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PC Users Group
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# **LINUX IS HERE!**

With Linux getting more and more press every day we felt it would be of great value to bring in someone who could tell us just what Linux is and how it might benefit us.

Ed Weinberg will demonstrate how Linux can be used as a drop-in replacement for Windows NT in a Windows network.

This includes file and print sharing, LINI email, and connecting Win95 lee-nucks, machines to the Internet.

He will also show Linux as a workstation with office programs and Internet browsing. Linux runs on more processors than any other operating system. The companies who are supporting it or have announced that they are supporting it read like "Who's Who" of the computer industry. The list includes IBM, on servers and porting DB2 and Lotus Notes. Compag will be shipping servers with it pre-installed, Oracle and Sybase and Interbase and others have ported their databases, CA, HP, Netscape, Intel.

Linux is used by Cisco Systems for print serving world wide, Burlington Coat Factory at all their locations, and it created the special effects for the movie Titanic...and it is free and STABLE!

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In head-to-head tests at PC Week Labs it beat NT in web serving, Windows networking, and in a multi-processor server configuration.

Ed Weinberg has been using Linux for three years. He develops internet sites and corporate intranets in network environments

consisting of some combination of Win95/98, NT, SCO, and Linux. Ed has a BSEE from Syracuse University and has taught classes for the Association of Computer Support Specialists on the subjects of HTML and Linux. Ed will also be bringing many Linux CDs to raffle off.

LINUX: Pronounced
lee-nucks, A freely-distributable
implementation of UNIX that runs on a
number of hardware platforms, including
Intel and Motorola microprocessors. ..
developed mainly by Linus Torvalds. ...it's
free, and ... has become extremely popular
over the last couple of years.
(www.webopedia.com)

~ You can study up at www.linux.org ~

#### MEETING SCHEDULE

#### LINUX IS HERE!

The Palisades Center Raso Community Room Tuesday, April 13, 7:30PM

#### Y2K - WHAT'S THE STORY?

There will be a panel discussion at the West Nyack Library, Strawtown Road, West Nyack, on Thursday, April 15, from 7-9 PM. Panelists will be Richie Star, Win95 SIG (special interest group) leader; Steve Weinberg, Webmaster; members Vinnnie Cin and Mike Diedrich.

Rockland PC Users Group is located 35 miles northwest of New York City. Our tax-exempt organization is dedicated to community service and public education with demonstrations, special interest groups (SIGs) and individual help with all facets of IBM-compatible personal computing.

### FROM THE NEW EDITOR

Although I have been a member of this group for years, I'm still a bit new, as I have not met most of you. My only contact with our group has been through the **ComputerConnection**, getting a sneak preview each month as I helped Sy Ribakove with the proofreading. It was a privilege to be in on the production of this fine newletter, and I always enjoyed our banter about commas, semicolons, widows and orphans and other typesetter stuff. Although I was offered the editorship on several occasions, I turned it down, sure that I didn't have the resources of time to keep **ComputerConnection** up to its award-winning standards.

But things change, and here I am. I'm exploring middle-age, and perhaps that's what this organization is trying to do. For those of you who share this quandry, you know there is some pain involved.

The **Computer Connection** has a temporary new look; there is still much work to be done and it is going to have to be a group effort. Computers are no longer just for hobbyists; for many of us they are vital parts of our everyday doings. As such, they keep us exposed to a constant stream of information. Our newsletter must become an exchange, a way by which we share these issues. Please make yourself a part of this effort. A letter, a complaint, an opinion, a question, a laugh - all are welcome. (Computer humor is a big stress-reliever for me and I believe in passing it around.) New software and books are often available for review (and you get to keep them). Check our web site (www.rcpug.org) for contact information, or email me directly at mcbaade@aol.com.

And so, fellow members, as you follow the bus down the Information Superhighway, keep us in mind. This publication will not continue without your help.

#### Marian Baade

**Newsletter Editor** 



The Rockland PC Users Group, a tax-exempt educational organization, meets monthly, usually on the second Tuesday. Meetings begin at 7:30 PM. The Rockland PC Users Group supports the computing interests of the community as well as the interests of its own

members. The latest information about meeting programs and dates is available on the Internet at <a href="http://www.rpcug.org">http://www.rpcug.org</a>.

**NEWSLETTER EDITOR**Marian Baade

ASSISTANT EDITOR
Peter Vecchio

mcbaade@aol.com

peterplusplus@Juno.com

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### PROFESSIONAL SERVICES

UCS, a Rockland County full Internet Service Provider, offers a 10% discount to RPCUG members. There is a two-week trial period during which service can be cancelled without charge.

For information and to obtain the discount, phone 623-1720.

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Marian C. Baade Computer Consulting ~ Destop Publishing / mcbaade@aol.com

#### **OFFICERS**

**President**: Sondra Coulter, / mscoulter@aol.com **Vice President:** Charles Wendler, / k2boz@ucs.net

Secretary: Charles Wendler

**Treasurer:** Thea Zendell, / tzend282@aol.com **Member-at-Large:** Gary Fitzgerald, / gjfitz1@aol.com

#### **COMMITTEES**

Intergroup Liaison: Jack Marsella, / mumbassa@bestweb.net

Membership: Phil Van Riper, / pdvr1@ibm.net

Programs: Jon Olson, / corsair.jon@worldnet.att.net

**Public Relations:** To be appointed

**Webmaster:** Steve Weinberg, / rpcug@acd-pc.com

# From the PRESIDENT'S DESK

## Sandy Coulter

Considering the agenda and the fact there was no presentation set for the March meeting, I was very pleased with the turnout. Some members that had not come to meetings in many months turned out to show support for recent efforts. It was a pleasure to see their familiar faces again.

As most members now know, there have been significant changes to the infrastructure of the RPCUG. We have a number of new board members and some roles and duties have been re-defined and streamlined. The more demanding positions have now been either shared or modified so that nobody becomes overwhelmed.

Our present newletter editor, Marian Baade, has been a member of the RPCUG for a long time but is generally unable to come to meetings. She hopes to be able get to one soon so that the membership can get to know her face-to-face. For now I can tell you that she is a very talented, well organized, congenial individual who welcomes member input. I am hoping that members will show support of our new editors by contributing in some way. Whether contributions are by writing about a computer experience or reviewing a product, you can contact Marian from an e-mail link at the website (www.rpcug.org) to find out the many ways you can help.

### **Programs**

Although there was not enough time to get a presentation arranged for the March meeting, our new program chair, Jon Olson, has already set up programs for April and May and has a number of good prospects in the works for the months that follow. He also welcomes suggestions and can be contacted via the website.

In April we can look forward to a presentation on the alternative operating system Linux, which has been gaining much popularity and recognition lately. I understand there will be many copies of Linux to be given away as door prizes in the raffle. In May we will have Microsoft with us again. Look for more details in the next issue of **Computer Connection**.

#### **SIGs (Special Interest Groups)**

Anyone wishing to start a new SIG (i.e., workshop) should contact Stu Weiss our SIG coordinator either from the RPCUG website or by phone at 623-3406.

#### **ALT/OS SIG?**

The April presentation of Linux brings to mind the recent loss of the Alternative Operating System SIG (Alt/OS SIG). A gentleman at a recent general meeting expressed an interest in continuing the ALT/OS SIG. He said he had several networked computers available for use. Unfortunately, I was preoccupied at the time and did not get his name. Now that we have a SIG coordinator, I think we can help get him started if he would just contact me (or Stu Weiss) again.

#### **New Users SIG**

Remember that the New Users SIG (Special Interest Group) is held on the same evening and location as the general meeting. The fifth in a series of seven monthly workshops will take place on Tuesday, April 13 at 6pm sharp. The topic will be PC maintenance & software selection. Non-registered members may sit in and audit the workshop but no new registrations will be accepted at this time. For further information on the NU SIG, contact assistant Frank Palmeri at 914-634-2966, e-mail to palmshet@aol.com; or leader Bill Hans at 914-639-1887, e-mail to Billhans1@aol.com (note the number 1 in first part of e-dress).

#### **Welcome New Members**

Because there was no newsletter last month, I did not get a chance to properly welcome February's new members. And so, we welcome Nancy DeGraff from New City, NY and Emil Bahary from Pearl River, NY. New members from March are Lotar and Kayta Kirsten from Tappan, NY. I look forward to seeing you all at future meetings!

#### **Old Members**

In an organization as large as ours, members can come and go and nobody notices. This is not so in the case of member Bertram Mantell, who passed away on March 7, 1999. Bert was a long time member who was always visible and involved in the RPCUG. His family has informed me that he thoroughly enjoyed being a part of our group and that the RPCUG was very important to him. I am sure many of us will miss his presence at future meetings.

### **Final Thoughts**

I am very pleased with the recent outpouring of support and assistance. Attitudes and perceptions are definitely changing. We have so much going for us and are so close to becoming a truly healthy organization, that it would be a terrible shame to backslide because candidates for elected positions cannot not be identified. It would be ideal if members would come forward and identify

(continued on next page)

#### **Y2K** (continued from page 7)

Instead of the user inputting the information, let's write a small computer program that we will run every time the computer boots up. It will do the following: Check the date just as the BIOS passes it to the operating system. If it sees the 1980 year number, it "reads" the binary output of the RTC and sends to the BIOS a date message consisting of "20" for the century byte and the mm/dd/vy information received from RTC; just as if it were a command coming from the keyboard through the operating system. addition, our program will check the two less significant numbers in the year data. If they are evenly divisible by four or 400, it signifies a leap year and the computer's calendar will be adjusted. In concept, if not in detail, that is one way to make an older BIOS Y2K compliant.

Alternatively one generally can buy an upgraded BIOS to replace the non-compliant one or, in many cases through a reprogramming technique, upgrade the existing BIOS chip to handle the century roll over and the leap year changes. The third way is to purchase for less than or about \$20 a small printed circuit board that plugs into a slot on the mother board to effect the requisite changes. The latter may be the only solution in some cases cited for the AMI BIOS.

WINDOWS 98 has built in a software patch that corrects the data from a non-compliant BIOS circuit. A "get home free" pass also goes to you if your BIOS is an Award 4.50G. Not only will the latter move smoothly across the century border and handle the leap year matter but, if you try to test it with any of the Y2K Test programs we have tried, you will get an improper answer; you will be told that it won't work. To learn if your computer has the Award 4.50G BIOS: Immediately after starting to boot, when the box with computer info first appears at the top of your screen, press the Pause key (Usually upper right corner). That will stop the screen and allow you to read the identification of your BIOS at the very top. If you miss it you may have to reboot and move more quickly.

While on the subject of BIOS compliance however the following information from *Award* [1] and *AMI* [2] may be of use. Other than the Award 4.50G (and probably 4.51 pg) BIOS, the company confirms that all versions produced prior to April 26, 1994, need only be reset once after year 2000. There is no remark about leap year compliance but it can be tested. Meanwhile there is an implication that a number of chips produced after April 1994 and some time in 1996 require software patches to work.

If you have an AMI BIOS the company suggests acquiring an AMI2000 Y2K enabler card from your retail dealer. You can, however, gain limited compliance by using a command line patch as described above or by using one of the software

patches to be described later on. *Microfirmware*[3] sells replacement BIOS chips under many brand names. Whether some are compliant isn't known and all should be tested.)

(to be continued next issue...)

#### **PRESIDENT'S DESK** (continued from page 3)

themselves as potential candidates, but I hope that some will at least be receptive and open-minded when contacted by the nominating committee.

Hope to meet and greet you at the next general meeting where we will all get a look at the Linux operating system. Meeting will be on Tuesday, April 13 in the Raso Community room of the Palisades Center Mall, West Nyack, NY. Sign-in begins at 7:15 and meeting starts at 7:30 sharp. See you there!

# **The Chuckle Corner**

QUOTES ABOUT COMPUTERS AND SOFTWARE AND OTHER THINGS

Collected by Steen Hansen Hviid, Columbus, OH

- "Walking on water and developing software from a specification are easy if both are frozen." (Edward V. Berard, "Life-Cycle Approaches")
- "An idiot with a computer is a faster, better idiot" (*Rich Julius*)
- I haven't lost my mind, I have it backed up on tape somewhere.
- Windows, another fine product from the folks who gave us EDLIN.
- Programming today is a race between software engineers striving to build bigger and better idiot-proof programs, and the Universe trying to produce bigger and better idiots. So far, the Universe is winning. (Rich Cook)
- I've never met a human being who would want to read 17,000 pages of documentation, and if there was, I'd kill him to get him out of the gene pool. (Joseph Costello, President of Cadence)

# THE INTERNET IS MIGHTIER THAN THE PEN...

#### **Instant Upgrade:**

http://www.execpc.com/~exvooper/joke.html

#### America OuttaLine

http://www.bobsfridge.com/outta.htm

#### The End:

http://opaldata.com/the end/index.html

# **ARE YOU ANNOYED?**

## A Review by Sy Ribakove

**Windows 98 Annoyances** by David A. Karp; O'Reilly; 464 pages+CD; \$24.95; ISBN 1-56592-417-7

O'Reilly Utilities CD: Quick Solutions for Windows 98 Annoyances; \$39.95; ISBN 1-56592-549-1

Reilly, whose book catalogues are often displayed on our "Take One" table, has issued a valuable book that deals with the perils, pitfalls and pratfalls of Windows 98. It's called **Windows 98**Annoyances, and it explains what you can do about many of the exasperating "features" of Windows 98.

Although one person's nuisance can be another person's treasured delight, it's hard to love many of Windows 98's so-called "features." Take those nagging "Are you sure?" dialog boxes that appear when you delete a file. Windows 98 ought to know that if you delete a file by mistake, you can restore it from the Recycle Bin or, if you change your mind immediately about the deletion, you can press Ctrl-Z and the file will reappear no worse for wear. (Ctrl-Z is Windows' life preserver. Highlight a file in Explorer. Press Delete. Then press Ctrl-Z and your restored file will reappear at the end of the list of files.)

Another annoyance is the incomplete information that's provided when you save a file. The Save dialog box may tell you that the current (last used) folder is Documents, but it doesn't tell you where Documents is. Is the destination folder C:\Documents or C:\Word\Documents, or even D:\Documents? You have to claw your way up the folder tree to find out exactly where your file is headed just in case you should ever want to find it again.

Windows 98 Annoyances, in addition to making the Windows interface work for rather than against you, offers essential understandings about the Registry, Maximizing Performance and Trouble-shooting. There are also useful appendices, including a complete list of the contents of MSDOS.SYS, a text file that you can edit to control exactly how Windows 98 starts up on your system. The book tells you how to accomplish this task.

Spend an hour or two with Windows 98 Annoyances and you'll have gone a long way toward

uncovering many of Windows 98's undercover secrets. Just finding out how to quickly and easily get rid of those slithering windows, menus and lists is reason enough to invest some time and money on this book. As a bonus you'll also get a CD containing some excellent shareware and a 30-day trial version of O'Reilly Utilities, a standalone product I am about to describe.

The O'Reilly Utilities CD is subtitled "Quick Solutions for Windows 98 Annoyances." It makes it really simple to eliminate lots of Windows 98's annoyances. You just check boxes rather than try to hack the Windows Registry. The solutions offered are grouped conveniently into four categories: Files and Folders, Start Menu and Desktop, Internet and Maximizing Performance.

Files and Folders contains such items as

Compare File Contents or Folder Listings,
Copy File and Folder Names to
Clipboard, Copy Folder Listing to
Clipboard, Copy or Move Files Anywhere
and Find File Version Information. None
of these tasks is easily accomplished in
Windows 98. Similarly useful are check boxes in
the Start Menu and Desktop group: Hide the
Taskbar Tray, Change the Registered User and
Company Name, and Clear Unwanted Items from
the Control Panel.

Internet tweaks include Choose Default Internet Applications Easily, Convert Between Netscape Bookmarks and IE Favorites and Disable Internet Explorer Desktop Integration, each one calculated to warm the heart of all of us who wish to increase the distance between ourselves and Microsoft's software. Maximizing Performance gives us Optimize Virtual Memory, Turn Off Animated List Boxes, Menus and Scrolling, and Recommend Better Windows Settings.

The bottom line is that the O'Reilly Utilities make it possible to have Windows 98 your way, and in less than five minutes.

User group members are entitled to a 20% discount on all O'Reilly products, including the **Windows 98 Annoyances** book (\$24.95) and the O'Reilly Utilities CD (\$39.95) when you purchase them directly from the publisher (800-998-9938). They are a bargain.

# FINDING & FIXING Y2K PROBLEMS

PART ONE: A PROLOGUE

By Ray Isenson, Editor of the 4C er, Central Coast Computer Club, Santa Maria, CA

Note: The article is unusually long for this publication. However, because of the problems associated with the **ComputerConnection**'s growing pains, as well as the significance of this issue, the Editor has opted to print it in its entirety.

[For the protection of the Rockland PC Users Group, Rockland County, NY and the Central Coast Computer Club and their respective members, the following disclaimer is established:

Testing and upgrading your PC to achieve Y2K compliance will require running some programs and adding software patches and making other changes to your system. Within the several sections of this document various programs are identified as being designed to correct the deficiencies that you may find to exist in your machine. The software and patches come from generally reliable vendors. They have been tried in machines belonging to members of the Central Coast Computer Club without creating any observable, unfavorable consequence. Introducing the programs into your machine should not cause any problems, if properly done. However, neither the Central Coast Computer Club nor the Rockland PC Users Group can accept any responsibility for losses to your PC, hardware, data files nor software, resulting from such introduction.]

This article is devoted to helping you get your personal computer ready for a smooth transition into the year 2000. There has been enough publicity given to the "Y2K BUG" in the public news media and in computer oriented magazines. On that count we can skip any long harangues about why, supposedly, the problem came into being or the many dire predictions about what terrible things can be expected. Rather, the orientation is on why you, personally, need or need not be concerned, as a function of how you use your personal computer. It includes matters like how you can check to determine the "Y2K compliance" of your PC and what you can do to get it ready for the next millennium should you find it to be non-compliant.

Initially, and the question that each of us must harbor is, "Will the 'Y2K Bug' affect me?" The answer is relatively simple. If you use your computer only for playing games or for word processing and have no objection to manually entering the date in the heading of each letter, you probably have no need to concern yourself with Y2K compliance. That is, except, of course, if you save the files on your drive and count on the PC assigned file date and time to keep track of when letters were sent, and if you never bring up a letter to revise and re-send it. Also important if you are to be totally unconcerned about the roll over into CY 2000, is the requirement that you have no intention of upgrading your application programs. That's because, if you do try to update a

program your computer likely will not be able to distinguish between the new and older version.

Conversely, if the machine in question is used on the Internet, used to send e-mail, used for electronic banking or communicating with your stock broker, or running programs such as Ouicken, Mind Your Money or Microsoft Money, or preparing your tax return, not being compliant can easily result in problems. It would be bad enough if only your records become messed up. Still, more to be feared, you conceivably could find vourself in litigation with your broker or banker or the Internal Revenue Service because the "date" on which you think a transaction occurred is not that which your computer establishes for the electronic record. Amplifying this latter point, the heading of each message transmitted over the Internet contains a date/time stamp placed there by the sending computer. Because it is impossible to predict how some current or future programmer will chose to use that information it is equally impossible to state that, "It will never cause a real problem."

Therefore, granted that non-compliant computers can cause problems, one has to ask, "Is my relatively new computer non-compliant?" Perhaps that can be better restated as, "I just bought my computer 6 months or 10 months ago. Am I not safe?" The company, Greenwich Mean Time, experts in the Year 2000 problem, tested about 500 different RAM BIOS chips. (The integrated circuit that determines whether a given computer is Y2K compliant, that which starts a computer going when power is applied and transfers date and time information from the battery driven clock in your computer to the operating system... WINDOWS or ??) Of the 500 tested, 11 percent of the 1998 versions, 47 percent of the 1997 versions and 93 percent of the pre-1997 versions failed to roll over properly from 12/31/1999 to 01/01/2000. For a computer purchased in the early half of 1998 there is a good chance that the BIOS in that machine is a 1997 version. Now, ask yourself, "Can I be sure that the hardware in my new computer is Y2K compliant?"

Without belaboring the point further, it's reasonably obvious that any of us who actually exploit the capabilities of a PC should make sure that it's Y2K compliant; we are well advised to test our own computers. Fortunately, running the tests are fairly simple. You can run them yourself or, if

you aren't confident in your ability to control a computer from the "c:\" command prompt, there are commercially available programs to do the job for you. Where the test results are unfavorable, software fixes are generally available and equally easily applied. Some of the tests and fixes are reviewed in the rest of this article some are just identified.

So far, only addressed is the first of three areas of possible deficiencies that make up the Y2K problem; the hardware problem that goes all the way back to the design of your computer. Equally important are inherent date manage- ment problems of the operating system; Windows 3.x or 95 or DOS or IBM's OS/2Warp or Unix. For example, WINDOWS 98 and all of its predecessors have known compliance problems. Thus almost all existing computers are, from the operating system vantage, non-compliant. Again, correcting the problem is easily done and will be discussed.

The third class involves the application programs used; the word processors, spread-sheets, income tax preparation, accounting systems and all other software the use of which involves dates. Because of the great number of programs by various software publishers that fall into this category this article cannot begin to cover even a significant fraction. It behooves the user, on a case by case basis, to go to the publisher to determine whether any given program is compliant. Nevertheless, what can be done in general and how to go about identifying possible problems and taking corrective actions is also addressed.

Finally, a note: in discussing the various potential problem areas in the following sections, various patches and information sources are named and assigned superscript identification and, sometimes, asterisks. The numerical identification marks correlate with Internet addresses, URLs listed at the end of this article from where the identified item can be retrieved.

#### THE HARDWARE PROBLEM:

Hardware non-compliance with Y2K requirements simply questions the ability of a computer's date/time monitoring function to roll smoothly from the end of the twentieth century to the beginning of the twenty first century. To explain the cause of the problem, where there is one, and how it may be circumvented requires a not too technical description of the hardware involved.

Each computer has a small, battery operated circuit, similar to that in your inexpensive digital wristwatch. (If you are a Trivia fan, the circuit standard is the Motorola devised MC145818.) The circuit is generally known as the "RTC" (real time clock) and its output to the computer is a binary coded decimal signal containing year, month, day, hour, minute and second information. Pictured in our more

familiar decimal terms the calendar output takes the form mm/dd/yy. There is no century information.

When a computer is "booted up" another small battery operated circuit called the BIOS (basic input/output system) takes the date/time information from the RTC. In most, but not necessarily all BIOS chips, the remaining two digits of the year data are stored in what is aptly named the "century byte". The BIOS chip adds the century data to the information from the RTC and passes it to the computer's operating system; typically DOS or Windows for most PCs. From the operating system, it is called up by the applications programs.

Where the hardware is not Y2K compliant, during the 12 months after the beginning of the new century when the computer is booted, the BIOS will "read" the RTC and get a year number of 00. It will preface that number with the century byte to yield "1900" and pass that to DOS or Windows. Because of another design quirk, the operating system cannot handle a date less than 1980 so that becomes the year data.

The two important things to remember are that the century data are placed there or changed by a command from the keyboard through the operating system to the BIOS and that the operating system changes any year data before XX80 to XX80, where, of course, the XX represents the century data. When, at the C:\prompt you type in "date" and hit the enter key, the computer responds with the date in the format mm-dd-yyyy and asks that you enter a new date. When you do, that information is picked up by the operating system as "bonafide" information and also passed to the BIOS. The latter removes and stores the century information and passed the two less significant figures to the RTC.

So, if the smooth roll over from 1999 to 2000 were all that is involved the problem could be solved by booting up your computer before midnight on New Year's Eve of 2000, setting the date to 01-01-2000 and hitting the enter key just as your clock strikes midnight; a move, which we shall see, is often all that's needed.

Unfortunately there may be another problem. The year 2000 is a leap year as will be 2004 and 2008, and so on. Somewhere in the computer system that bit of information must be stored and passed to the RTC at the appropriate year and time in the month of February or the computer's date will once again go awry. The user, as part of the system, could input the change but admittedly, it would be the sort of nuisance that we expect the computer to take care of.

(...continued on page 4)



## WANT TO JOIN THE GROUP? HERE'S HOW!

Annual membership in the Rockland PC Users Group includes a subscription to **ComputerConnection**. Bring your completed application and a check payable to RPCUG to a meeting, or mail your application and check to RPCUG at 169 South Main Street, Suite 384, New City, NY 10956-3358. **(PLEASE PRINT ALL INFORMATION)**.

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Student	\$ 15	Techie / Professional
Corporate	\$100	
Renewal: Me	embership number	
	et this newsletter? s	n one)?

change." - FORTRAN manual for Xerox computers

statement is to give manes to primary purpose of the DATA statement is to give names to constants; instead of referring to pi as 5.141592655589795 at every appearance, the variable pi can be given that value with a DATA statement and used instead of the longer form of the constant. This also simplifies modifying constant. This also simplifies modifying the program, should the value of pi

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