UPGRADE?

(This article was extracted from the Summer, 1992, catalog from PC Enterprises. Although not the only PCjr products supplier, PCE is certainly the largest, and they are the only ones left anywhere who are still developing new products for the Junior . If you haven't got a copy of their new catalog, then: (a) Shame on you for not coming by and picking one up at the June APCjrUG meeting; and (b) call 922-PCJR during working hours and request one. There's no charge for the catalog and there's a whole lot more to this 112-page publication than just a list of stuff to buy. Please keep in mind as you read this article, however, that it was written in part to help sell a line of products. - Editor)

The PCjr is a genuine IBM brand computer and is therefore extremely well made and reliable. It's not as fast as the latest 386 or 486 computer, but most people don't need more speed. Dependability and expandability are much more important. A faster computer will not make you type any faster, and it can't make your floppy, hard disk drive, or CD-ROM spin any faster, either.

Each year thousands of PCjr users call us and ask the same questions. Should I upgrade my PCjr or should I buy another computer? If I upgrade my PCjr will I be able to run important software packages. Will the PCjr run dBase? And will it run Word Perfect? The answer of course is yes!

The PCjr uses the very same microprocessor and Disk Operating System (DOS) as the IBM PC and PC-XT. As a result, the PCjr runs virtually all PC compatible programs - as long as the PCjr is expanded to include any hardware that the program requires. Most programs require at least 512K of memory. Consequently, additional memory is the first thing, and often the only thing, PCjr users need to add in order to run PC programs.

The second most important product you could add is a second drive. While a second drive is not

The ORPHAN PEANUT is designed, laid out, and entirely created on a PCjr with 736 KB of RAM or 8 MHz of clock speed (but not both together), a Microsoft Mouse, a second floppy drive (3.5") from PC Enterprises, and two 20-megabyte hard disks from RIM via Paul Rau Consulting. There's other stuff as well, but we forget.

Software used includes *TEXTRA* word processing (ver. 6.0) and QEdit (2.1) text editor, Power Up! Software's *EXPRESS PUBLISHER* 2.0 desktop publishing, and sundry other programs of varying usefulness.
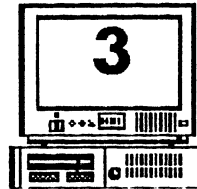
SOME HELPFUL GUIDELINES

THE PERSONAL COMPUTER AWARENESS DICTIONARY FOR BEGINNERS

Do you feel confused by the jargon of the personal computer revolution? Afraid to enter the world of the computer salesmen to browse because you don't understand their language? Well, here's a quick lesson on just what some of those slick phrases you've heard REALLY mean!

IBM-COMPATIBLE: *not* IBM-compatible

FULLY IBM-COMPATIBLE: somewhat IBM-compatible, but won't run BASIC programs

100% IBM-COMPATIBLE: compatible with most available hardware and software, but not with the blockbusters IBM always introduces the day after tomorrow

LAP-TOP: smaller and lighter than the average secretary

PORTABLE: smaller and lighter than the average refrigerator

TRANSPORTABLE: neither chained to a wall nor attached to an alarm system

HARD DISK: a device that allows naive users to delete vast amounts of data with simple commands

MOUSE: a peripheral originally named "vermiform appendix" because of its functional resemblance, renamed for its usefulness as a cat toy

PRINTER: an electromechanical paper-shredding device

MODEM: a peripheral used in the unsucessful attempt to get two computers to communicate with each other

NETWORK: an electronic means of allowing more than one person at a time to corrupt, trash, or otherwise cause permanent damage to useful data

DOCUMENTATION: a perplexing linen-bound accessory resorted to only in situations of dire need when friends and dealers are unavailable, normally employed only as a decorative bookend

USER-FRIENDLY: supplied with a full-color manual

VERY USER-FRIENDLY: supplied with an on-disk and audiotape tutorial, so the user needen't bother with the full-color manual

EXTREMELY USER-FRIENDLY: supplied with a mouse so that the computer user needen't bother with the on-disk and audiotape tutorial, the full-color manual, or the program itself EASY TO LEARN: hard to use

EASY TO USE: hard to learn

EASY TO LEARN & USE: won't do what you want it to

POWERFUL: hard to learn and use

MENU-DRIVEN: easy to learn

COPY-PROTECTED: (1) a clever method of preventing incompetent pirates from STEALING software and legitimate customers from USING it. (2) a means of distinguishing honest users from thieves by preventing larceny by the former but not the latter.

WARRANTY: an unconditional guarantee that the program purchased is actually included on
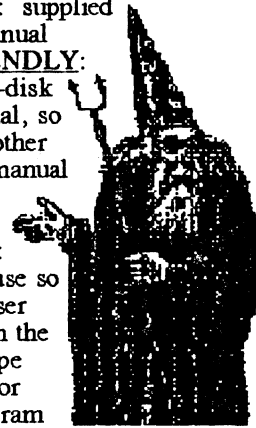
FODA Update

by Dan Lambert

I thought that it was about time that I gave the membership an update on the efforts that we are making through Friends of Disabled Adults (FODA).

To date, we have received four IBM PCs (one with 64K, two with 256K, and one with 640K), and three PC jr's in various states of repair. We have also received several accessories and add-ons for both Juniors and PCs. All of the PCs had two 360K full height drives, and one of the Juniors had a memory expansion unit and second drive (Racore). (Unfortunately, neither the memory expansion nor the second drive are workable.)

From these donated systems, we have assembled and donated three workable PCs and two workable Juniors. The recipients of these systems are overjoyed to be able to use these "dinosaurs".

One of the Juniors has been fitted with an IBM 300 baud modem, and each of the PCs was equipped with a Hayes Smartmodem 1200 (also donated). I don't think that any one of the recipients has tried to utilize their modems yet, because all of them are still trying to master the basic computer functions.

I'm hoping to be able to reach out to more of these people through your efforts to solicit the contributions of equipment and supplies, and through your own contributions and efforts.

Our needs continue to be computer equipment, monitors, keyboards, modems, and any thing else usable on computers. We need diskettes,

cables, and anything else that is necessary to provide these systems.

If you have any old software that you are no longer using, but is still necessary (particularly if you still have the manuals) there is a crying need for it. I have several people who would like to learn some programming. There are others who would like to become proficient in Lotus or

DON'T FORGET –

Friends of Disabled Adults (FODA) accepts donations of any IBM-compatible computer or parts, but they're particularly interested in your Junior if you don't need it anymore.

similar spreadsheets. I have one who would like to. Contact Dan Lambert at 381-1893.

Thanks to your generosity, these few have been helped, but there is more to be done. Talk to your friends who own computers (especially if they have upgraded to a more advanced system) and mention these efforts we are making. Spread the word to others who are in a position to donate equipment or whatever. Remind them that their donation is a tax deductible gift to charity.

We have accomplished a lot in a short period of time. I'm confident that we can accomplish
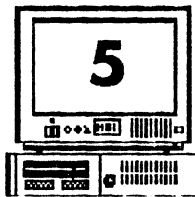
PROTOCOLS

by David Wilson

*A diplomat's life is made up of three ingredients:
protocol, Geritol and alcohol.*
                    --Adlai E. Stevenson

Some of the more common questions that beginning modem users ask is "What are these protocol thingies that the BBS keeps asking me about when I want to download a file? I don't know what the differences are between them, so I don't know if I'm dong the right thing. How do I know what I'm supposed to u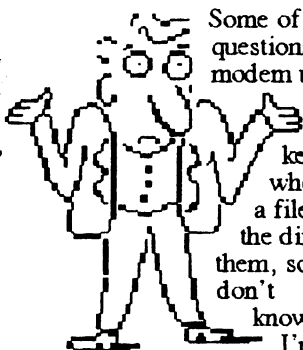se? And why? I looked up the word in my Funk & Wagnall and all it said was a bunch of stuff about treaties and ceremonies and draft copies that don't appear to have any relevance to file transfers." True, it doesn't, except in the broadest sense - as a "treaty" between two computers governing the exchange of blocks of data.

"Protocol" is defined in my Webster's New World Dictionary of Computer Terms, 3rd Edition, as a "Set of rules or conventions governing the exchange of information between computer systems." That seems simple enough, but how does it apply to the average computer user? Well, it doesn't unless you have three things: a computer, a modem, and a telephone. We're not going to get into telecommunicating from the beginning in this article; if you need more detail on starting up and establishing a link between your computer and another, please look it up in one of our earlier articles. You should also check the articles on file compression and decompression at the same time so you understand this "ZIP" stuff.

We're going to assume that you're connected

```
File Area = [20]  Recent Upload's

  File Commands:                              Search Commands:

  [L]ist Current Area          PCjr           [1]- By Keyword
  View a [Z]ip File        Workshop BBS       [2]- By Filename
  View a [T]ext File                          [3]- By Filedate
  [R]equest a File(s)
  [D]ownload File(s)
  [U]pload File(s)       Other Commands:

                         Change [F]ile Area          [M]ain Menu
                         [P]revious File Area         [G]oodbye/Logoff
                         [N]ext File Area

  To unzip files on this system you MUST use PKZIP/PKUNZIP v...[e].
  PKZI.0.EXE is available in the Archive and Virus Utility Area.
```
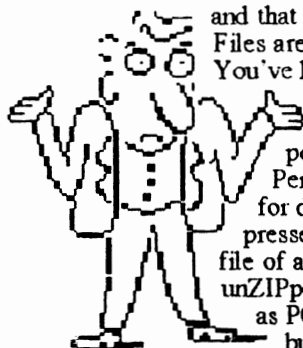
PROTOCOLS

and that you've navigated to the Files area of your favorite BBS. You've listed the new files and, sure enough, you find that the Hypertext version of the position statements of Ross Perot are now available to you for downloading in a compressed file called PORP.ZIP, a file of about 200 bytes (the unZIPped version is also available as PORP.TXT, 335 bytes long, but we'll skip that.) Since this is the very thing you've been waiting for, you decide to take the plunge and download the ZIPfile. (Remember, "download" is from the other computer to you and "upload" refers to a transfer from you to the remote computer.)

(The command sequence you follow to download a file is essentially the same on most BBS software I'm familiar with, but there may be some variations, so watch the prompts.)

First, tell the BBS or remote computer that you want to download a file. Normally, simply typing the letter "D" (or "d", it doesn't matter -

```
Time Remaining: (82) Minutes

Enter Option [?=Help]: D
```

just don't include the quotation marks, okay?) and hit the ENTER key. The BBS responds by asking you what file or files you want to download, and you respond by typing in the name of the file you want. In this case, you type

"PORP.ZIP" <ENTER>.

Now, we come to the protocols. You'll be presented with a list of protocols to choose from, such as this:

```
Time Remaining: (32) Minutes

Enter Option [?=Help]: D




[X]   Xmodem
[1]   Xmodem-1k
[Q]   Xmodem-1k-G
[Y]   Ymodem           [*]
[G]   Ymodem-G         [*]
[Z]   Zmodem           [*]

(*) indicates batch transfer available
```

and asked to select one from the list.

The most common protocols are XModem, YModem, and ZModem, but it isn't quite that simple. The differences you need to be aware of mostly concern the size of the block of information that will be transferred, but there are a few other variables as well. We'll keep it simple and not explore many of these.

Without getting into any of the technical aspects, a protocol establishes several facts and sets up a system for the file transfer which includes such elements as the fact that the other computer is also using the same protocol for the transfer, the number of characters to be transmitted in each

PROTOCOLS

"block", and the type of error checking to be performed between blocks of data. This last feature is absolutely essential in providing a completely satisfactory transfer - it would do no good to spend ten minutes or an hour transferring a file only to find that a character had been omitted or scrambled during the first minute of the transfer and therefore all the following data has been incorrectly received. The result is technically referred to as "garbage", and that's accurate. Several means of checking the correctness of the block of data have been devised; all you have to do is make sure that you and the remote computer are using the same method.

XModem was the first file transfer protocol devised to be run on a personal computer, and it changed the face of home computing forever. Like most prototype models, however, it has been superseded by newer and fancier versions, as well as a host of imitations and "improved" models. YModem is one of these, as is 1K XModem. (The two are not the same, although the 1K version is often incorrectly listed as YModem on BBS lists of protocols.) Basically, the big difference between them and the old faithful XModem is simply that XModem transmits data in 128-character blocks, and the other two do so using a much larger 1024-character block. Since each pauses after sending a block and queries the other computer to see if the correct block was received, then waits for a reply before continuing, it is obvious that the bigger block should be faster, and it normally is noticeably so. If the receiving computer doesn't verify that the just-received block is the one it should have gotten the transmitting computer sends it again and

continues to do so until they get it right. Then it moves to the next block and repeats the process. The exception to the rule that bigger blocks are faster comes when there is interference, or "noise" on the telephone line. The higher number of repeats will cause the blocks to be repeated more often than usual and the bigger blocks simply take longer to send, check, re-send, re-check, and so forth than the smaller ones do. If you're having line noise problems, try using XModem - it may work much better. Both XModem and 1K XModem run very well on a PCjr with no hard disk or RAMdisk.
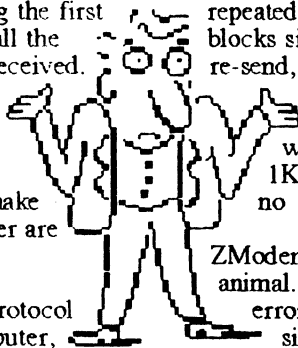
ZModem is a somewhat different different animal. It sends data and receives error-checking queries more or less simultaneously, and it adjusts the size of the blocks it sends according to the amount of line noise or other problems it detects. It's a sophisticated, dependable, and rather faster protocol, and unfortunately isn't available to PCjr owners who don't have a hard disk or enough memory to set up a RAMdisk with part of it to act as a downloads destination. The fault is in the PCjr's lack of Direct Memory Access (DMA) a component of just about every other computer that permits the computer to handle both input and output at the same time. Since ZModem eliminates that pause - or most of it - between block transfer, query, and response, your little old Junior is waiting for a break that never comes and the result is that information piles up until it just overloads the CPU and paralyzes the system. A RAMdisk or hard disk bypasses this need for a pause, so Junior systems equipped with them can use ZModem without
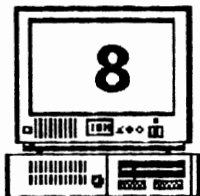
PROTOCOLS

any problems at all.

ZModem has a couple of features that make it a very nice protocol indeed. One is that you can tell it to detect and accept all ZModem transfers without your having to type in all the information. Thus, if you're downloading PORP.ZIP, you would simply tell the BBS that's what you want, the BBS sends out a signal, and you computer automatically sets itself to receive that file. ZModem is also capable of "batch"
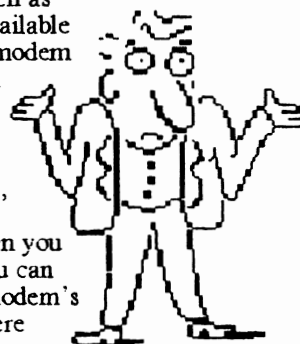
```
Protccol [Erter-quit]: Znodem

File(s) to cownload: porp.zip
```

transfers, that is, it can set up a list of files to be sent or received and you don't have to begin a new transfer for each one.

Here's another: if you're modeming along, downloading a 250,000 byte file at 1200 baud, and you've gotten to the 249,900 character point when suddenly your cat catches the modem power cord in her tail and disconnects it (don't laugh - it's happened!), you don't lose your entire file or have to begin the downloading process all over again. ZModem has the ability to detect the point at which the cutoff occurred and begin the transfer from there the next time you connect. (You have to set your file transfer options on your communications software to do this, but it's a one-time configuration setting and normally very easy to do.) ZModem can be installed via a system of batch files as an "external" protocol, but most communications software written since 1989 has it included as a

part of the program.

Other protocols, such as YModem-G, are available only if you have a modem which has a built-in hardware error-correcting feature. If your modem possess this, it'll show up in the opening screen when you first connect, or you can (gasp!) check the modem's documentation. There are a number of shareware protocols available as downloads from various BBSs. Many are faster, flashier, and more ingenious than the X,Y,Z group, but if you have those basic three available to you, the chances are that you won't encounter a BBS without compatible protocols. It won't hurt to download some of the fancy ones - BiModem, PUMA, etc., but forget about HSLink if you haven't got at least a 9600-baud modem on your PCjr - and play with them, but for the most part you'll probably want to stay with the old reliables. You may want to download and set up ZModem to run from a set of batch files, but I've found that the advantages obtained over the version found in most communications programs aren't worth the hassle involved in setting it up.

Okay, now you've successfully downloaded PORP.ZIP using all three protocols at your disposal, and have unZIPped it using the techniques described in the October, 1990, PEANUT . You're now ready to read the wit and wisdom of HRP, for what that's worth. Enjoy!

UPDATE?

often required, it offers a great convenience. Select a second floppy drive or a hard drive. Hard drives are preferred because they allow you to copy many diskettes into the computer's permanent memory, and are much faster than floppy drives.

Unfortunately, some PCjr owners never call PC Enterprises. Instead, they go to a local computer store and ask what they need to upgrade a PCjr. The computer retailer tells them they need a new computer. Is this true? Of course not! But you can't blame your hometown computer dealer. After all, the probably know very little [Ed. Note: !!!] about the PCjr and don't sell PCjr add-on products - but often they do sell other computers!

Originally, the PCjr was sold with 128K of memory, a single diskette drive, a chicklet keyboard and could not be expanded. As a result, the unexpanded PCjr could not run most PC programs.

Today things have changed. The PCjr can be expanded to include just about any product available for other computers. Unfortunately, most PCjr critics simply haven't kept up with the PCjr. In fact, most are surprised to hear an expanded PCjr actually runs more software than other IBM computers - but it's true! The PCjr is the only IBM computer that runs programs which require a Tandy Graphics Adaptor (TGA).

Several years ago PC Enterprises pledged we would continue developing new PCjr products and would continue supporting the PCjr for as long as the need existed. Today, as in the beginning, PC Enterprises continues to develop products that permit PCjr users to keep pace with IBM's newest computers. As long as the PCjr can be expanded to include the latest hardware, and as long as the PCjr can run the latest software, PCjr owners have very little reason to buy another computer. When you expand your PCjr, you can add what you want, when you want, without paying for features you don't really need. Each year, thousands of PCjr owners take their PCjr out of the closet and upgrade their PCjr for the very first time. Once upgraded, PCjr owners are very happy with their PCjr, and almost always continue to expand.

I wouldn't trade my Ford Bronco for an import from Yugoslavia even if the cost to buy a new car might appear inviting. Likewise, I wouldn't trade my PCjr for a faster computer which is designed to be the least expensive computer that could be made. I know the difference and so do you! Browse through our catalog and see all the products available for the PCjr. I think you'll agree. Upgrading the PCjr is the right choice.
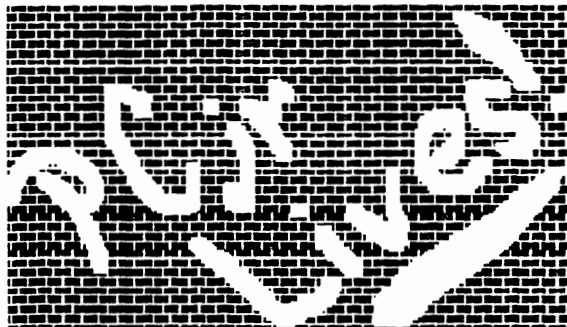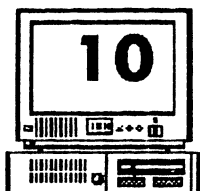
SOME HELPFUL GUIDELINES

the disk in the box

VERSION 1.0: buggier than Maine in June, eats data

VERSION 1.1: eats data only occasionally, upgrades free to avoid litigation by disgruntled users of version 1.0

VERSION 2.0: the version originally planned as the first release [except for a couple of data-eating bugs that just won't seem to go away], no free upgrades or the company would go bankrupt

VERSION 3.0: the revision in the works when the company goes bankrupt

NOW AVAILABLE: available any day now

AVAILABLE SOON: should be out within a year

AVAILABLE MAY 1: version 1.0 may ship to dealers August 1

STANDARD: similar to something else on the market

BACKUP: the duplicate copy of crucial data that no one bothered to make

SPREADSHEET: a program that gives the user quick and easy access to a wide variety of highly detailed reports based on highly inaccurate assumptions

WORD PROCESSOR: software that magically transforms its user into a professional author

BUSINESS GRAPHICS: popular with managers who understand neither decimals, fractions, Roman numerals, nor PI, but have more than a passing acquaintance with pies and bars

DATABASE MANAGER: a program that allows the user to manipulate data in every conceivable way except the absolutely essential one he or she conceives of the day after entering 20 megabytes of raw data

INTEGRATED SOFTWARE: a single product that deftly performs hundreds of functions the user never needs and awkwardly performs the half-dozen he uses constantly

WINDOWS: a method of dividing a computer screen into two or more unusably tiny portions

Ed. Note -We don't know who to credit for this - we downloaded it from a BBS -, but we appreciate it. It sometimes feel that this is closer to the actual fact than the generally accepted definitions.

FODA Update

much more. There are many other areas we need to be working in such as the shelters for homeless families.

Think about how much it could help someone with no home and no job to be able to generate a professional looking resume on one of our donated computers with a printer. The vast majority of those folks would much rather be working than not.

The possibilities are endless. Please, let us not just let this idea fade away. We are, each and every one of us, in this world together. Whether we like it or not, we are all "our brothers keeper" in one way or another.

WE CAN MAKE A DIFFERENCE!

Orphan Peanut Puzzle (PRESENTING a Orphan Peanut Puzzle)
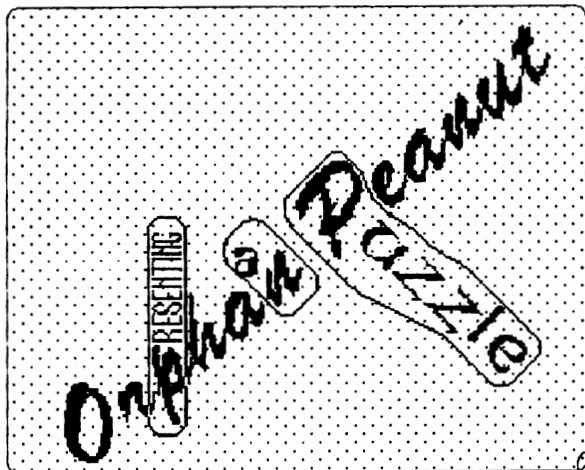
All words in the list are Present in the Puzzle.

Words will appear horizontally, vertically, or diagonally

Words may be spelled either forward or backwards.
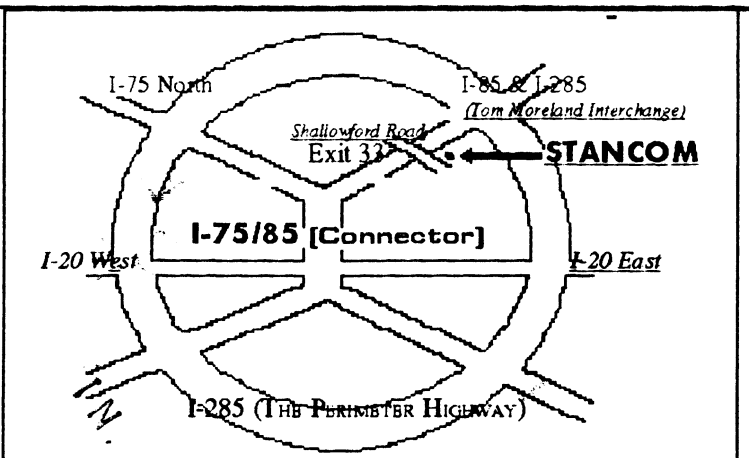
Solution next month. We hope.

PCJR

BRICK	MOUSE
CARTRIDGE	OBSOLETE
CGA	OOWL
COMPUTER RESET	ORPHAN
DISK	PARALLEL PORT
DISKETTE	PAUL RAU
DMA	PC ENTERPRISES
DOLPHIN	PCJR
ELMER HUNGATE	PEANUT
FLOPPY	PRINTER
IBM	RAM
INFRARED	SIDECAR
JOYSTICK	SIXTEEN COLORS
MODEM	STILL ALIVE
MOTHERBOARD	THREE VOICE

```
C A N K E T A G N U H P K E M L K J S F S Y L
U G P I A P A R A L L E L Q P O R T M P I E Z
E A N T H D E U I L A Z L L I T S Z E Z X R C
M K R T X P A J O Y S T I C K U L G E H I N O
P N D J K N L M C O M P U T E R S R E S E T R
C X B U L C G U X M I N L A K A T E B E J P
F F X F U U I P D R E T N I R P U Q Q A N T U
E M I F M U A R I W L R A E A M O U S E R R A
N G A I H S R P B B D E M E J E O G L C C A N
T U J R L I S G Q S M E G L E C P M E P O C T
E M L G U A Y C N Q G D S T D I L D F S L E P
R O K O Q R P P P F I O E K W O B C L Q O D Y
P T Q S H T D Z C R N L O F U U O J O L R I P
R H B L I D G I T J O N J M R Q E S P K S S I
I E J P D D N R S S R M L E E E T U P L Q N I
S R F Y C D A I B K G Q O D I E S U Y I F F N
E B B W D C J O O R E Y Q O O R N Y G R O J R
S O M B U T L E I Y M T U M G H D N A F Q X W
J A R M I W Q U X Q U S T L C T S R E A A T I
G R Q I O K R K C D Q L L E U H E H P P W M S
H D U O K D F X G H D O M I O D K J R S M T O
A A H A P E A N U T U C N B W A S S I P N W H
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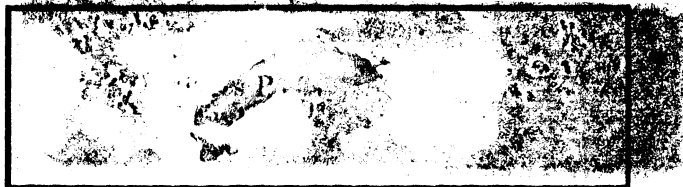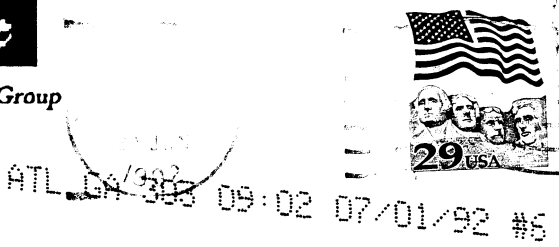
GETTING THERE

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

I-75 North

I-85 & I-285
(Tom Moreland Interchange)

Shallowford Road
Exit 33 ← STANCOM

I-75/85 [Connector]

I-20 West

I-20 East

I-285 (THE PERIMETER HIGHWAY)

the overpass you will see a buildiing on the left with *STANCOM* in latrge letters on the front of it.
If you're inside the Perimeter (I-285): Get on I-85 heading North from the city. Watch for the *Shallowford Road exit*, Number 1 33, and leave the Interstate highway there. Turn right on Shallowford Road, get in the left lane and prepare to immediately turn left into the *STANCOM* parking

The Orphan Peanut

The Chronicle of the Atlanta PCjr Users Group
12450 Charlotte Drive
Crabapple, GA 30201-1408

ATL GA 303 09:02 07/01/92 #6

29 USA

HAPPY BIRTHDAY!