassignment of LPT1 to the serial port, such as in your autoexec.bat file. Look for a MODE LPT1:x,x,x... command or some such thing. The DOS default of LPT1 (also PRN) is to a parallel port and this would change it. Perhaps Popsicle reads PRN or LPT1 automatically as parallel and also reads the serial port and finds that a printer is attached. If the manual for the NEC printer says that it is truly a serial printer, (according to standard # RS 232-C) then there should be no reason that it won't work on a standard PC with whatever cable is needed to plug into the PC. We doubt the NEC has some kind of ROM chip which specifically "fools" the jr. via the serial port to indicate or act like a parallel printer. After all, even the thermal printer from IBM especially made for the jr. has a standard serial interface and is now being sold for connection to PCs.

Q. I have a Quietwriter printer and the otherwise excellent word processor (Perfect Writer, jr. version) does not have a driver for this printer. Is there anything I can do?

A. Here are a few things that you might try. Read the manual for the printer to find out what OTHER printer it might emulate. For example, our Epson DX-10 daisywheel is almost never found in the list of printer drivers in various word processors. The manual says that it uses the same commands as a Diablo daisywheel and it sure does! That driver is just about everywhere, and our problem is solved. As a matter of fact, in one program, Better Working Writer, the Diablo driver works perfectly and the DX-10 driver does not! If you can't find the information in the printer manual, a call to the manufacturer could get rid of your headache. If all else fails, just try whatever drivers are in the program until you hit gold and write it in the manual for future reference. You can't hurt anything.

PCjr LIVES!

Running IBM Assistant Series Software on a PCjr RAMDisk

Running the IBM Assistant series software from a ramdisk speeds up the program dramatically, particularly the spelling checker on Writing Assistant. Unfortunately, the disks are write protected and can't be loaded onto the ramdisk in the usual fashion. The following will outline how you can get around the writing protection problem.

Create the following two batch files on a working disk in drive A: as shown below.

A>COPY CON:ASST.BAT<RET> ECHO OFF<RET> CLS<RET> COPY GBAT.BAT D: >NUL<RET> D:GBAT<RET> ^Z<RET>

A>COPY CON:GBAT.BAT<RET>

ECHO Insert Assistant disk. When main menu < RET >

ECHO appears, insert working disk. < RET >

ECHO < RET >

PAUSE < RET >

COPY *.* D: >NUL<RET>

D:<RET>

G<RET>

^Z<RET>

NOTE: Where ever D: appears above, substitute the letter of your ramdisk.

To run, boot your system and create your ramdisk (the ramdisk must be at least 320K). Then insert the working disk with the two batch files from above in drive a: and type "ASST". When the message appears to insert the Assistant disk, do so and then hit any key. When the main menu of the Assistant program appears you can remove the Assistant disk and insert your working disk.

IMPORTANT: When specifying a filename to save or get, you **must** use the prefix A: or the file will get saved on the ramdisk and lost when you shut off the machine.

Tell Us When You Move

The Post Office will not forward your copies of jr Newsletter when you move, because the newsletter is mailed via Third Class Mail.

So please notify us immediately when you plan to change your address.

PCjr User of the Month

A PCjr Record-Keeping Fanatic

EDITOR'S NOTE: This is the second of our regular monthly feature articles on how one PCjr user has come to know and love his or her computer. These articles are not intended to be read as high achievement awards. Rather they are published in this newsletter to provide other PCjr users with a glimpse into the computing life and times of another PCjr user. It's a way of learning what others do with their computers. It's also living proof of the fact that PCjrs are alive and well in America today.

One of the first things Donald Dombrosky, of Elyria, Ohio, will tell you about himself is, "I'm sort of a screwball for keeping records." He will also tell you that in his pursuit of keeping track of everything from the titles, cost and date of every videotape he's ever rented to the per gallon cost of all the paint that's ever been applied to his house, his PCjr is his greatest friend.

On just about any night of the week you can find Don tapping away on the keyboard of his PCjr. "I spend 20 hours or more a week with my PCjr," he says. And you can be sure he knows just how much time he spends computing, because he keeps records of it. Of course.

We often hear complaints from wives of male football fans who become "football widows" as their husbands devote all their free time to watching their favorite game. So we asked Don whether his wife minded all the time he spends with his PCjr. "Not a bit," he said, pointing out that with him in front of his PCjr, she gets to watch what she wants on television.

Don's PCjr has a Racore Drive II with DMA, 640K, and a Racore 20MB hard drive. He also has several cartridges: Quicksilver, PC I.D., jrVideo, PCjr Color Paint, and Cartridge BASIC. His most unusual piece of computing equipment is a Seiko wrist terminal, which allows him to keep data such as phone numbers with him at all times. He hooks his wrist terminal to his PCjr via a cable to his serial port, which has an A and B switch box so he can use both his wrist terminal and his mouse.

Don's passion for record keeping is unleashed primarily with the aid of DBase III Plus, which Don uses to keep track not only of the videotapes he's rented, but also of what he spends on gas, water and telephone, a complete mailing list of family and friends, how many miles he's ridden on his bike, records of a book club he belongs to, the rain collected in his rain guage, his automobile's gas mileage and oil changes, and a complete home inventory. Just to mention a few things he keeps track of.

Before he got his PCjr, Don kept his records in a ledger book. "I guess I've got some of the old fashioned habits in me," he says. The habit of record keeping may be old fashioned, but now he's able to take advantage of modern electronics to carry an old habit to new heights.

Translates Records into Graphs

He uses Harvard Presentation Graphics on his PCjr to print graphs based upon his vast collection of data. These graphs show such things as monthly average rainfall, the unit costs of telephone and electric services, or perhaps how well his salary increases are keeping up with inflation. He couldn't have done that very easily with the old fashioned method.

SuperCalc 4 is Don's spreadsheet program. He uses it for keeping track of business expenses, deductions and other calculations. For word processing, Don mostly uses an early version of WordStar, although one of his two daughters prefers PFS Professional Write. "She feels it's more user friendly," Don says. Another wordprocessor, Displaywrite 4, is also in Don's collection for those times when he brings correspondence home from the office, where the secretaries use Displaywrite 4.

Don works as a project engineer for a large plumbing supply company, where some of his friends love to play Mean 18 during their lunch break. Don is a Mean 18 player himself, at home on his PCjr. "And when I make a hole in one I brag it up at work."

Of course he keeps meticulous records of his scores.

Don cites Mean 18 as probably his favorite game. "The colors are great on the PCjr." His other favorites are Test Drive, Hardball, Wheel of Fortune and Chessmaster 2000.

As an engineer, Don appreciates the power and precision of AutoCad. With it he has made complete three dimensional drawings of every room in his house. And he says AutoCad on his PCjr can perform 80 per cent of what the highly sophisticated drawing program at work can do.

What does Don need in order to keep up with his future computing needs? Well, he's almost out of space on his 20MB hard drive, so there may be another one on his jr before long. He would also like a 3.5" high density drive, when and if they become available for PCjrs.

Does he comtemplate trading in his PCjr? "No, as far as I can see, it will take care of anything I will ever want to do for the forseeable future."

CHECK OUT THE NEW ADDITIONS TO OUR SOFTWARE COLLECTION. GREAT SOFTWARE FOR \$5.95 A DISK!



Reader Feedback



Writer Finds DOS 3.21 Creates Some Problems, Solves Others

It's almost uncanny how some article in the newsletter will address a recent problem. The August issue in Q & A on page 20 mentioned problems associated with using DOS 3.xxx formatted disks when booted upon DOS 2.1. Not more than two weeks ago, I had DOS 3.21 loaded and formatted a box of disks without the /s option for general use. (Why I had DOS 3.21 loaded is another story.) Just last week, I was working with MASM and using PC-Write to create and edit the .ASM file. Actually the files were edited numerous times over several days without incident.

The problem came up when I was trying to configure the printer control file of TONTO (a Sidekick type TSR). Then the fact that I had a problem became evident when I got a "Disk Full" message. I read the directory and found that it was indeed full and included files that weren't supposed to be there. One file was listed twice. Upon running CHKDSK, every file (I mean every file) was cross linked. Fortunately, I was able to reconstruct the ASCII files that I had been working on. The other files had been backed up, so no damage was done. Needless to say, those disks were reformatted using DOS 2.1.

Now for the other story. QuickBasic has received a great deal of press in the Newsletter since ver. 3.0. Just recently, I attempted to compile a novel menu program I had picked up in a magazine which used the Chain command to call the selected programs. I had some problems because the original was written for the EGA card (had to use screen 2, because the screen needed 80 col in graphics mode and QB does not support screen 6). I also experienced DIM errors, returns without goto, and others that escape me now. But the clincher was when I could not get rid of "Out of memory during CHAIN." I really don't know what prompted me to boot up on DOS 3.21, which I have. but seldom use. Anyway, once I did this, my problems went away, even a final "label not dim" error that wouldn't go away when attempting to execute within the QB interpreter. The result of this experience is that I now boot with DOS 3.21 when working with QuickBasic.

In closing, one of my pet peeves with the jr. is the inability to use those nifty screen writing programs that are almost universally written to access the screen buffers directly. I noted with interest P.C. Enterprises new cartridge offering with a jrvideo routine. Doesn't sound like this will

address my specific problems, but I do plan to write to P.C. ENTERPRISES about the Combo Cartridge and voice my concerns concerning video calls.

Robert F. St. John, Las Cruces, NM

An Apology and Some Tips From Racore Drive II User

The August issue of the **jr Newsletter** arrived while I was on vacation so I only just recently got to read your reply to my previous letter. After reading it I realized I had been somewhat guilty of dumping on you. I want to apologize for that and to thank you for the response.

I also want to thank you for the explanation regarding the PCjr's graphics. I have to admit to being somewhat confused about it. I had heard the term VGA used in regard to the jr quite some time ago and had forgotten what it meant. I was also confused as to why some programs using true CGA graphics would run on the jr while others would not. You were extremely helpful in clearing that up for me as well!

Since writing to you I have discovered something interesting about the problem I told you about in regard to the "Buffers =" line in my CONFIG.SYS file. It seems that I only get the grinding noise from my A: drive (when I have a "Buffers =" line in my CONFIG.SYS file) when I boot up my jr in JR Mode (I have the Racore Drive II Plus). When I boot it up in PC Mode I get no such problem! As you might guess, I plan to run my jr in PC Mode from now on. Still, it

(Continued on page 8)

JrNewsletter Welcomes Questions

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

Reader Feedback

(Continued from page 7)

would be nice to know why I experienced the problem at all!

In your response you speculated that the corrupted file I suffered for no apparent reason may have been caused by a virus. I suspected this as well and checked my boot disks (I use three different boot disks) with an anti-virus program. All checked out clean. What is strange is that only one boot disk and a program disk (the former about three times) have experienced this problem. None of my other disks, boot or otherwise, have ever been affected. The program disk had no COMMAND.COM file on it either. If a virus was in fact the cause, you'd think the problems would have occured with most, if not all, of my other disks by now, but it hasn't! (My self-booting disks, anyway.)

Finally, I have a new problem to report. About a month ago the screen on my Color Display would, suddenly and without warning, shimmer. Sometimes, if it shimmered very briefly, this had no effect on my jr. Most often, though it locks my jr up. Usually I can do a warm boot to get things going again. Sometimes, though, this doesn't work and I have to shut my jr off and turn it on again to get my jr running once more. A friend on Compuserve's Jr. Forum has suggested that might be a sign that my power supply is going out on me. What do you think? Is it the black box or the internal power card?

At any rate, thanks again for the response to my first letter! I have enjoyed the jr Newsletter immensely since first subscribing to it almost a year ago. I consider both it and The Junior Report, another PCjr publication, absolute musts for the PCjr owner. Without you life would be pretty difficult for all us jr owners! Keep up the good work!

Steven S. Miller, Grand Terrace, CA

EDITOR'S NOTE: We hesitate to diagnose problems like this on the basis of a letter. The information is sketchy, but this problem raises an interesting question because it does sound like a power supply problem, which is something that many PCjr owners who have had their computers for several years are beginning to face. It might be a deterioration of the power hardware, or it might be that you have expanded your PCjr to the limit of the power supply that it can deliver.

PCjrs come with 32.5 watt power supplies. The computer uses about 28 watts, and other add-ons, such as drives, an internal modem, memory expansion units, etc. can quickly eat up the remaining power. If you are close to the maximum your supply can provide, you may experience some odd behavior from your computer.

Even though your monitor has its own power supply,

the fact your computer is locking up when your monitor appears to malfunction sounds as though the computer's power supply may (emphasis on MAY) be the culprit.

At any rate, this problem gives us a chance to point out something that many PCjr users need to keep in mind: your power supply is limited. So check the power requirements of any peripheral you intend to add to your computer. Or, consider purchasing the new 150 watt power supply now being offered by PC Enterprises (800-922-PCJR). Then you'll never have to worry.

Reader Rates Scrabble Software

You have no information on your compatability list on Electronic Arts' Scrabble, but I bought it anyway. I want you to know that it runs just great on my jr. with 640K. It requires 256K and is not copy protected. However the lack of color is a great big disappointment. It is quite sophisticated and gives you a good challenge, but you see, I have been using Monty Plays Scrabble for about a year and a half, and the color and sounds are just beautiful. Also, it seems more friendly! Thought you could use the input.

In the September-October issue the articles by Diana Fisher and Terry Haines are really funny, and "Another Kind of Virus" got a few chuckles, too. I've recently gone back to work five days a week, and don't have as much time now to play with jr. so I can really relate to what these people are saying!

Edna Nagles, Portsmout, VA

Feedback from PCjr Expert Provides Tips, Comments

While reading the August jr Newsletter, I noticed a few items of special interest to me, so I decided to send you some comments and questions.

You may get quite a few other letters on the Q&A column by Rene Waldron in the August jr Newsletter, but here are my thoughts.

1. Question on p. 3: System crashes with BUFFERS greater than 4 with Tecmar irCaptain.

The problem is indeed software. It's tied to the Tecmar CONPCJR.EXE memory management program. The CONFIG.SYS file BUFFERS= command first allocates memory for the disk buffers. CONPCJR called in the AUTOEXEC.BAT file then sets the video buffer page location. With DOS 2.1, there is only room for BUFFERS=4 to 7 when the video buffer is at page 2. If you want to use more buffers, large device drivers, or DOS 3.X, you must move

(Continued on page 12)

How to Merge Files Using DOS Commands

Believe it or not, ir Newsletter has recently received three letters from readers asking basically the same question: "Can I combine several files from one directory, or from different diskettes, into one file?"

The answer is, yes you can. And it's not Suppose you wrote a daily diary on your PCjr, writing about the exciting things that happened to you or the fascinating thoughts that occurred to you each day. After a year or two of this, you decided some of your experiences would make great magazine articles. So you want to combine several files on similar subjects in order to edit them.

The way to combine all your files about trainwrecks you've seen, would be as follows: At the A>, type

COPY

TRNWREK.382+CARSFALL 185+OFFBRDGE.686 WHTAMESS.ART

The above command will add the files in the order you name them so they become a new file. in this case a file called WHTAMESS.ART. This will be the file with the three entries from your diary about trainwrecks. You can now edit and rewrite those files into one blockbuster of an article for magazine publication.

The general principle here is that you put a plus sign between all the files you want to join and they will all be copied, in order, to a new file with the name you put after a space. There must be a space before the name of the file you want the others to combine into. Files from different drives can be joined in the same way by typing the drive before the filename, with no space between the drive and the filename. You can also combine several files into an existing file by placing the name of that file after the space. In the above example, then, to get all your trainwreck entries into one existing file, you would substitute the name of that file for the new file in the example, WHTAMESS.ART.

Using Wildcards

If you have many files with the same prefix or extension, you can combine them using the * symbol. Let's say all your diary entries about trainwrecks over the years have the file extension .WRK. In order to combine them all into one file, you could type

COPY *.WRK WHTAMESS.ART

Once again, all your trainwreck entries would be combined into a file called WHTAMESS.ART, ready for you to polish up for submission to LIFE Magazine.

You can also use the? as a wildcard to stand for any single character in a filename or extension. Let's say all your diary entries were in files called DIARY with the extension consisting of the number of the month and the number of the year. To combine all entries for the year 1986 you could type

COPY DIARY, ?86 DIARY, ALL



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Flight Simulator

(Continued from page 1)

loaded by typing "fs" at an "a> prompt." The first screen will ask for your screen driver - don't look for a mention of the jr, it's not there. Select option c. (RGB-CGA). Yes, that's right FS3 does not support jr's 16 colors out of the box. Other questions will ask about a flight log or a mouse. When asked about function keys on the left or top, select left for full use of flaps or throttle (particularly if you are not using a joystick for the latter). Insert the scenery disk and you're on your way! Where? To Meigs Field, of course, where else? But, we're getting ahead of ourselves.

How is FS3 different from tried and true Flight Simulator? One's first impression is "complicated," but the added complexity rounds out many an enthusiast's wish list of new features. There's no way a full description of each feature can be included here, but working our way from pull-down menu 1 through 5, here's a brief tour.

Menus are a bit sluggish to appear - on a PCjr with a V20 running in jrconfig's "compatible mode" at about 5.5Mhz it takes about 2-3 seconds for a menu to appear, depending upon scenery options in use. (NOTE: jrconfig is the software I use to configure my PCjr with 640K. It creates a low ramdisk, so that software like FS3 can run in upper memory for maximum speed. You don't have to have jrconfig to run FS3.)

MENU 1 (MODE).

Here you can opt for flight instruction (Option #3) from taxiing through approach and landing with either instructor or student control - a much needed addition. During "student control" you will be coached by onscreen messages. "Flight analysis" (#2) will display a graph of your landing or show course plotting, assuming you want to see the results of your aeronautical efforts. With #5, "Entertainment," there are quite a few choices: the old, reliable WWI fight game, still a winner for its action and simplicity, a new crop duster game which will hone flying skills if you stick at it, and flying in formation with an aircraft which leads you about with a smoke trail through such courses as "Bridges and Towers" and a fanciful "Walls in the Sky."

This menu also gives access to Multi-Player Mode - formation flying with a friend via modem! Option A lets you change to another of FS3's new features, Lear Jet mode. With the Lear, you can really zip around, although landing is tricky. This mode can shorten your flight time on a long leg, however. Just take off in the Cessna, switch to the Lear in mid-flight, then back to the Cessna to land! A chicken method, but it works! When flying the Lear use a LIGHT touch on the controls. Flaps become speed brakes for landings. Landing the Lear can be done, but plan AHEAD. This menu also gives access to an instant replay feature, user-defined modes and even user-defined demos!

Finally, Menu 1 offers EFIS/CFPD, a feature not yet included in most aircraft systems. With EFIS, an electronic "highway in the sky" will guide you to a VOR (VHF Omni Range) or lock onto an ILS (Instrument Landing System). Try it!

MENU 2. (VIEWS)

FS3 really shines here. No longer are you limited to out the windows or the map views. With FS3, you can watch yourself fly! Whether from the tower's perspective, a spotter plane, or "track" (most useful with the 2 player mode) you can relieve the boredom of a long leg by seeing your plane against the background or watch yourself land! A "full screen view" replaces the control panel with a new panorama if you're comfortable flying with no panel.

Option A puts titles on the windows so that you can remember which windows you have active and you may need to. Windows? Yes, FS3 provides for multiple views.

An exciting new feature -- see your plane fly!

Small windows are overlaid on the cockpit view for the map and to allow you to see the spotter plane view at the the same time. These windows can be resized and moved about - and you'll probably want to since they infringe on the normal view a bit. Unfortunately, there seems to be no way to save your default window preference from session to session.

Option E "Display Quality" offers various tradeoffs between flicker/image complexity and the speed with which the screen refreshes. FS3 does seem a bit less smooth in its action than original FS, so experiment with this one. The original FS asked PCjr owners with expanded memory if they wanted to use additional memory to speed the display. FS3 doesn't, but Option E provides some of the same. Finally, the multiple windows are toggled by means of the [,], and Num Lock keys. The latter is a handful with the original PCjr keyboard which uses alt-Fn-N for Num Lock. Windows are turned off by hitting their toggle key twice in rapid succession. Try hitting alt-Fn-N twice quickly! Better to select/deselect the map with "2," "8", and then spacebar. (A tip: you can go from any menu level back to flight by hitting the spacebar.)

MENU 3. (ENVIRO)

Here's one of FS3's major additions. New realism has been added on this menu for bad-weather fliers. With the original FS, you were either in an overcast layer or not, period. With FS3, multiple cloud decks can be specified, from scattered to broken to overcast, with or without ragged bottoms. True, the clouds look like cotton balls, but the ef-

fect works.

If more realistic clouds were not enough, FS3 also adds the most feared nemesis of aviators - thunderstorms. You can set the bases and tops of these towering monsters, complete with lightning, widely scattered or dense, and even specify their movement and direction. At first, the thunderstorms seem to be only a visual addition, but, during several flights, my Cessna was tossed about in random updrafts/downdrafts. The randomness adds to the realism. Lastly, FS3 takes a page from Sublogic Jet and offers stars and a quarter moon for night fliers.

MENU 4. (SIM)

This menu will most often be used for the simple fact that it enables joystick use. The use of joysticks cannot be overemphasized. Joystick A controls the basic "stick," Joystick B the throttle and brakes. Don't leave home without them. True, you can use Fn 8 to gradually reduce power, Fn 2 to add full power and can work with cursor keys to fly, but joysticks give you full functions without taking your eyes off final approach and add smooth transitions as well. Also, centering aileron and rudder, a frequently-used action requires the "5" key on a numeric keypad, something the the jr's keyboard doesn't support, but it's a natural with joysticks. Joysticks are a must.

Menu 4 also gives access to "realism," a mode which allows separate use of the rudder pedals. By default, FS uses "auto-coordination" which moves the rudder pedals in synch with the ailerons. This is very unrealistic and tends to hide the fact that turns must be "coordinated." Coordinated turns are the reason the turn and bank indicator in the bottom left corner of the instrument panel is there to begin with. Unfortunately, FS3 key usage makes this feature impractical on the original PCjr keyboard. The "C" and "M" keys can be used with FS 2 on the original PCjr keyboard for this purpose.

Menu 4 also allows for the annoying "sound effects" of FS to be turned off and permits training scenarios by selectively turning off individual instruments.

MENU 5. (NAV/COM)

This menu provides only a few options of interest beyond those in FS2. It is needed to set coordinates when changing locations and for "slew" mode. Slew mode allows you to move quickly along a course and cut down your elapsed time, but read the manual first.

Menu 5 also provides for tuning radios, but these functions are still supported under the old alt-N, alt-V, and alt-C and are faster that way.

But Menu 5 does hold one welcome addition - access to ADF (Automatic Direction Finder) in addition to VOR navigation. ADF was once the province of Commodore users, but now is here for the "rest of us." Forget the "transponder" and the "air traffic control" option. The

transponder is nonfunctional in this release, as it was in the last and the ATC option does nothing more than give you that repetitive message from the tower.

Now you can fly through a thunderstorm

So much for the menu tour. How does FS3 perform on the PCjr? Performance is comparable to FS2 except that control response is a bit more sluggish than with FS2 running in jrconfig's "compatible mode." This small difference is subjective and may vary a bit with your system. Again, experiment with the screen options in Menu 2.

No such ambiguity prevails when weather details and windows are added. Here, FS3 definitely slows down. To verify this, I flew from San Jose to San Francisco, directly to Runway 28 Left at SFO. The flight took 16.7 minutes in clear weather, both on FS3's instrument panel clock and "real time" (my watch). Adding scattered clouds and thunderstorms increased the total flying time to 22.7 minutes. Does this slowdown suggest that Microsoft wants us to upgrade to faster machines? Perhaps, but, then would not flying in clear weather be too fast?

The comparatively sluggish performance of FS3 (at least when loaded with windows and new weather features) prompted a timed comparison with FS2. A comparable test showed that FS3 will get you from Point A to Point B in the

(Continued on page 19)

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Reader Feedback

(Continued from page 8)

the video buffer up to page 4 to allow room. This is done with a command such as the following in the AUTOEXEC.BAT file.

CONPCJR -P4

Since each video page is 16K, page 2 starts at 32K, and page 4 starts at 64K. The result is 32K of RAM less for programs when using page 4. Unfortunately, attempts to use page 3 produce the same problems as with page 2 due to the way the software is written.

2. Question on p. 4: Use of TTL monochrome monitor on a PCir.

All the monochrome monitors I've seen on PCjrs are composite monitors plugged into the RCA "V" jack. The "T" connector is intended for the TV adapter and still provides a composite color signal. I was under the impression that connecting this type of input to a TTL monitor would either produce no useful display or damage the monitor. Could you confirm that connecting only pins A1,2,3, and 8 will really drive a TTL monitor properly?

The Reader Feedback letter from John Vincent contained a discussion of disk drive problems including one which gave a "Boot Failure" message. However, after sev-

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eral attempts, the disk would boot and run fine. This sounds very much like the Qume 142 lubrication problem which many folks have run into. Lubricating the chrome drive rails with a couple of tiny drops of oil from a Radio Shack needle nosed oiler may do the trick.

Finally, on page 17 you answer the letter from a confused Steven Miller. I liked your gentle response, but there is one nit I'll pick if you permit.

The PCjr indeed has its own type of graphics and it offers all the features of CGA but adds the ability to handle two color pages or 16 colors instead of 4 in 640x200 mode. This is not like the PS/2 VGA analog graphics at all. The PCjr has a chip which is a Video Gate Array (VGA), but this has nothing to do with the Video Graphics Adapter (VGA) of the PS/2 machines.

Keep up the flow of information. Your newsletter continues to be a super resource for all of us with PCirs.

John King, San Rafael, CA

EDITOR'S NOTE: Yes, we can confirm that most TTL monitors will work when connected as described in the August Questions and Answers column. There may be some TTL monitors that are not compatible, but there should be no danger in trying them, even if they turn out not to work properly.

PCjr Keyboard Problem Solved by Cleaning

After a summer of high humidity my keyboard was erratic. I disassembled the unit and sprayed the circuit board lightly with contact cleaner. I then brushed (rubbed) the carbon buttons attached to the keyboard rubber sheet with extra fine emery cloth. It has since always worked fine.

When I first read jr Newsletter I was taking several PC magazines. Since then I have dropped all of them but jr Newsletter. The other mags had very little dedicated to IBM PCjrs and more ads than anything else. I find your PC mag like the IBM Jr -- small but mighty! Keep up the fine work.

John F. Robinson, Terra Haute,

Tips from a Bootgame User

I want to tell you about my experiences with the utility Bootgame. It can be purchased from Ed Strauss at the following address for \$10.00: ES Quality Products, 767-B Redwood Place, Reno, NV 89502, Ph. (702) 786-4040.

From experimenting with the program, I discovered that it may not be compatible with your memory expansion

software. You are lucky that Ed Strauss includes on the disk a full copy of his memory expansion software which you will probably have to use to get the program to work properly. This is no problem, because his software supports your expanded memory up to 640K and can support two disk drives. This should be more than enough for even the most demanding of games.

The installation of the memory software should be no problem at all because the software installs itself. You do have to choose whether to use the batch file to install one or two drives. If you are only going to use the software to boot autobooting games, this choice is not even that important. The autobooting software will handle that environment. Persons owning Racore hardware with DMA especially should appreciate Bootgame because you can include the utilities to enable your DMA and change your video display to one more akin to a PC's when you are in PC mode. People without Racore hardware can reap the benefits of increased memory and addition of programs that increase compatibility like Savenml and Int9. (These are on Jr. Patches Disk #56.)

I recently purchased a Fujitsu 2551 half-height, direct-drive, 5 1/4 floppy drive. It was incompatible with my Racore disk drive controller card. In fact, after calling the Racore technical department, I discovered that every disk drive except the Qume 142 disk drive is incompatible.

Alan D. Peters, Cleveland, OH

Jr User Wants to Use REXX

I have used the REXX interpreter on an IBM VM system. It can be used to write application as well as system programs. It is structured, powerful, easy to write, and easy to debug. I bought a copy of Personal REXX from the Mansfield Software Group. I couldn't get it to run without crashing my jr. I talked with technicians at Mansfield who thought it was an interrupt problem. I finally had to send the package back with regrets.

Please, does anyone out there have a patch to make it run on a jr? Also, on a less serious note, does anyone have a Chinese checker game?

Jim Goldfrank, Reston, VA

Editor's Note: We haven't heard of a patch for this software or of a Chinese checkers game. If we do get information on either of these, we'll report on it in a future issue.

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Wizardry I: Fantasy Lover's Delight

By Carl Marseilles

As some of you may have heard, I like to play computer games of most any type. That's why I was elated when I won Wizardry I: Proving Grounds of the Mad Overlord last fall in a raffle. Little did I know the size of the task I was undertaking.

...the weary band of adventurers trudged through what appears to be an endless maze inhabited by all manner of creature and apparition. Leading the band are two warriors: Carl of the South, a human fighter of no particular strengths and no particular weaknesses and Scooter of Elk. a dwarf of fiery spirit who revels in battle. Behind these warriors is a pious priest, a gnome by the name of Father Tym, who comforts his fellow adventurers with his pious ways, use of a staff and the ability to cast magical spells. Following Father Tym is a hobbit, a thief named Robin the Hood. He walks slowly and awkwardly feeling the effects of poison from his last encounter. The rear was brought up by two elfin mages. Tall and stately in their flowing robes, they often appeared distant in their thoughts. Both Merlin of Po and Mordrid of Mock possessed intelligence and magical powers far in excess of their fellow travelers (after all, they managed to be last in line during this dangerous adventure and that shows some intelligence). But wait... I thought I heard something. In an instant Scooter the Impetuous draws his long sword and kicks open a door. Three slimy creatures guarding a locked treasure chest are startled at the sudden appearance of such a motley crew. The battle is drawn and life in the maze known as the Proving Grounds of the Mad Overlord continues...

Wizardry I: Proving Ground of the Mad Overlord is a Sir Techinteractive fantasy role-playing simulation. The game includes a Player's Guide, tips on keeping your computer healthy, map plotting aid, quick reference chart for Mage and Priest Spells and master/boot disk. System requirements are an IBM PC or 100% compatibles with 12kb, one 5.25" disk drive and a color graphics adapter. A warning on the game's cover stated, "may not work on some PCjrs'." (Editor's Note: We have no reports of PCjr problems with Wizardry.)

The Player's Guide is 74 pages long. It is logically organized, interesting to read and complete. Despite these complimentary remarks, the Player's Guide is no pamphlet and all 74 pages should be read. For players who may be anxious to play, reading the Player's Guide can take an eternity. For those who venture out before completing the

Guide, good luck. A quick start guide would have been handy.

The game is complex, allowing for the creation of many types of characters and armament. Rather than role playing the created characters, I felt as if I were an unseen commander manipulating the lives of each adventurer. Learning the game requires more than reading the Player's Guide. It requires experience and that means time. As I became more experienced in field command and managing the band, my adventurers grew in their capabilities. The longer they live, the better their chances of surviving future encounters.

In conclusion, I have enjoyed playing Wizardry I: Proving Ground of the Mad Overlord and recommend it to dedicated adventure game players. If you lack imagination or want to play for an hour, this is not the game for you. A friend of mine claims to have played Wizardry I for a year. He also enjoys it and is about to graduate to Wizardry II: Knight of Diamonds. Thank you, Sir-Tech for this enjoyable game. I'm looking forward to the Second Scenario.

(The above article was originally published in the Elkhart PC Users Group Newsletter)

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More Cartridge Slots

(Continued from page 1)

the features provided by cartridges all at the same time.

The Siamese Slots, which sell for about \$25, can bring your total to three cartridges operating at one time, if you have one unit, or four operating cartridges with two Siamese Slots in your two cartridge openings. PC Enterprises' unit, which sells for \$29.95 takes four cartridges, which means you can have a total of five cartridges running with one unit or eight with two units. (Hope you can follow that!)

The Siamese Slots protrude from the front of your computer, while the PC Enterprises unit sits behind or beside your computer, connected to one of your slots by a cable. Siamese Slots are available from Oowl Software, Computer Reset and Paul Rau. (See ads in this issue)

As of the writing of this article it appeared that most cartridges are compatible with each other, so almost any combination of them could operate simulaneously without any problem. We expect there will be a few exceptions to this rule, but at the moment we aren't aware of any incompatibilities.

Available Cartridges

For those of you who are not familiar with all the cartridges that can add power and convenience to your PCjr, here is a brief list:

Cartridge BASIC: Provides a version of BASIC that takes advantage of the color and graphics capabilities of PCjrs. Other versions of BASIC, though they can be run on PCjrs, do not do this.

QuickSilver: Boots up your PCjr quickly and silently by replacing the IBM memory test and eliminating the PCjr beep. Also modifies the keyboard BIOS for greater software compatibility.

jrVideo: Speeds up the PCjr's display of information on the screen, thus effectively speeding up most computing tasks.

jrSynchro or Keyboard Buffer Cartridge: Enables you to type while the disk drive is running without losing characters and hearing that beep. Also fixes bugs which can cause software to crash or hang up.

PC I.D.: "Fools" software into thinking it is running on a PC, rather than a PCjr, thus increasing your ability to run some software.

Clock: Provides a clock for your PCir.

Clock Calendar: Gives your PCjr both a clock and a calendar.

Keylights: Has three green lights which tell when your caps lock, num lock, or scroll lock keys are on.

Configuration and Configuration Plus: Sets up your drives and display when you boot up and fools software into thinking it's on a PC. The Plus feature adds key lock

indicators for caps lock, num lock and scroll lock keys. (These cartridges available only from PC Enterprises.)

Combo: Combines jrVideo and jrSynchro Cartridge features into one cartridge.

Quick Combo: Combines above Combo features with QuickSilver features. (Available only from PC Enterprises.)

This list covers the cartridges that enhance the performance of PCjrs, but there are many other cartridges that contain software, such as Lotus 1-2-3, Wordstar, and others.

Cartridges also can be programmed using EPROM equipment to introduce almost any software you want into a cartridge. The advantage of this is that software running from a cartridge does not use any of your PCjr's RAM, thus leaving memory free for other tasks. Integrity Technology has ROM cartridge kits for this purpose. (See ad in this issue.)

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Can Software Improve Your Writing?

By Tom Mortenson

How readable is your writing style? There are several public domain and/or shareware programs available that can give you a quick insight.

Microcomputers can fully justify their existence for word processing alone. In addition to word wrap, formatting, quick editing and reprinting, word processing offers much more to a writer. And, to assist those who use a computer for writing, there are a number of specialized tools available besides word processors. Some of these Include:

- * A thought processor our outliner, like PC-Outline.
- * A spelling checker that catches both your typos and your chronically unsolvable spelling problems; and
- * An on-line thesaurus.

However, there is another type of word processing aid available; a utility that provides you with a quick assessment of your writing style or the readability of your text. For this article, I will take a look at eight of these writing style and readability checkers, ranging in complexity from one that simply provides a count of the number of words and sentences in your document to a program that shows you how to write forceful, clear English.

All of the writing style utilities evaluated in this review were downloaded from Bulletin Board Systems (BBS). Some are free, but most are shareware programs for which payments of up to \$35 are requested. In several cases, there are true bargains here if you are concerned about the readability of what you write. (If you aren't, then why do you write?) The programs reviewed in this article include:

Clearcut from Imagination Enterprises; Count, from Robert Kiesling; Fog, from Joey Ribichaux; Maxi-Read, from RWS & Associates; Parse, published by PC Magazine PC-Read, from Wash 'n Ware Software; PC-Style, from ButtonWare; and Styled, from Louie Crew.

How They Work

These programs typically examine word and sentence length in the process of evaluating the writing style or readability of a document. The document file that you want to evaluate must usually be a straight ASCII text file, although some of the programs are able to evaluate documents that contain imbedded characters.

Several of the programs (Fog, Maxi-Read, PC-Read, Parse, and PC-Style) produce a report at the end of the evaluation that shows the **Fog Index** of readability developed by Robert Gunning or a similar type index. The Fog

Index specified the grade level of educational attainment of the reader required to understand the document. For example, a Fog Index of 12 corresponds to a senior in high school. Longer words and/or longer sentences lead to a higher Fog Index.

Two programs (Maxi-Read and PCStyle) use a more thorough scheme developed by Rudolph Flesch to evaluate readability. In addition to reading level, most of these programs look at the number of long words, use of the passive voice and personal pronouns, all indicators of a weak writing style. Some of the programs even print out a list of problem words that the author has used in his/her text file.

What you do with the report generated by each program is up to you. These programs cannot make poetry out of sludge. The content has to come from the author; these programs look only at how easily the text can be read. I have found that too often, I use big words in long sentences. One paper I recently wrote required a PhD to understand it; so I went back and chopped up sentences and used shorter words to make my points. I think I produced a clearer paper as a result.

Here are the programs that I found and tested. All are fast, easy to use, and the price is right. Best of all, you can try them out before you have to pay for them.

Clearcut

Clearcut is a text file clarification program that focuses on problem words in your text. The words considered to be "bad" are generally overblown, confusing words; those most often found in governmentese communications and language. Clearcut looks through an ASCII text file for these "bad" words and then suggests shorter, clearer alternatives on the screen as it reviews the document. The final screen provides a count of words, average word length, and a table of the number of words of each character length.

Count

This program does nothing more than count the number of characters, words, and lines in an ASCII text file.

Fog

Fog is based on Professor Robert Gunning's Fog Index. It examines the first fifty sentences for long words and sentence length. It provides a grade-equivalent reading level requirement to understand the text.

The report places the tested file on a chart comparing it with other writing samples. As an example, the Wall Street Journal has a reading level equivalent of 11, Readers Digest has a reading level of 9; and TV Guide has a level of 6. The "safe level" is about 11 or 12.

Maxi-Read

This is an elaborately designed, professionally pre-

sented and easy to use readability checking program with an extensive and informative report. The user is presented with several easy-to-use menus, with on-line help available. You can enter sample text or import a file, including one with imbedded characters.

The options menus permit you to print out the sesquiepdalian or long words with the report, print the report on screen, printer or both, and then provides a progress report on the percent of the file evaluated. This progress report helps considerably, since the program seems to be somewhat slow; in reality, considering the extent of the analyses performed, it really isn't slow at all!

The resultant report gives the grade level (like the Fog Index), Flesch Index, percent personal words, percent sesquipedalian words, and other measures or readability.

Parse

This is about the same program as Fog reported above. PC-Read has added a brief menu that permits you to change the logged drive, change the subdirectory path, and to select a test file from all files on that subdirectory. Otherwise it provides the same report, in the same calculation time as Fog. But the author has more than doubled the shareware fee requested.

PC-Style

This is a snappy program based on the readability guides of Rudolf Flesch. While 8087 support is available, it only speeded up calculations by 10% to 15% on the ASCII text files I tested. The program informs the user of how the document is progressing as it works through the text file.

The resultant report includes:

Counts of words and sentences:

Number of words per sentence;

Percent long words;

Percent personal words;

Percent action verbs;

Number of syllables per word; and

Calculates the documents readability index.

PC-Style is easy to use, fast, entertaining, and extremely informative. (PC Style is Disk #76 in the Software Store. See page 23.)

Styled

This program is better described as a lesson in how to write clear, concise English. Styled is most helpful in revising and polishing the near final draft of a document. It was written by the Director of the Writing Program of the Chinese University of Hong Kong. It is a program that reads and analyzes text, much as an attentive writing professor would review a paper you had submitted.

The program consists of four analyses:

(Continued on page 18)

PC-Style -- Top Rated Writing Improvement Tool

As you can see from the article on this page, there are many writing improvement programs on the market. But one of the best -- PC-Style is a user supported program that you can try before you buy. We checked it out and added it to the jr Newsletter Software Store for those of you who feel you may need some help with your writing.

Here's how it works: Let's say you've just written a report, a letter, or something you want to be as good as it can be. Put PC-Style in your disk drive and type PC-Style. It will ask you the name of the file you want it to analyze. Type in the file name and PC-Style gives you an analysis on your screen, which you can then print out if you want to save it.

PC-Style's analysis includes a count of words, word lengths, personal words, action words, and others. It calculates the readability level of what you just wrote and rates your writing according to several different standards. It's like having a teacher grade your paper instantly. (Well, not quite. PC-Style reads at 150 words per second.)

PC-Style is fast and easy to use. For ordering information see page 23.

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Writing Improvement

(Continued from page 17)

Word Length ("skin of a paper"); Punctuation ("pulse of a paper"); Syntax ("skeleton of a paper"); and Nominalization ("symptoms of cholesterol")

Each analysis consists of a graphic display of each sentence with the particular analysis chosen illustrating how you have written. The world length analysis, for example, shows a graphic display of each sentence.

Each word or ten or more characters in length is highlighted. The report from the analysis of the sentences studied lists all long words in those sentences. In addition to what it does in the way of analyzing writing style, this program stands out as a fine example of the instructional potential of the microcomputer.

Summary

Of the eight writing style and readability checkers evaluated for this review, I found three of them to be considerably more informative, useful and worthwhile than the others. The following products are the ones I would recommend:

Maxi-Read; PC-Style; and Styled.

Graph-In-A-Box OK on PCjrs

Although a letter from Roger Holden in our Sept-Oct issue reported that Graph-In-A-Box, by New England Software does not run on PCjrs, we have reliable reports that this program does in fact operate on PCjrs.

It is not uncommon for us to hear apparently contradictory reports on software compatibility. One user might have failed to follow instructions carefully, or may have set up his/her PCjr in a way that causes that software to fail, or may have a defective or copy-protected version, or the reasons for so-called incompatibility can be many.

For this reason, in reporting on software compatibility and in compiling the data on our Compatibility Disk (#60), we have not branded a program as incompatible unless we have received several very reliable reports verifying that fact.

Want to get your child excited about writing?

Try WORD PROCESSING FOR KIDS
-- Disk #41, page 23. --

Computer Teacher Disk Helps You Learn To Compute

If you have trouble understanding your computer manual or learning how to use DOS commands, our newest addition to the Software Store can help you.

The Computer Teacher Disk is an interactive learning program that covers the basic information you need to know in order to use your computer effecively. You can't begin to appreciate how much your PCjr can do unless you know how to use it -- how to tap into its vast capabilities.

Computer Teacher is easy to use and it takes you from a basic working knowledge of how a computer works and how to use simple DOS commands to what might be called an intermediate level of computer knowledge. When you have completed the learning exercises you will no longer be confused by the computer terms you see in software instructions or computer magazines and you will be able to use DOS commands to carry out your instructions, rather than being confused by what to type at the A> prompt.

The interactive aspect of Computer Teacher makes it more interesting than reading a book, as well as more memorable. After the tutorial program explains how to use a DOS command, it will ask you some questions to make sure you understood. You type in the answer and are congratulated when you are correct.

The software is menu driven, which means you just select the lesson you want from a table of contents and it begins where you want it to. Lessons cover using the keyboard, basic computer hardware, intermediate computer hardware, basic DOS, batch files, and subdirectories.

You can go through the lessons at your own speed, skipping past the parts you know, or repeating the harder parts when you need a second run-through to really understand.

If you, or anyone you know, are confused and want to use your PCjr to do more, you could definitely benefit from doing the enjoyable exercises on this disk. Afterwards you will actually undertand what the articles in this newsletter and other computer publications are all about.

To order Computer Teacher Disk #77, see page 23.

Flight Simulator 3.0

(Continued from page 11)

same time as FS2; it only slows down when extra features are added.

Does FS3 use the PCjr's full 16 color mode? No, at least not from Microsoft. But, with a patch written by Lou Davidson of MSC Inc. and a member of the Metro PCjr Users Group (Washington, DC) it does. Thanks to Lou, PCjr owners can see the same 16 color graphics Tandy users see. Microsoft decided to cater to Tandy users while ignoring us. Lou's patch creates the driver CUSTOM.GRA and can be downloaded from the JR-BBS in Rockville, MD (301)-468-0984 or order JR PATCHES V3 (Disk #56) from the Software Store on page 23.

FS3 will run in 4 colors on a PCjr with 256K, but needs384K or better to run in 16 colors. 640K is ideal so that the program can be run in jrconfig's "compatible mode" in clear memory for maximum speed.

Lousy Documentation

FS3's documentation is inadequate. The manual chapters make a valiant attempt to describe all of FS3's new features, but seem to be written by someone who was just pulled from the Multiplan V 5.0 project and was bored. The manual heads you in the right direction but you're often on your own after that.

The manual's failings are magnified by the "readme" file on the distribution disk. Here you will learn the frequencies of the NDB's and that there are instrument approaches not documented. Instructions are included for converting one's FS2 Scenery Disks to FS3, but they don't work on floppies. I have tried to load a "converted" Scenery Disk on several floppy-based PC's and the PCjr to no avail. Works fine on a hard disk, however.

If the manual has faults, the maps included are worse. FS3 adds a few extra scenery details to the original program (but not many) and even adds San Francisco as a scenery area. It fails to tell you that all the airports on the San Francisco "Star" Scenery Disk are available.

The shortcomings of the FS3 maps suggests a solution: Flight Simulator is so accurate that real maps can be used. Aviation "Sectional" charts produced by NOAA will greatly add to the realism of FS. FS's geography is so precise that an instrument approach to an airport will cause that airport to appear in the windshield just when it should in the real world. Sectional charts and other maps are available at any airport's Flight Service Station and from NOAA for a few dollars.

Is FS3 worth it? To any FS enthusiast, there's no question. It's out, you buy it. For others, mastering FS2 would seem a wiser option. Flight Simulator is an amazingly ac-

curate reproduction of the real thing. Perhaps future articles on "how to land" would be welcomed. Or a piece on using FS's flight navigation to the full potential might assist users. No matter, at \$30 or so, FS3 is one of software's few great buys, whether you're a Chuck Yeager type or not.

Metro PCjr BBS Grows -- Now Has 80 Megs Of Data

The Metro PCjr Users Group, based in the Washington, D.C. area, successfully raised \$300 toward the purchase of an additional hard drive for its excellent BBS.

The BBS now offers 80 MB of data, including a message area where PCjr users swap complaints, tips, info; a compatibility section where software compatibility info is available; and many downloadable software sections.

The BBS is operated by Jeff Perriens and can be reached by dialing (301) 468-0984.

Add power to your PCjr with JR POWER PACK I & II. These two disks, which you'll find in the jr Newsletter Software Store, contain software designed especially for you and your PCjr. They make your computer easier to use, more productive and more fun!

(See page 23 for ordering information)

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IBM PCjr INTERNAL MODEM - complete with all information. 300 baud. \$40.00. Call 508-473-4234 after 5 pm EST (11)

IBM PCJr 128K - One drive, amber monitor, DOS 2.1, PCjr Wordstar, PCWrite # 1 ^ 2, PC Screenwriter, plus assorted other programs. Runs excellent. Roland Ramos (213) 478-0975 \$550 or best offer. 165 S. Harvard LA, CA (11)

IBM PCJr 256K - IBM color monitor, Enhanced Keyboard, Okidata 92 microline printer, excellent condition. DOS 2.1, Cart. Basic, Volkswriter, writing asst., original documentation, 25 floppy disks \$650. Andy Ziegler (212) 493-8927 or (718) 631-1853 after 7 p.m. (11)

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Complete 128k jr, jr color monitor, parallel side, internal modem, speech side, keyboard & serial cables, 1-joystick, carrying case. All for \$460.00 & I'll pay shipping. Or will sell these and other parts separately. Hank Kennedy 813 Chisholm Vly. Dr. Round Rock, TX. (512) 255-2812 (9)

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PCjr Items: Parallel printer attachment \$35; Connector for TV, \$10; Adaptor cable for IBM color display \$10.00; mouse systems PC mouse w/special PCjr adapter and software; Also PC Paint Plus. Paid \$140 for both, will sell for \$80. All prices include UPS. Pat Delahanty, 53893 Delany In. Elkhard, IN 46507 219-264-0627 (9)



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jr Newsletter Software Store



This software is the best public domain and usersupported 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 \$5.95 per disk.

- * NEW * PC-STYLE. Perhaps the best of many programs that help you make what you write more readable. Jim Button made this a very slick, useful tool for improving your writing. It reads and analyzes what you write, then gives you a detailed analysis based upon several useful standards. Fasy, easy to use. 128k (Disk #76)
- * NEW * COMPUTER TEACHER. For those who want to learn how to use DOS commands and to undertand 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)
- * NEW * RAMDISK. Use ADJRAM to create a RAM disk of any size and adjust its size at any time without losing the contents. Or use JRCONFIG to set up your PCjr. Both programs with complete instructions for creating and using RAM disks on you PCjr. Need 256K. (Disk #75)
- * NEW * MIND READER. Experience the wonders of artificial intelligence! Use a full-featured word processor that guesses the words that you're about to type. Works like a charm! 128K ok. (Disk #74)
- * UPDATED * IMAGEPRINT V1.5. Produces near 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)

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 compatability, problem solving, software, maintenance, memory expansion, how-to projects, tips on using DOS, and more! 128K (Disk #54)

JR POWER PACK II. Disk full of programs to make your PCjr more useful and powerful. Fix compatibility problems,

set up ram disks, tiny wordprocessor, set up 3.5" drives, use DOS easily, and more. Need 256K for some, 128K ok for most. (Disk #65)

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

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)

See Sept.-Oct. Issue for Complete list of Disks

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)

PCJR PATCHES V..3. Patches to fix software that ordinarily won't run on PCjrs. V.3 adds patches Flight Simulator, V.3. Also for Arctic Fox, Managing Your Money 3.0, Autocad, King's Quest II, Turbo C, QuickBASIC, Starflight, Advanced Flight Trainer, Double DOS, Bard's Tale (16 colors), Turbo BASIC, and BASICA. (Disk #56)

NAMEPAL. An excellent utility program for maintaining and printing name and address lists, address books or mailing labels. Keeps business and personal references and allows user to maintain free-form notes as well. Requires 128K Memory. (Disk #70)

PC-OUTLINE. Organizes thoughts, notes, lists of just about anything. Powerful features create logical outlines, merge with your wordprocessor, customizing allows you to rearrange and manipulate data. Outperforms many commercial programs, says PC Magazine. 128k. (Disk #17)

PRINT HANDLER. Excellent software for printing banners, sideways, etc. Contains custom font generator, print

(Continued on page 22)

Software Store

(Continued from page 21)

spooler, and other useful print control utilities for Epson and compatible printers. 128K (Disk #51)

BATCH FILE UTILITIES. A tutorial on how to create batch files and six utilities to use. 128K (Disk #26)

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)

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 5-12. Word match games, find-a-word puzzles, word scrambles, and many more made by teachers. 128K, need Cartridge Basic. (Disk #32)

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)

TIME TRAVEL IN HISTORY. A maze adventure game in which you have to answer questions about different periods of American History in order to get gold pieces--and save your life! 128K (Disk #21)

BRAIN BOOSTER. Includes IQ Builder, a program that both teaches and tests your ability to solve number, analogy, synonym and antonym problems like those on IQ and SAT tests. Also includes Algebra and Chemistry programs. For high school and up. 128K (Disk #43)

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

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)

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)

LANGUAGE TEACHER. Helpful exercises for both French and Spanish language students. Hundreds of vocbulary words and verb conjugations. 128K ok. (Disk #72)

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GAMES. 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)

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, the hardest one of all. Runs on 128K. (Disk #10)

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REFLEX POINT. Patterned on the TV show Robotech, this game follows the show's storyline, with the Freedom Fighters trying to reach the Reflex Point and destroy the evil Invid Prince. 128K ok. (Disk #12)

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)

BUSHIDO. Test your skills in martial arts combat. Fighters kick, spin, duck, punch, etc. Requires 256K and keyboard with function keys (Disk #16)

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. Need Cartridge BASIC (Disk #31)

CASTAWAY/S. AMERICAN TREK. Test your survival skills as the survivor of a shipwreck in the South Pa-

cific. 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. Need Cartridge BASIC (Disk #55)

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

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)

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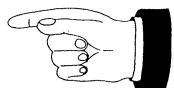
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