

North Texas  **NEWS**

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*North Texas PC Users Group*

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# North Texas PC NEWS

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### Deadline:

All advertising and other material for publication in North Texas PC NEWS must be received by the NEWS staff by the 10th of the month prior to publication. See deadline information below.

### Circulation:

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Member distribution was 1590; remaining copies were distributed to PC user groups around the country, and to advertisers, prospective members and others with common interests.

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## DEADLINE

Copy deadline for October  
North Texas PC NEWS:  
Tuesday September 10th

### Meeting Dates:

September Meeting - 4th Sat. (28th)  
October Meeting - 3rd Sat. (19th)  
November Meeting - 3rd Sat. (16th)  
(tentative)

*Write an article.  
Beat the deadline.*

## Submitting Articles for Publication in North Texas PC NEWS

1. **Article Style.** Type all copy flush left without justification. This includes headings, bylines, and the first line of each paragraph. Place a credit byline (author's name) between the title and first paragraph. Leave a blank line between paragraphs.

2. **Media.** All copy exceeding 10 lines should be submitted via the NTPCUG BBS or on floppy diskette(s) - (5.25" or 3.5" DOS formatted). If you want the disk returned please include a self-addressed return-postage-paid mailer. If you submit your article in hardcopy and expect us to transcribe it, bear in mind that we don't type so well. Most times, hardcopy-only-articles get filed in the Void.

3. **File Formats.** ASCII text files are preferred. Use .TXT extension for ASCII files. If formatting is crucial, Microsoft WORD and WordPerfect files will be accepted. Other word processor file formats may be acceptable but only if the article is accompanied by hardcopy and an ASCII file version of the article. Word processor files create a lot of extraneous work for the editors. If the article can be ASCII-fied, please do so.

3. **Submitting Articles.** You may use one of three methods.

a) **NTPCUG BBS (Preferred).** Log-on to the BBS and select (U)pload from the main menu. Your default file transfer protocol will be displayed. If you want to change your default protocol, use the (P)rofile option. Once you have set the file transfer protocol, select the (A)rticle option from the upload menu. You will be prompted for the filename to upload. Enter the filename (don't use drive or path name). The BBS will prompt you to begin the file transfer. (Refer to your communications software manual for instructions on transferring files.) After the file transfer has been completed, you will be prompted to, "press any key to continue..." You will then be prompted for a one-line description of the file. Enter the description. To exit the Article Upload Menu press ENTER until you get back to the Main Menu. (OPTIONAL - Send a BBS mail message to Douglas McQuaid regarding your submitted article.)

b) **Snail Mail (a.k.a. U.S. Postal Service).** Put the article on a floppy diskette and mail it to: 10429 N. MacArthur, #360, Irving, TX 75063

c) **SneakerNet.** Track down one of the editors at the monthly meeting and give them a diskette with the article on it.

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# Program for September \_\_\_\_\_ Timothy Carmichael \_\_\_\_\_

9:30 AM - 11:00 AM

## Microsoft Corporation

### Visual BASIC for Windows

Visual BASIC is a graphical application development system for Microsoft Windows Graphical Environment Version 3.0 that combines visual design tools with a powerful general-purpose programming language and a Windows .EXE compiler. It provides a simple solution to the complex task of creating real Windows-based software applications. The Visual BASIC programming system will be presented and its capabilities demonstrated in detail. There will be a drawing for free products.

11:00 AM - 11:30 AM

## NTPCUG Business Meeting

\* Tickets for each drawing will be given out from 10 minutes before until 15 minutes after the start-time of the meeting to attending NTPCUG members who show proof of membership.

## Prez Sez

### International APL Convention

Stuart Yarus, Computer Council President is attending the International APL Convention at Stanford University in California. Stuart tells me that is not too late to pre-register for next year's convention to be held in Leningrad in the Soviet Union.

I hear that the city of Leningrad wants to remove the word Lenin from its name. One proposal is to go back to the name Petrograd. However, Stuart assures me that APLgrad has an inside track. You heard it here first!

### First Saturday

Reagan Andrews, an aficionado of First Saturday, reports that there are many good computer "things" being sold at great prices in the hours before sunrise. Unlike our vendors, there is no requirement that all products be computer related. Reagan reports seeing one vendor selling both watermelons and microwave wave guides from the same truck.

### Beta Testing

As many of you know, several of our members including myself participated in the DOS 5.0 Beta test program. Doing Beta testing is a real commitment in time and patience.

Imagine my surprise when I returned from vacation to find the user group post office box overflowing with boxes and packages from a certain vendor.

The first box contained a letter telling me that the vendor was just real sure that I would want to par-

ticipate in testing their new product and would I please sign and return the non-disclosure agreement.

The subsequent boxes contained a flurry of updates to the product accompanied by ever increasingly hostile letters demanding that I return the signed non-disclosure agreement.

I signed and returned it today along with a letter explaining that it would be best to establish that I, or some member, really did have the time and commitment to participate in their beta program before sending all those updates. I also thanked them for all those diskettes that formatted out so nicely.

That will teach me to go on vacation!

### October is computer trade show month.

Fall Comdex is a large computer show held every fall in Las Vegas. This year it will be held from October 21 - 25. Each year, the Association of PC User Groups uses the occasion to hold its annual user group summit meeting. In addition to the summit meeting, there are user group classes and roundtables on the Saturday and Sunday before the show. I have volunteered to put on a one hour class on how to set up a membership database.

If you want to attend, please let me know. The user group usually has lots of free admission passes.

Two weeks before Fall Comdex is Networkworld. Networkworld is held right here in Dallas at the Convention Center. (It got too big for the INFOMART.) Originally Networkworld was a show devoted to Novell networking products. However, it has expanded far beyond Novell or even networking.

Free tickets are a little more difficult to come by but try to attend anyway. Networkworld is like Comdex

without the hassle of trying to get from one show location to another.

### Membership Cards

I sent out 125 renewal letters in August and will be sending out 160 letters in September. When you renew your membership, we generate a membership card which entitles you to participate in the drawings. That card is available at the Information booth near the INFOMART entrance during the next meeting. Please stop by and pick up your card and save us the expense of mailing it.

### Ten Year Anniversaries

Ten years ago last month (August), IBM announced its personal computer. It's hard to believe that it has been ten years. I was one of those people who

bought a PC as soon as they came out. I still use it occasionally, my wife now claims it as her machine. It won't run some of my latest software but it still does a fine job of running WordPerfect and Procomm Plus. I spent many hours at its' keyboard writing and rewriting the thousands of lines of assembly code that make up Professional Basic.

That anniversary precurses another anniversary. On February 20, 1982, the North Texas PC Users Group held its first meeting on the SMU campus. That will be a special date for me because although I wanted to attend, I was out of the country that February and did not get to join until the March meeting.

Starting in September, the Board of Directors will begin to plan our tenth anniversary celebration. If you have any ideas as to what we should do, please contact me or one of the other board members.

Jim Hoisington

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IBM's PERSONAL COMPUTER,  
A publication of the Que Corporation,  
February, 1982

## A book review— and a look back

by Richard S. Terreo

Before I begin, I must apologize for being ten years late with this book review. First there was 8088, PC-DOS, BASICA, VisiCalc, floppy disks, CGA graphics. Then came MS-DOS, clones, 80286, Lotus 123, Turbo Pascal, MS-Windows, hard drives, 80386, EGA then VGA then Super VGA. The list is endless. It took a lot of time just to keep up with all the changes. It came so fast before we all knew it ten years had passed.

But, now it's time to catch up. So the first thing to do is to get to some reviews of all those computer books on the shelf. There have been a great many books written about the IBM PC and the compatible computers that were created as a result of its introduction. However, this book was the first. Every so often it's interesting to review some of the events that have played an important part in changing our lives. This is especially true on an anniversary, such as the tenth, of this kind of event. The introduction of a personal computer by the IBM Corporation certainly falls into that category.

The purpose of the book, IBM's PERSONAL COMPUTER, is to introduce the IBM PC by providing the details behind it. There are chapters on the system unit and keyboard, the system's peripherals, the system software, programming languages, and business software. There are comparisons with the popular microcomputers of the day. Appendices include a listing of the various third party companies providing hardware and software for the IBM PC, the BASIC language commands, and the differences between the PC DOS and CP/M operating system commands.

August 12, 1981, do you remember where you were? This was the day that IBM announced their entry into the personal computer field. Apple computer, whose president Mike Markula said the IBM PC was "the legitimizing of the microcomputer industry", placed full-page ads in the Wall Street Journal that said "Welcome IBM". Ten years ago, microcomputer meant hobby computer. This is apparent by the inclusion of a section in chapter one entitled "Are Personal Computers Tools or Toys?" Many, even then, felt that IBM's introduction of a personal computer was the beginning of the end of this type of thinking.

The book offers an interesting comparison of the IBM PC with the IBM model 360, the most popular commercial computer of the 1960's and 1970's. The new IBM PC, which offered an equal amount of RAM capacity as the model 360-40, is faster at accessing that RAM. Its disks are as much as 200 times faster than the punched cards popular with

the model 360. Although admittedly an unfair comparison it does illustrate how the IBM PC "can match one of the most popular mainframes of only ten years ago".

The system unit, which weighs in at 29 lbs (with two disk drives), includes a system board with five slots for hardware expansion, jacks to attach the keyboard and a cassette recorder for data storage, the power supply, and an audio speaker. The 16-bit 8088 central processing unit has the ability to directly access up to 1 million bytes (megabyte) of memory. Clock speed: 4.77Mhz. Of the 1 megabyte of memory available, 256 thousand bytes (kilobytes) is reserved for the system's Read Only Memory (ROM) of which 64 kilobytes is provided on the system board. This ROM contains the basic Input/Output System and the cassette BASIC interpreter. For Random Access Memory (RAM), which is used to store data and programs, 16 kilobytes is provided on the system board. The RAM can be increased to a total of 256 kilobytes by installing another 32 kilobytes on the system board and an additional 192 kilobytes on optional boards for the expansion slots. Although not available at first, an additional 384 kilobytes of the 1 megabyte of total memory has been reserved for RAM expansion, in the event that anyone would ever need more than 256 kilobytes of RAM for data and programs.

The system unit contains bays for up to two optional disk drives. These drives use 5-1/4 inch single sided/double density floppy diskettes for a capacity of 160 kilobytes each. The keyboard includes 84 keys. In addition to the traditional alphanumeric keys found on a typewriter, there are special computer function keys for Escape, Control, Alternate, Insert, and Delete. To the right of the return key is a dual purpose numeric/cursor keypad. On the left side of the keyboard are ten programmable function keys.

In addition to adding more RAM, the expansion slots are used to connect a monitor, an optional printer, and an optional communications adapter to the system. Even an optional game port card is available. Two choices are provided for adding a monitor. The first is the Monochrome Display adapter (MDA) which also includes a port for connecting a printer. The MDA provides 80x25 or 40x25 text. There is no provision for dot addressable graphics or color with the MDA. An 11.5 inch (diagonal) Monochrome Display is available to connect to the MDA. An 80 character-per-second dot matrix printer is also available.

For color and dot addressable graphics, the Color Graphics Adapter (CGA) is available. In addition to the 80x25 and 40x25 text screens, the CGA offers dot addressable graphics in three modes: 160x100 16 color low-resolution, 320x200 4 color med- resolution,

and 620x200 monochrome high resolution. A color monitor is not available from IBM. The CGA includes ports for connecting either a third party composite color monitor, a third party RGB (red,green,blue) monitor, or a third party RF modulator. The RF modulator allows you to connect most television sets for use as a computer display. The CGA does not provide a printer port like the MDA. It's text modes provide a character box of 8 dots by 8 dots. For this reason the text of the CGA is not as well formed and easy to read as the MDA which provides a character box of 9 dots by 14 dots. It is possible to connect both a monochrome and color display to the system unit at the same time. The PC-DOS "MODE" command is provided to switch between the two.

In the operating system chapter are summaries of the PC-DOS commands. PC-DOS is an implementation of Microsoft Corporation's MS-DOS specifically tailored for the IBM PC. Also in this chapter are a comparison of PC-DOS with CP/M-86 an alternate operating system from Digital Research, a discussion of the EDLIN text editor that is included with PC-DOS, and information on still a third available operating system the UCSD p-System developed at the University of California, San Diego. The chapter on programming languages includes information on the cassette BASIC included in ROM, the advanced BASIC provided with PC-DOS, the Fortran and Pascal Compilers available from IBM, the UCSD Pascal and Fortran, and the Assemblers available for the various operating systems.

Software evaluations are included for EasyWriter, a word processing program; IBM/VisiCalc, a version of the popular spreadsheet for the IBM PC; and IBM/Peachtree, a small business accounting package. Be sure not to miss the charts on pages 22 through 24 which compare the IBM PC to other popular microcomputers such as the Commodore VIC 20, PET, and CBM; the TRS-80 Model III and Color Computer; the Atari 400 and 800; the Ohio Scientific C1P, C4P, and C8P; the Apple II and III; Hewlett Packard 125; and the Zenith Z-80 and Z-90.

We can sometimes better appreciate where we are by taking a look back at where we began. This book certainly documents the beginning of a new way for people to use the power of computers which has changed the computer industry in a fundamental way.

One last note, although I highly recommend this book, it may be difficult to find. I am almost certain that it is probably no longer in print. Your best bet may be your local branch of the Public Library or one of those used book stores.

Richard

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# What is Multimedia?

Part I

by Bernard F. Mayoff

It is hard to hear or read anything about personal computers without encountering the phrase: Multimedia. Everybody is doing it or is going to be doing it. In this series, I will discuss what "it" is and give examples of products that are available today.

Since I am most familiar with IBM products, and IBM probably has more multimedia products available than any other vendor, most of the examples will be IBM examples.

Multimedia, as you have figured out, is not a crisply defined term. Nor is it a new one. The term doesn't even necessarily mean that the computer is interacting with more than one of your senses! Sometimes the term is used when one of your senses is used in multiple ways, such as combining still images with full-motion video. There are several elements that can be involved and a multimedia product always does have more than one of these elements; that is what makes it "multi"-media. We'll examine these potential elements:

- Computer generated graphics
- Images
- Animation
- Audio
- Full motion video
- Touch

Lets start with some background. In 1986 IBM announced the InfowindowO Touchscreen. The Infowindow is used in "interactive video" applications, the forerunner to multimedia. Interactive video means that a full-motion video segment is displayed, usually from a videodisc, and that the user has some way of interacting with the system to control when to show video or which video segment to show. Applications are primarily in education and marketing. One of the first major uses was at the XV Winter Olympic Games in 1987 in Canada where Infowindows were installed in kiosks around the city. By touching the screen a visitor could view maps, get dining and schedule information, hear descriptions in English or French, and see "movie" clips. The Infowindow is a regular PC display with several remarkable additional features. It accepts a signal from a VCR, a videodisc player, a camera, or any other TV signal and displays it on the PC screen in full motion. Text or graphics from the PC can be superimposed on the video and portions of the video can be hidden. The display also has the intelligence to accept instructions from a PC and control a videodisc player, telling the player when to start and

stop, what portion of the disk to show, whether to play at normal, fast, slow or reverse speed, and whether to play the left channel of stereo sound, the right channel, both or neither.

The Infowindow has built in stereo speakers and a headphone jack. It also has a 128 word speech synthesizer to create a limited ability to speak even without a prerecorded videodisc. And the display is touch sensitive, able to tell when you point to something, and what you are pointing to with 1/4" accuracy. The user might never see a keyboard or a mouse.

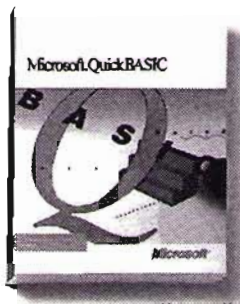
A major breakthrough of the Infowindow was the quality of the video image that it can display. All that was needed was quality video material that was appropriate to the application. We won't go into the economics of video production in this article but it isn't cheap. All of you with a video camera have noticed the difference between your productions and those of the evening news or any TV show (well, almost any TV show). As in all businesses, professional results require professional skills and equipment and the time to employ them. We don't have the patience to watch courseware or other material that isn't done well. For interactive video to be successful, the quality of the video must be as good as we see on TV or at the movies; if it isn't we won't use it. The Infowindow became the standard for interactive video applications and a number of authoring languages for creating courseware/presentations and a library of materials are available from numerous vendors. You can see examples of the Infowindow and courses for adult literacy or teenage substance abuse in the IBM showroom at Infomart. And don't forget, this was available in 1986.

Video isn't easy to modify, whether it is to correct it, add to it, or update it. You may need the same scenery, the same color scheme, the same talent. Videodiscs can't be modified, they must be remade. There are many projects that require full-motion video and where it can be cost-justified, but they are always applications where the payback is very high, or the material has a very long life, or the volume is very, very high. Applications with high volume are what today's developers are looking for.

The Infowindow introduced a system that had almost all of the elements of multimedia combined in one device. Often all of the elements aren't needed or can't be cost-justified. In the following months, we'll explore individual elements, both hardware and software, to gain a greater understanding of each element and when we might need them, and we'll look at current devices to see how to get just those elements we want.

Bernard

♠



Compiling your application is as easy as choosing **Make EXE File**. If you need help on a language keyword, it's only a keystroke away.

# Zip. Bam. Boom.

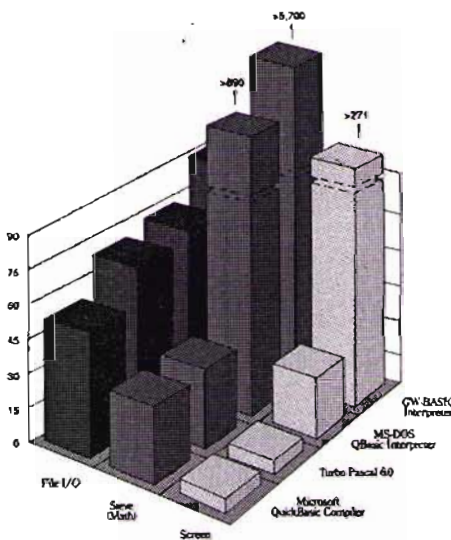
That's how it feels to build a DOS<sup>®</sup> .EXE with the remarkable Microsoft QuickBasic<sup>™</sup> compiler.

To start with, you can zip right along when writing code. Because you'll be working in a fast development environment that includes debugging aids such as watch variables and conditional breakpoints. And a multiple-module, multiple-window, syntax-checking editor. Plus context-sensitive help that answers your questions with a single keystroke or mouse click.

Then, when your app is completely finished, just unleash our high-speed native 80x86 compiler. And bam. You'll have a 100% standalone executable that's very quick. Very powerful, too, since it can access all 640K of DOS memory.

The final result: a fast, sophisticated application that can be distributed without paying any runtime fees.

So call us at (800) 541-1261, Dept. T14, or see your Microsoft dealer. And find out how Microsoft QuickBasic compiler can create your own personal boom in programming.



Benchmark comparison shows the speed of the Microsoft QuickBasic compiler.

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## PROGRAMMER'S TIPS

### Key Features

- High speed native 80x86 compiler
- Max DOS capacity
- Multiple Modules
- Run/Edit/Continue w/o recompiling
- PROCEDURES & FUNCTIONS w/ local variables & parameter passing
- User Definable data types/structures
- SELECT CASE & DO/WHILE
- Line Numbers & GOTO/GOSUB
- Watch Variables

	Microsoft QuickBasic Compiler	MS-DOS QBASIC <sup>®</sup> Interpreter	GW-BASIC <sup>®</sup> Interpreter	Turbo Pascal <sup>®</sup> 6.0
• High speed native 80x86 compiler	Yes	No	No	Yes
• Max DOS capacity	640K	160K	64K	640K
• Multiple Modules	Yes	No	No	Yes
• Run/Edit/Continue w/o recompiling	Yes	Yes	No	No
• PROCEDURES & FUNCTIONS w/ local variables & parameter passing	Yes	Yes	No	Yes
• User Definable data types/structures	Yes	Yes	No	Yes
• SELECT CASE & DO/WHILE	Yes	Yes	No	Yes
• Line Numbers & GOTO/GOSUB	Allowed	Allowed	Required	Allowed
• Watch Variables	Yes	No	No	Yes

*More powerful than QBASIC Interpreter or GW-BASIC, Microsoft QuickBasic is as structured as Pascal, yet surpasses it in productivity.*

- Use the exclusive QuickLib's to add new commands and functions. For instance, specialized math, file I/O, database, and graphics.
- You can use hundreds of 3rd party/shareware libraries. Or make your own QuickLib's by compiling a Microsoft QuickBasic module.

# Microsoft



## PostScript, Ventura and Windows— Lost again in upper ASCII land

by Reagan Andrews

I reviewed Adobe's *TypeAlign* last month. Although I liked the product a lot, I was perplexed in my attempt to reach some of the "upper ASCII" character codes in *Zapf Dingbats*. I promised I'd do a follow up on Adobe's help (after the PC News' deadline passed).

This just isn't something that's easy to explain in a short note.

The good news is that Adobe, and I, figured it out finally. Half of the problem was me. The other half was the first Adobe technician I spoke with.

I kept forgetting about *Windows 3.0's* need for a leading "0" in front of the three-digit ASCII character code and was only using the three-digit code itself. That goes back to the early PC days. (Will explain later, in some detail.)

The second Adobe technician was much more helpful. Reminded me I had to add the leading "0" and gave the page reference (567) in the *Windows 3.0 Users Guide* explaining the procedure. Did I feel stupid.

That wasn't the only problem, though. Adobe includes Character Access Charts identifying each character or symbol by their key cap or upper ASCII character code — one for Windows' ANSI character/symbol sets, and one for *Ventura Publisher* (GEM) sets. These are interesting, printed with the Windows set on one side, and the Ventura set on the other side of the page.

This led to some confusion.

First Adobe technician informed me (incorrectly) that the pages were designed to be cut in half, so that each chart would be 5.5" X 8.5" with front and back portions. He also didn't know about Windows' leading "0" convention. The second technician cleared all this up and (correctly) reported that the full ASCII character code sets were on just one side of the Adobe-supplied charts. Worked fine, then.

The procedure is simple. Hold down the [Alt] key as you enter 0 + the three-digit ASCII character code, then release the [Alt] key. Sequence in Windows is:

[Alt] + 0 + 168 produces this — ♣

Became "curiouser and curiouser". Ventura (GEM) running under Windows 3.0 retained the GEM version three-digit ASCII character code (136), but it also recognized the same codes plus the leading "0" as well. Ventura 3.0 (Windows) only worked with the

leading "0" convention as did *Word for Windows 1.1* and other Windows applications.

### Upper ASCII code confusion deeply rooted in PC history

Back in the earliest "good old days" of computing, before PC's and even before widespread use of monitors, most computers were operated via Teletype consoles. These looked like very large electric typewriters with both keyboard and printer combined.

Early machines were slow, 110 - 150 Baud was typical, only had uppercase letters, and tended to be very, very noisy.

The operator would send a command to the computer and wait for the computer's response to print out on the console. (There was one major benefit to this style of operation, though. It made later debugging much easier since everything was there on the printout.)

Remember that mainframe computers of the 50's and 60's had much less "power" than typical PC's boast today. Memory and mass storage were minimal and data transmission rates dictated that each byte of code passed had to do as much work as possible. Also, since there were a number of manufacturers, some standard(s) would be necessary so that one site or machine could interface with others.

The answer was the ASCII 8-bit character set. ASCII is the American Standard Code for Information Interchange, and the original set contained 128 character codes from 0 - 127. The first 32 character codes still carry the heritage of the Teletype with (now) printer control and transmission control codes. Best examples are 010 - Line Feed, 013 - Carriage Return, and 012 - Form Feed.

### Big Blue adds to confusion

IBM probably contributed the most (at time of this writing) widely used "super set" based on the original ASCII set with introduction of the IBM-PC in 1981. IBM's set included a number of graphical characters which allowed construction of boxes, borders, etc., and which also allowed symbolic screen representation of control and other non-printing characters (the funny-faces, musical notes, etc.)

Windows 3.0 utilizes another "super set" of the ASCII set called ANSI (American National Standards Institute) character set which includes the original ASCII 128 codes and adds an additional (upper

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*Selected* **SIG** Happenings

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News and meeting notes of Special Interest Groups

*(Material for this column should be sent to Andy Oliver, SIG Coordination, before the 10th day of each month)*

### Assembler SIG

Our August meeting featured a discussion by Frank Cavallito of recursion techniques in Assembler using, as a model, a program to print a directory tree. The possibility of doing a SIG project was raised and discussed again. We have a scheduled speaker for October, Andrew Chalk, who will discuss Serial Communications. This leaves September open (not to mention other available dates). We are looking for both suggestions for topics and volunteers for presentations.

As usual, check the BBS before the scheduled meeting dates for any last minute changes.

Frank D. Cavallito

### BASIC Programming SIG

The BASIC Programming SIG has been incommunicado in the SIG Happenings column, but we have been very active in our meetings. We have been discussing a variety of issues each month, most related to our ongoing development project. Travel conflicts and a new business for Kent have taken us off

the track considerably. Problems with getting source code distributed has also put us behind schedule.

In August, we will re-attempt our two-hour special session, the first hour devoted to character-mode BASIC (QuickBASIC and PDS). We hope to put ourselves back in synch with our previously published 1991 schedule, and we'll look at the Contact Manager program in total. We will also talk about Q-Basic, the newest BASIC interpreter included with DOS 5.0, and its similarities and differences with QuickBASIC and PDS.

In the second hour, we'll be looking at Microsoft's newest BASIC language product - Visual Basic. If you haven't seen or heard about Visual Basic, you'll want to be in attendance. Windows programming has never been easier! As a beta tester for Visual Basic, Kent will share with us some of the trials and successes of Visual Basic as well as building a complete application in Visual Basic during the session.

September will feature the complete Personal Calendar system and how it builds on the material from the Contact Manager. October and November will

be devoted to recapping the previous months and to building the menu interface for the complete system.

We hope to see you at all of our meetings.

Kent Kingery & Steve Dixon

### Communications SIG

At the July meeting, we began soliciting expertise from among our membership. Turns out we have a wealth of knowledge about a variety of communications packages, on-line services, etc. So, our August meeting centered on a demonstration of ProComm Plus, one of the more comprehensive and better known software packages available.

In September, we plan to look at the CompuServe on-line system, a pay as you go service containing a wealth of information, software, etc. In addition, if all goes well, we'll examine yet another communications software package - Telix.

In October, plans are to demo Bitcom software.

Do you have a favorite communications package, BBS or on-line service? Show us! Just contact Bill Green or myself, and we'll make you a Comm SIG star! Remember, we are an organization of volunteers, and none of us are experts on EVERYTHING. So, please share your knowledge.

See you at the Comm SIG!!

Doug Gorrie

### C++ SIG

In August, we discussed a variety of topics. Tom Cook got us started with a follow up of his July presentation. He continued his discussion of virtual vs.

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### ASCII continued

ASCII) 128 character codes from 128 - 255 which promises to become the "standard" ASCII super set.

Adoption of a real, single "standard" for screens and printers may only be a dream, though.

Currently, there are many, many available character/symbol sets based (loosely) on the ASCII set. All tend to adhere to the universal "lower ASCII codes", but diverge widely in implementation of the remaining 128, "upper ASCII codes." Such is the case of the Ventura Publisher (GEM) sets, the sets included with the Hewlett-Packard LaserJet series of printers, "na-

tive" fonts included with many dot-matrix printers, etc.

Each of the "standards" above features somewhat different upper ASCII codes for similar characters/symbols. The user will need character access charts for each of the sets available on their system/printer. It will also help to keep documentation handy - and remember to use it.

Forcing publishers and manufacturers into a single (ANSI) system may be one of Windows' more important contributions.

Reagan

a

non-virtual functions, and showed some examples of the type of assembly language code that is generated by each. Kent Cobb returned to a discussion of the project (finally!) with a review of the text\_window and text\_line classes, and an exploration of how well C++ lives up to its claims of reusability. We expect to continue this discussion in September, and start talking about the next major project phase, data input.

Kent Cobb and Tom Cook

## DOS SIG

This should be fun. What does Novell - DRI have in store for DOS users? Come to think of it, what does Microsoft have in store for DOS users? Or, IBM/Apple? And, where will OS/2 2.0 (if ever released in full by IBM) fit into the OS picture in the short run?

Jim Holstington, NTPCUG past and present President, knows the OS questions above won't be have simple answers for most of us. Major concern is "splitting" PC users into various OS camps and this trend's impact on both hardware and software (and their prices) in the future.

Are the major DOS vendors responding to real users' concerns, or are they, as Reagan is beginning to suspect, merely fronts for BIOS upgrade vendors taking advantage of the increasingly complex "typical" PC's most of us are using now. (I do love a really good conspiracy rumor, even if I have to start it myself.)

DOS 5.0 is settling in and users are becoming acquainted with its installation and setup idiosyncrasies to the point that horror stories are seldom being heard late at night. Real issue now is who should update to 5.0? Biggest questions will obviously be for owners of PC/XT-style machines. Easiest answers hinge on hard disk size and current DOS version installed on the PC.

Answers will vary, and will be explored at the September DOS SIG Meeting. We'll conclude the meeting with the usual, unusual Q & A period focused on SIG members' questions and problems with current DOS installations and their application software.

Reagan Andrews

## General Genealogy SIG

There were 61 present for 13 July meeting. The General Genealogy SIG always meets in Room 7001 from 9 to 10 a.m. The July program was on "Family Reunions" and was presented by Al Sanford.

The family reunion program generated considerable interest and several people asked for a follow-up sometime in the

future. Al Sanford started out by saying he had been secretary of a reunion for the last eight years but had never attended a family reunion of his own kin (Sanford on father side and Raleigh on the mother side). He is related to the reunions because of marriage. His wife is a Bledsoe and there are at least three major Bledsoe groups in the Dallas area each of which meet every year. Each of these reunions is an off-shoot of George Bledsoe who came to America from England in 1650. Each reunion has different meeting rules. The oldest (has been meeting yearly for over 50 years) meets on the same date (Sunday) and location from 11 am to 2 pm after a fellowship, dinner, and business meeting. The second reunion broke off from the first and has been meeting for two years. They rotate the meeting place to the vicinity of each member and meet from noon Saturday through noon Sunday (with some RV's staying from Friday night through Sunday night). The third reunion has been meeting a number of years at the same location and on the same Saturday from 11 to 2 pm with a fellowship dinner and meeting. This year they are meeting Friday and Saturday at a dude ranch owned by one of the Bledsoe descendants.

The secretary role for these reunions requires using a computer for two reasons: (1) to keep an up to date mailing list and publish newsletters and (2) to keep a genealogy update using descendants charts, family group sheets, etc. and eventually publishing a book.

August 24 is the next meeting. The first 15 minutes or so of each of the next few months will be devoted to teaching MS DOS basic principals to help genealogy people better understand how to organize and troubleshoot their genealogy data.

GENTEX 92 is coming next January. Come to the Genealogy SIG on Super Saturdays and keep up to date on GEN-TEX 92.

Al Sanford

## PAF SIG

The Personal Ancestral File (PAF) SIG met in Room 7001 on July 13, from 10 to 11 a.m. Jun 15 with 41 present. PAF is a \$35 software genealogy program good for beginners or experts with versions available for IBM compatible or Macintosh computers.

The program was "the use of DOS in PAF". An understanding of the DOS principles is necessary to aid in the troubleshooting of PAF problems. The DOS used in IBM compatible computers is called MS-DOS. The MS stands for Microsoft, the company who publishes the DOS. The most commonly used versions are DOS 2.2, DOS 3.3,

DOS 4.1, and DOS 5.0. Each higher number represents an upgrade to the DOS. DOS stands for Disk Operating System and the basic software used to bootup and run the computer. The operation of the MS-DOS is keyed to the disk drives used in the computer system. If a computer has only one disk drive (called a floppy disk drive) then it is the A drive. If the computer has two floppy disk drives, then there is an A and a B drive. If one hard disk is added then it is the C drive. With a one or two drive system, the computer must always be "booted up" on the A drive. If one or more hard disks is used then the computer can boot up on the C disk drive. The disks can be further divided into directories and sub-directories with the command MD (for Make Directory). It is imperative that the PAF user know what directories are used for (1) the PAF operational software, (2) the PAF data files, and (3) the PAF "scratch" or "temporary" files (such as GEDCOM files).

Upgrades to the PAF 2.2 programs will be available at the August 24 meeting. Al Sanford, Garland, 214-278-7888; Tom Bennett, Irving, 214-252-7187; Travis Morris, Cleburne, 817-645-0617, or Joe Waldrop, N. Richland Hills, 817-498-5856 have "repair" disks that can be used to reorganize a PAF database that has gone awry. Please call the one nearest you when you experience a problem.

Al Sanford

## LOTUS SIG

If you missed the August meeting, you missed a few major events. First of all, I could walk without crutches, cast, or cane. What can I say, I am doing better. It is nice to be able to walk - although I am very slow.

The August meeting also included the introduction of Betty Brooks as a new Assistant SIG Leader of the Lotus SIG. Betty comes to the NTPCUG from the Houston Area League of PC Users or HAL, where she has been the Lotus SIG Leader for 6+ years. She also attended Lotus Week, and all I can say is that everywhere we turned, someone knew her. Betty is an outstanding addition to our user group. And since my wife and I are expecting a baby in late September, her Lotus expertise will be put to good use quickly. Please join in welcoming Betty to the group.

The August meeting included a demonstration of two packages I received after attending Lotus Week. The first package was What's Best which is a spreadsheet optimization program. This program determines the optimal inputs to achieve certain goals in your spreadsheet models. There is a demonstration disk in the DOM collection and a review elsewhere in this

issue. The second package was ICE from Baler software. ICE provides the capabilities of Baler, the spreadsheet compiler, but as an add-in. A demonstration disk is also available in the DOM library and a review is elsewhere in this newsletter.

The September meeting will be led by Betty Brooks. Betty will be demonstrating a spreadsheet application that she is developing for a client. The application is FAST-EST which develops estimates. Through this application Betty will be demonstrating several techniques that she uses when developing models. I will not be at the September meeting since it is on the 28th of September and my wife's due date is the 30th. If the baby is early, I will try to send some info to the meeting.

The Lotus SIG always takes time to answer questions users are having of Lotus products. If you have a question, come on by and ask - we will be glad to help.

Mark Gruner

### Personal Users SIG

This Special Interest Group (SIG) is for you!... If you consider yourself any of the following: ... a novice... a new PC owner... a beginner with PC's... a person curious about PC's... a soon-to-be PC owner... a personal (versus professional) PC user... or... a PC user needing to review some "fundamentals".

We offer sixteen (16) individual, stand-alone classes covering the "fundamentals of personal computers." Four classes are offered at each monthly meeting of the North Texas PC Users Group (2nd or 3rd Saturday on the 7th floor of the Infomart in Dallas). After four monthly meetings (covering four classes each), the entire 16-class curriculum is begun again. The classes are presented in numerical sequence, but you can take them in any sequence convenient to your personal schedule.

The classes always start each month at 9:00 AM, 10:00 AM, 12:00 Noon, and 1:00 pm. Since each class is a "stand-alone"... i.e. self-contained and NOT requiring any other classes as prerequisites... you can begin attending at any time convenient to your other priorities and schedule. In addition to receiving informative instruction from people very knowledgeable in their field and class topic, you also receive a set of handout notes for each class, to allow you later review. There are no homework assignments, no pressures, no tests, and no dumb questions. You don't even have to be a member of the NTPCUG before you attend... **ALTHOUGH YOUR ARE ENCOURAGED TO JOIN NTPCUG AND VOLUNTEER YOUR TALENTS.**

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Join us as we learn and review "THE FUNDAMENTALS."

The four classes for SEPTEMBER 1991 will be:

9:00 am	Class 1.8	Start Up
10:00 am	Class 2.3	Diskette Sizes & Formatting Each
12:00 Noon	Class 3.3	Copying & Backing Up Files
1:00 pm	Class 4.3	Personal Computer Hardware

Bob Presley

### Advanced Programmers SIG

This month the SIG continued last month's intense discussion of protected mode versus real mode programming. Again the merits of protected mode interfaces like DPMI and DOS extenders were enthroned and overthrown.

The SIG members were so involved that when INFOMART turned out the lights and locked the doors, the group adjourned to the parking garage adjacent to the building. The usually vocal crowd was so noisy that it took them a while to notice the sound of the saxophone music emanating from the rear of the top floor of the garage.

As we ran up the ramp, we could see a fellow playing his instrument in the twilight of the evening. As we approached him, he explained that he had heard our discussions and he said that he would like to add his opinion. The stranger, who spoke with a slight Gallic accent, said that Real Mode programming would work as long as you used the right subroutines for memory management.

With that, he jumped into his Peugeot and vroomed down the ramp of the parking garage into the twilight.

Jim Hoisington

### Unix SIG

Well, my recent attempts at foretelling the future have been complete disasters. So I know I am on dangerous ground when I make predictions about happened at the August meeting. Consequently, I will not even make a guess. Instead I will move on to what we have planned for September. (I have definitely planned this. Whether it comes off is quite another matter).

At the September meeting, I plan to give a presentation on how to cus-

tomize the configuration of your terminal. This should be an interesting topic and many of you have mentioned that you would like to see a session devoted to this.

The UNIX Operating System was designed to be flexible and support many different types of hardware. UNIX's method of handling terminal configurations demonstrates this. By making appropriate entries in a few files you can quickly setup your system to support a new terminal. You can also make entries in .login or .profile to have your system assume you are using a certain terminal when you login on a certain line. Or you could have it prompt you for the correct terminal type if you are not sure which type that line is (as might be the case when using a modem). You can also change the way the terminal handles certain things. Don't like your editor beeping at you when you make a mistake? You can change that to a flash instead.

Doug Scott

### Word SIG

What version of Microsoft Word are you using? Is it the latest in its particular series? September's Word SIG Meeting will explore some of the ins and outs of Microsoft's updating and the resulting confusion this has caused in the past couple of years.

Right now, there are three distinct MS Word products: Word for Windows, Word 5.5 and Word 5.0 for DOS. Each has its strengths and weaknesses, and each will appeal to different users as a result.

Even though many Word 5.0 users may be unwilling to make the jump to one of the two latest versions from their familiar and comfortable current version, they should consider benefits to be gained from moving up to the top of their series. Most current versions of each at time of this writing are Word for Windows 1.1A, Word 5.5A for DOS and Word 5.0B for DOS. (No, you won't find the x.xxX or x.xxY on the box.)

So far, printer drivers written for Word 5.5 continue to work well with Word 5.0. Exception to this is the problem that almost everyone has had getting Word's PostScript drivers together with NEC's LC-890 PostScript printers. We'll discuss work-arounds that may help in this case and others at the September Word SIG Meeting.

Reagan Andrews

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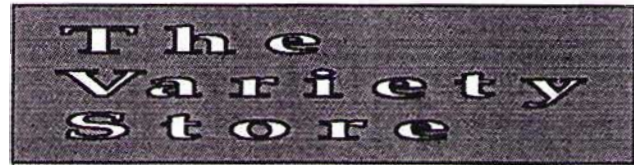
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by Reagan Andrews, Ph.D.

(A personal view of new or unusual hardware, software, and applications for IBM small computers and compatibles.)

## PC Acquisition Fever Continues — Borland woos A-T, Novell takes DRI, and WordPerfect spreads FUD on the prairie

If Microsoft wasn't nervous about the IBM - Apple deal last month, the Novell - DRI merger coupled with Borland's grabbing Ashton-Tate must have caused some high-Richter tremors in Redmond, WA. But, what does it all mean?

Media speculation is running wild about the impact of all these events in past months. Read that as pundits pushing hypothesized strategic alliances (all aimed at Microsoft, of course), whispered plots in the dead of night, and many, many confused and frustrated MIS types trying to plot future buying/implementation courses for their companies.

Last month, I predicted there would be a big surge in Valium sales as a result. Think I'll include Xanax, Thorazine, and Johnnie Walker Red this month as products to watch as the confusion spreads and thickens.

### Novell acquires DRI — IBM switch to DR DOS?

Novell, dominant network software publisher, reported they had reached an agreement to acquire Digital Research, Inc. (DRI), publisher of DR DOS, Microsoft's only real competition in the DOS arena at this time. DRI's DR DOS has earned high praise in the last six months as a viable replacement for MS-DOS at substantially lower cost.

DRI was publisher of CP/M, dominant microcomputer OS (operating system) prior to IBM's introduction of the IBM-PC and PC-DOS in 1981. DRI also designed GEM, an elegant, but very fast GUI that never really caught on except as platform for Ventura Publisher.

Novell would like their own, captive, DOS according to media sources who speculate that IBM might be quite interested in a non-Microsoft DOS for lower-end PC's in the future. Novell and IBM have moved closer together in the last several months, so such speculation may be based on more than fantasy.

Question is, could IBM keep their hands off the code of a good OS?

### Borland tackles A-T In giant database grab

At the other end of the spectrum, Borland made significant progress in their effort to acquire Ashton-Tate. Goal was obviously a very large installed dBASE customer base

for future Borland products. Gravy may be A-T's other products, including the languishing *MultiMate* word processor line.

Borland has been rumored to be "sitting on" a very fast dBASE compiler for some time and buying A-T would be a very good way of avoiding almost certain litigation on release of the new compiler. Also, Borland does have the programming muscles to rework and revitalize A-T's ailing dBASE IV.

On the other hand, *Paradox* has made serious inroads into the former dBASE-dominated database market. How Borland will handle the two competing product lines in the future will be very interesting.

Other A-T products may get a boost as well, including once-powerful *MultiMate*. Borland would like a good word processor and is rapidly acquiring Windows programming skills. *MultiMate* coupled with this may provide an entry into the Windows word processing arena as well as a mature (antique) DOS-level word processing product.

### An ode to FUD — WordPerfect Announces WP for Windows Beta

This simply doesn't "square" with WordPerfect's comments at last year's Fall Comdex. Received a copy of the Fall 1991 issue of the *WordPerfect Report*, describing WP for Windows' ▶

entry into Beta testing in July, 1991.

WordPerfect says *WordPerfect for Windows* was expected to enter Beta testing in July, and "the Beta and Beta II testing phase to be completed in two or three months." Major media announced WP for Windows' Beta testing in early August.

Fall Comdex comes in October this year. WordPerfect people at last year's Fall Comdex (November) said the product they showed was "close to shipping." But, the *WordPerfect Report* said the new Windows WP wasn't "code complete" until April 26, 1991. I must be missing some vital link here, or simply don't understand the Beta process.

There's a clue here, though. "Two or three months" isn't really adequate for thorough Beta testing of such a complex, complicated program. Best recent example is Microsoft's massive, seven-month Beta test of *DOS 5.0*.

WordPerfect has already begun a massive advertising campaign for the new Windows word processor as if it was already shipping.

Is it possible that entry of *Describe* for Windows, announcement that *Word for Windows 2.0* will be released late this year, and *Ami Professional 2.0's* expected shipping have WordPerfect resorting to IBM's FUD (Fear, Uncertainty and Doubt) marketing strategy?

#### Speaking of Beta's OS/2 2.0 called "dull"

IBM does it differently. Media sources are already beginning to pan *OS/2 2.0* as somewhat "dull" since so many of the features promised for the new *OS/2* are "missing" from the

Beta versions distributed for testing.

The Beta testing process is "drawing fire" as well. IBM appears to be distributing Beta versions primarily to its largest sites and ignoring the smaller sites and developers. Aside from being excluded on the basis of perceived site-size discrimination, the smaller developers are claiming the IBM process will fail to detect the problems that will affect smaller installations.

In addition to the complaints above, quoted in *InfoWorld*, numerous speculations about *OS/2 2.0's* ability to run Windows applications are being spread in the media. This might be somewhat problematic for IBM who has boasted that *OS/2 2.0* will "run Windows (applications) better than Windows."

All the above may point to delivery delays. IBM was hinting that *OS/2 2.0* would ship in September, but the media coverage would indicate that may be somewhat optimistic. IBM might ship *OS/2 2.0* without the Windows module(s), then offer the Windows modules at some later date, and at additional cost to the user.

Don't think that would sit too well with a user community expecting a super *OS/2 2.0*, but receiving a pared down product indistinguishable from *OS/2 1.3*. Don't know - IBM's done it before.

#### Anything you can make, I can crash publicly - Microsoft, IBM at play

IBM and Microsoft officers have discovered a fun, new, game. It's called make (insert *OS/2* or Windows 3.0 here, depending on the respective officer in-

involved) crash in front of large audiences.

Microsoft's Steve Ballmer may have begun the game by using a specially-written routine to make *OS/2* lock-up according to *PC Week's* July 29, 1991 issue. Some media sources reply that the Microsoft display of *OS/2* muscle followed an earlier display by IBM-er Lee Reiswig purposely bringing Windows to its knees (UAE?) during an *OS/2* press tour.

That's not new - NTPCUG members get to see this with some frequency at selected product demonstrations during regular meetings. Don't think these are on purpose, though.

What's new is that both IBM and Microsoft are using officers to do the public deed, and the crashes are on purpose. Although it's amusing the first time, maybe even the second time, such behavior really belongs in the domain of the backyard sandbox.

#### Back to Betas - or lack thereof Symantec, Central Point bugs

At first blush, Symantec's new *Norton Utilities 6.0* and Central Point's new *PC Tools 7.0* got rave reviews in the media. Both were highly praised for their new features and improved interfaces.

That's fading rapidly as bug reports arrive on both products in ever increasing numbers. Both of these super tool kits are items the user will choose first to trouble shoot system problems, and the thought that the tools may be the source of the problem(s) is somewhat frightening.

These are big, multi-module products that were largely rewritten for these enhanced and improved versions. Both

## WHAT'S BEST

A Review  
by Mark H. Gruner

What's Best determines the optimal solution of a spreadsheet based on user defined inputs, constraints, and other parameters and is published by Lindo Systems. I first heard of the product through an article in PC Week and later met Mark Wiley of Lindo Systems at Lotus Week in June 1991. Mark Wiley sent me an evaluation copy of the personal version for this review. The personal version handles 400 variables, 200 constraints, requires 256K of memory, and retails for \$149.

What's Best is an add-in for 1-2-3 version 2.01 and higher, Symphony version 1.1 and higher, or Quattro 2.0 and higher. All tests were performed on 1-2-3 version 2.3. Installation was quite simple once I found the instructions in Appendix C (a curious place). All that was needed was to start the WBINST program and answer a few questions. One interesting aspect of What's Best is you start 1-2-3 by entering WB at the DOS prompt. WB loads part of What's Best into memory, then loads 1-2-3. Once the files were copied and 1-2-3 started, I had to setup two add-ins to automatically load when 1-2-3 was started. The two add-ins were WB.ADN and SUMPROD.ADN. WB.ADN is the What's Best add-in while SUMPROD.ADN adds a new function to 1-2-3 which often makes formulas in optimization models much simpler.

Chapter 1 of the manual walks the user through a simple optimization spreadsheet. I followed the instructions and then optimized the model. The instructions indicated that the model would reappear, but it did not. After a little investigation, I came across the problem. I use an AUTO123.WK1 as an autoloading worksheet to load a macro library. This file presented some difficulty for What's Best because it stores the pre-optimized spreadsheet as WBTO.WK1, runs the optimization add-in, stores the optimized spreadsheet as WBFR.WK1, restarts 1-2-3, and tries to use WBFR.WK1 as an autoloading worksheet. However, AUTO123.WK1 overrides retrieving WBFR.WK1. I could not find this information in the What's Best manual. I disabled my autoloading worksheet but found the solution undesirable. It would have been more convenient and compatible if the equivalent of the File Retrieve command were used instead of reloading 1-2-3.

What's Best relies on linear programming to determine the optimal solution of spreadsheets. Consequently, all optimized formulas in a spreadsheet must be linear. A spreadsheet can have non-linear formulas, but these areas should generally be omitted from the optimization. Essentially linear equations include two cells on two different rows. For instance, the formula  $+A1*B1$  is a linear equation while  $+A1*A2$  is not.

Linear programming is a technique that uses straight lines to define the parameters of a problem. While this type of optimization works great for many situations, it does not work well on non-linear functions. Linear programming is generally used to allocate limited resources for maximum effectiveness. Ex-

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## The Variety Store continued

are as big, if not bigger than, DOS 5.0, and both are certainly as complex. Question here concerns adequacy of each product's Beta testing prior to release.

Speed with which major bugs have been reported for each so quickly after release suggests that answer is "Not adequate."

Is this just style, or  
Is there substance  
In all these Intel 486's

Just how many different 486  
chips are there in the Intel line?

I've lost count of all the permutations of the basic 486 theme that have been announced over the last month or so.

This month's offering is five (5) additional chips, two "SX" versions and three "dual-speed" "DX" versions. The latter are the most interesting of the group with internal speeds twice that of the external bus. There are 40MHz-20MHz, 50MHz-25MHz and 66MHz-33MHz CPU chips en route to users "real soon now". Intel

also announced a new twist — plans to sell chip upgrades directly to users — which ought to really make them popular with their systems customers.

Idea of the dual-speed chips seems promising and may have a lot to offer users with "CPU-bound" machines. Real benefit may be subjective — the user's warm feelings knowing there's a 66MHz monster loafing under the hood.

Reagan ■



amples include determining the production mix based on current inventory to produce the maximum profit, or scheduling staffing needs at a minimal cost.

The functions supported by What's Best include AVG, SUM, NPV, SUMPRODUCT (the add-in), ABS, COS, EXP, FALSE, IF, INT, LN, LOG, MOD, NPV, PI, SIN, SQR, TAN, and TRUE. There are work-arounds for many of the other functions through other capabilities of What's Best, but be prepared to make some changes in your modelling techniques.

What's Best requires several steps to optimize a spreadsheet. Step 1 is to specify constraints. To identify constraints, invoke to add-in and press the <, >, or = key to specify less than, greater than, or equal as constraints. There must be three blank columns next to the items that identify constraints. Step 2 is to identify those cells that can be adjustable during the optimization. Step 3 specifies the cell to maximize or minimize. And the final step is to optimize the spreadsheet. The file WBTO.WK1 is saved, the add-in calculates the optimal solution, the file WBFR.WK1 is saved, 1-2-3 is reloaded, and WBFR.WK1 is retrieved to show the optimized results. If the optimization was unsuccessful, a file indicating errors and other comments will be displayed. The best thing to do at this point is to print the comments and try to re-optimize the model later. One problem I encountered is only one non-linear equation is discovered per optimization which is rather frustrating if you have several non-linear equations in your model that need to be modified or omitted before the optimization can be completed.

The examples included with the program were very helpful. The manual also includes several tips and tricks to modify current spreadsheets to use the linear programming capabilities of What's Best. As a financial analyst, I usually work with business plans and projections. Most of the applications I create are not resource allocations problems and use a number of non-supported functions. I was hoping to find this program more suitable to different types of optimizations like goal seeking to determine the revenue needed to generate an IRR of 18%. Also, many of the financial functions that I rely on daily are not supported by What's Best.

My next test was to develop my own resource allocation model. I created an inventory model to produce maximum profits. The model used many more inputs than many of the samples included. Before optimizing the spreadsheet with What's Best, I tried to find the optimal solution on my own. Then I ran What's Best for the optimal solution. The solution from What's Best was higher than I was able to come up with on my own. It is this type of result that is critical to businesses. The businesses that can optimize there resources outperform their competition.

I was impressed with the ability of What's Best to determine optimal solutions. The technique of reloading 1-2-3 and inability of using autoloading spreadsheets are minor inconvenience for those who need the optimization What's Best provides. However, be prepared to modify some of your modeling techniques to use What's Best.

Lindo Systems can be reached at PO Box 148231, Chicago, IL, 60614. Their phone number is (800) 441-BEST, or (312) 871-2524, or FAX (312) 871-1777.

Mark

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## ICE

A review  
by Mark H. Gruner

Ice is a 1-2-3 release 2.2 or 2.3 add-in that turns 1-2-3 into a better, more powerful, and more secure application development environment. Ice is published by Baler Software which also published the 1-2-3 spreadsheet compiler named Baler. Ice essentially brings the capabilities of Baler into the 1-2-3 spreadsheet environment as an add-in. Ice adds better security, screen and interface customization, and a host of other capabilities. All this and a run time engine so that others can use your "Iced" applications. Ice brings these capabilities by adding over 70 macro commands to 1-2-3. Ice is also compatible with Baler's spreadsheet compiler - Baler.

Ron Reimann, President of Baler Software, was at Lotus Week in June 1991 where I was finally able to meet him in person. Ron was demonstrating Ice, giving away pre-release copies of Ice, passing out Ice T-shirts, and Baler hats. I was given one of each give-away. Later, I received a copy of the shipped product which is the version I reviewed. I have spoken to Ron and Nancy Reimann on several occasions by phone concerning their spreadsheet compiler and Ice, and it was nice to speak with them at Lotus Week.

Installing Ice with 1-2-3 version 2.3 was straight forward. I started the SETUP program, indicated the directories for the 1-2-3 program, Ice program and sample files, and the source disk. The next step was to attach two add-ins to 1-2-3 for Ice to work properly. The two add-ins are CORE.ADN and ICE.ADN in that order. The order is important. These two add-ins will take up approximately 80K of conventional memory.

I also eliminated both the Wysiwyg and Macro Manager add-ins from automatically attaching to 1-2-

3. I eliminated Wysiwyg since it uses 104K of conventional memory. While Ice is compatible with Wysiwyg, the 184K of memory for both Ice and Wysiwyg was a bit too much for my taste. The Ice documentation also includes several tips for using the two add-ins together.

Ice, however, is not compatible with the Macro Manager add-in. This incompatibility exists because 1-2-3's macro commands are hard-coded into the add-in. Because the macro words are hard-coded, the additional macro commands in Ice are not supported. At Lotus Week, several people (including myself) were asking Lotus about making the Macro Manager add-in so that it would be compatible with Ice.

After installation, my display was slightly changed. Release 2.3 automatically supports a mouse, uses white as the background color for the worksheet area, and uses blue to indicate the row and column of the cell pointer. After Ice was installed, the mouse pointer was not visible, black was the background color for the worksheet area, and the blue row and column indicators were not visible. The colors changes are rather minor. The mouse was a minor inconvenience since I do not rely on it except for Wysiwyg. And since I did not attach the Wysiwyg add-in, I really did not need the mouse activated. Another change to my configuration was that autoexecuting macros were turned off. Ice uses the range name \ as an autoexecuting macro.

Working through the tutorial of Ice is almost a necessity, because all of the capabilities of Ice are provided through 70 macro commands. Therefore, to take full advantage of Ice, you will need to write macros. Hopefully, every 1-2-3 user writes macros. Anyone who says macros are only for the power users is wrong - they simply do not want you to know something that he/she does.

What are the primary advantages of Ice. The biggest advantage I personally see is better security, although Ron and others might disagree. Consider an invoicing application that you want your clerical staff to use. In a 1-2-3 model, they might inadvertently delete rows in your inventory database, change formulas, or create other problems. Ice could secure this application so that none of these problems would happen. The result is a cleaner and more secure model. Further, you and your staff would feel better about the integrity of the spreadsheet and sleep better at night.

One type of security available in Ice includes eliminating certain menu commands of 1-2-3 through the (DELMENU) macro command. DELMENU uses a table of menu commands to eliminate. Other security features include encrypting the file, restricting the cell pointer to a set of cells. Another security feature is data input verification. All that is needed is the (TEMPLATETABLE) macro command and the

user can only enter the type of information specified in the table. These capabilities make it much simpler to make a secure application. Trying to make a normal 1-2-3 application as secure as Ice can, would require more macro code than one can imagine.

Ice also has an advantage over Baler which is that Ice supports other add-ins. Ice is compatible with @BASE (Personics), SeeMore (Personics), Sideways (Funk), Viewer (Lotus), Auditor (Lotus) and others. The ability to use the security of Ice as well as your favorite add-ins can be a real plus - particularly if you are a 1-2-3 consultant or have to have your favorite add-in.

Ice can also change the 1-2-3 interface so that it does not even look like 1-2-3. How about changing colors of 17 different screen items - Ice can do that. If you like pull-down menus, Ice can do that too. Ice can also do dialog boxes, user defined and user placed messages, adding titles to the top and bottom of the screen, and eliminate the 1-2-3 border. As you can imagine, 1-2-3 does not have to look like 1-2-3 ever again with Ice.

To test Ice, I used the same mortgage and escrow tracking spreadsheet that I used to test spreadsheet compilers in August 1990. I was trying to get the same results with Ice that I got with Baler. I was able to get surprisingly close to the Baler version. The conversion took longer since I had to write macros instead of using the Baler customization menu structure. I also changed the display so that it looked quite different. I successfully eliminated certain menu commands, encrypted the file, added titles, and other customizations.

Creating a run-time version of the spreadsheet application was simple. All that was needed was to run the BUILD program and my spreadsheet application was converted to a run-time model. BUILD also copies all of the needed files to a floppy disk and includes an install program for the spreadsheet. The final step was to see if the Iced application ran. All that was needed was to type MORTGAGE at the DOS prompt and the application appeared moments later.

At Lotus Week, Ice was the non-Lotus software hit and deservedly so. The additional security and other customizations Ice offers would work wonders for those who need to distribute spreadsheet applications and do not the recipients to change it. Lotus consultants and developers should love Ice - the advantages of a spreadsheet compiler in the friendly confines of 1-2-3.

Ice retails for \$395. Baler Software can be reached at 1400 Hicks Road, Rolling Meadows, IL 60008. Their phone number is (800) 327-6108 or (708) 506-9700, or by FAX at (708) 506-1808.

Mark

▲

RAM PAGEFRAME IPX MEMORY BIOS CACHE VGA MOUSE 386 BLUEMAX 486 HIGH DOS EGA INITIALIZE

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False. Most memory managers free up space for applications by moving TSRs and device drivers from conventional memory into high DOS memory. But they vary widely in how effectively they do it. Others require a lot of guesswork, and a lot of time. And you still won't get top performance.

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**QUALITAS**

# The Adventures of PC Tech

## Chapter 6

by Ben Thar

Mary Margaret, alias PC Tech, knew the day would be interesting. She opened the tool kit that she purchased from the superstore, and proceeded to open up the computer. The five rear screws came out easily, and the cover slid forward. Then the front had to be tilted upwards and you pulled the back straight up. Maggie wondered who thought up this extraordinarily stupid way to takeoff the cover. Why didn't it just slid off? Or lift off? Or have a flip top lid? Or have the components on a drawer that pulls out? She decided that philosophy and design were not in her future.

The error code that was on her screen when she turned the computer on indicated, according to the documentation faxed to her, that the hard disk drive had failed. While on the phone to the manufacturer's rep she asked, "Your policy states that there was a full parts replacement for the first year." "Yes," was the reply. "Well then, why am I opening a new machine that has an error code," she queried. "Now you have to understand that the warranty also says that if we could diagnose the problem over the phone, then we would ship you a replacement part. Otherwise, we would ship a replacement p.c. But we can usually figure out the problem over the phone." What ran through Mary's mind was to make sure in the future that all support calls would be on the vendors telephone tab, since they did not provide a 1-800 number. Bob remarked, "The hard disk drive is located in the front of the computer, directly in front of the silver power supply. Did you

remember to unplug the computer from the back first?" "No" M.M.said, "I turned it off. Wasn't that enough?" Bob cautioned her to always remove the power plug and all peripheral connections from the back before opening it up. She felt stupid, but she had to ask, "What is a peripheral? It sounds like something you'd find on a submarine." Bob laughed and explained that it was another moronic computer term that meant printer, modem, etc. Maggie didn't want to push her luck by asking what a modem was. She figured she would look it up later.

With everything unplugged, Bob continued, "The board on the bottom of the computer is the motherboard, named for some young computer nerd's first love. The accessory cards plug in the motherboard perpendicularly. If you trace from the hard disk, you will find a flat ribbon cable leading to an accessory card. The card is the hard disk controller card. Check that all of the connections are tight on both ends." P.C. Tech noticed that the cable was connected to the controller card, but two of the gold pins were on the outside of the connector. The connection was tight, so she didn't bring this up. Bob quizzed Mary on the controller cable. He said, "The flat cable has a red stripe on one edge. Can you see it?" "Gosh," she thought, "this guy must think I'm a real ditz." "Yes, I can see the red stripe." "Now, Bob inquired, "can you see if the red stripe is on the same side as pin number 1 on the controller card." "Yes it is, but it is not on pin number one," she stated. Bob wanted to know what she was talking about. She told him that the red stripe connector started on pin number 2. "We have found the problem," Bob declared. PCT thought after fixing it, "Well next time I can avoid a phone call," and she realized that repairing these things was going to be a series of trials that she could pick up over time. Mary decided to look for a local source of this informa-



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The NTPCUG is a non-profit, independent organization of individuals learning to apply personal computers to practical problems. For additional information, call (214) 746-4699.

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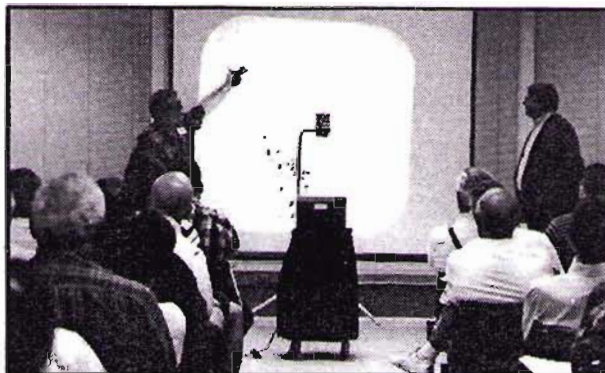
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## Inside the North Texas PC Users Group Community

Connie Andrews

The June DOS SIG meeting found Co-Leaders, Andrews and Hoisington, wading through some of the features, documented and otherwise, of the newest release of DOS 5.0. The theme of the meeting, "Learning to Love MS-DOS 5.0" drew a few hecklers led by none other than Fred Williams, but after Leroy Tension was called in to "explain" things to Fred, the meeting proceeded pretty much as planned.

What we don't have, I'm sorry to say, is a picture of the surprise visit Hoisington and Andrews paid to Fred's Paradox SIG immediately following the DOS SIG. It will be interesting to see how much of this makes it into the SIG Notes.



Reagan Andrews, left, attempts to convince DOS SIG members that DOS 5.0 memory maps are fun, while Jim Hoisington, NTPCUG President, looks on skeptically.)

If you haven't attended one of the many SIG meetings of the NTPCUG, you're missing a lot. Not only do you get to see some of our most dedicated volunteers at work leading SIGs, but you also get to see the fruits of their labors when they represent us in cities like Boston. (Mark, is your cast off yet?)

In this issue we are acknowledging volunteers listed below who served for the month of JULY. In addition to those listed below, our officers, directors, SIG coordinators and leaders, newsletter publisher, editor, staff and writers, newsletter ex-

change, and BBS SYSOP and staff are all volunteers; their names are listed in other sections of this newsletter.

PLEASE look for everybody mentioned here at our meetings or take a moment on the BBS to say thanks to them!

### INFOMART Liaison

Stuart Yarus

### Vendor Setup/Breakdown

Mary Ganote  
Marty Hill  
Michael Jinks  
Tom McCormick  
John Myers  
David Slavik

### Presentation/Equipment Setup and Breakdown

Timothy Carmichael  
Chris Jung  
Christopher Carmichael

### Information/Registration Booth

Conley Andrews (Anchor)  
Harvey Andrews

### Dianne Arnold (Anchor)

John Arnold (Anchor)  
Ralph Beaver (Anchor)  
Cliff Bishop  
Jan Frost (Anchor)  
Rick Griffith (Anchor)  
Judy Griffiths (Anchor)  
Hank Holt (Anchor)  
Pehl Lee  
Claude McClure (Anchor)  
Charles Mooney  
Raymond Reyes (Anchor)

### Connie Testa (Statistician)

Everett Turner (Anchor)  
Jose Valenciano (Anchor)  
Jean Waldrep (Anchor)  
Peyton Weaver (Anchor)  
Paul Williams (Anchor)

### Disk of the Month (DOM):

Not available at press time but we'll catch up next month.

## PC TECH continued

tion so she could pick it up quicker without having to repeat everyone else's errors.

After thanking Bob, she put everything back together and booted it. No error codes or messages. The following week, the computers were all set up in the same room. The users were scheduled for hands-on training, and Mary's nervousness was evident. She did not have any training in training people, and she never took speech class in high school. A copy of the notes she handed out helped her through the ordeal. She started by showing everyone how to turn the computer on, followed by the lessons she learned on floppy disk sizes, and finally she talked about the application program and how it worked. The question that PCT would always remember came from someone who had computer experience at her previous job. The subject being taught was setting margins on the word processor and the user asked, "Now the left margin, is that my left or the computer's left?"

*stay tuned . . .*

## VOLUNTEER INFORMATION

**1. Via BBS:** (214)387-2751, (214)387-2752 or (214)283-9036 (metro). Sign up on the Volunteer Conference - make the subject matter your area of interest.

**2. Meeting day:** Sign up at the Information Booth or DOM Booth to work those areas in a coming month.

### 3. By phone:

Auditorium Presentations Timothy Carmichael	661-4826 (w)
DOM Booth Activities Bill Drissel	264-9680 (h)
DOM Software Review Howard Hamilton	644-5721 (h)
Information Booth and General Information Connie Andrews	828-0699 (h)

## ON COMPLEXITY

*No. 55 in a Series*

## Software Licenses

by Jim Hoisington

One of the areas of PC software that will change the most in the next year is in the area of licensing. It used to be real simple. A person only had access to one computer so the software got licensed to the person or the computer. One copy of the software per computer or person.

But things have changed. People use more than one computer.

Consider a person in a sales organization that uses a database software product to keep track of sales. This sales person uses the corporate database of dealers which resides on a Local Area Network server in Dallas. One week out of every month this sales person gets on a plane with a portable computer containing a subset of the database which contains all the dealers in Southern California and flies to Los Angeles. For the week this person is in Southern California, they and a sales representative from the regional office update the database on the portable as they visit the dealers in the area. At the end of the week, the database on the portable is used to update the database on a file server located in the regional office in Torrance, California. Upon returning to the Dallas office, the database on the portable is used to update the database on the corporate LAN server. Who or what is the database software licensed to and how many licensed copies are needed?

In the future, licenses will have to deal with the realities of networks and portable computers. In today's workplace, different people use the same machine at different times and many people use more than one machine - at work, at home, on the road.

I have seen instances where software products that licenses that have are easy to administer are chosen to replace software that have software licenses that are difficult to administer. The reality of the marketplace is that the Local Area Network (LAN) administrator has an increasing amount of influence in which software gets purchased. After all, the LAN administrator is responsible for installation, support and training. If it's difficult to support, it probably won't get purchased.

As I pointed out in last month's column, most of the people who use the software don't know or care which product they are using. They are just trying to get some task accomplished which happens to use a computer and some software.

Here's what I want in a software license:

1. I want a per concurrent user license like Borland products. Borland products keep track of how many users are licensed to use the software at a time. If you happen to be number 6 on a product licensed for 5 concurrent users, you are politely asked to try again later.

2. If I can't get a concurrent user license, I want a per Login ID license like WordPerfect. This is almost like licensing the software to a user. The software is licensed to the network ID code of the user. It doesn't matter if they are using their desktop computer or their laptop. As long as they are using it on the network, it is legal.

3. The number of copies should be easy to administer. Again, the concurrent user is self-administering so it is the best. If it is not self-administering, then the serial number should be readily displayed so the person using each license can be easily verified.

4. Additional licenses should be nothing more than an envelope containing a piece of paper with a serial number and maybe a diskette that changes the concurrent user count. What I don't want is another set of manuals for each license.

5. Additional manuals, beyond the base copy, should be sold separately. In actual practice, I need far fewer manuals than legitimate copies of the software. As last month's column explained, a lot of people don't need a manual. And, someone who uses the same software on their desktop computer and on their laptop computer probably only needs one set of manuals.

I realize that people can illegally copy the software and then buy a set of manuals. But, if at least three book publishers don't have a book out on the software explaining its use in great detail, the software probably isn't worth much anyway. So how much is lost by selling the manuals separately?

6. Finally, I want a clear statement on how to administer software that travels out of the office and back again. Does a user with a legitimate copy on their laptop, also need to maintain a network license in order to access data on the file server via modem from their laptop while they are on the road?

This year a lot of companies with "obnoxious" software licensing policies will be forced to change those policies or loose market share to companies that have adapted to our modern workplace.

Jim

a





9:30 AM - 11:00 AM

**Microsoft Corporation**  
Visual BASIC for Windows

11:00 AM - 11:30 AM

**NTPCUG Business Meeting**

(See page 1 for description of programs.)

## Special Interest Group Meetings

For possible time changes, check the Bulletin Board just before the meeting and the overhead display in the lobby at INFOMART.

**9:00 - 9:55**  
Assembler - DOS  
General Genealogy  
Hardware Solutions  
Personal Users  
Quicken  
Software Review  
Windows Applications  
WordPerfect

**10:00 - 10:55**  
Basic Programming  
CAD  
dBase for TI Pro  
Fox Pro Database  
Local Area Networks  
PAF - Genealogy

**10:00 - 10:55 cont**  
Paradox  
Personal Users  
Unix/Xenix

**11:00 - 11:55**  
Community Service  
Family Roots - Gnlgy.  
Roots III - Genealogy  
TI Pro General Mtg.

**11:30 - 11:55**  
Orientation

**12:00 - 12:55**  
C++/Advanced C  
Communications  
Investors

**12:00 - 12:55 cont**  
Law  
OS/2 for End Users  
Personal Users  
R:Base

**1:00 - 1:55**  
Beginners C Language  
Business Apps./DAC Easy  
LOTUS  
OS/2 - Windows Developers  
Personal Users  
TI Pro - New Users  
WORD

**2:00 - 2:55**  
Advanced Programmers

## Special Interest Groups

**BIG Coordinator** Andy Oliver (214)223-4044 h  
(214)871-5854 w  
(214)349-6690 h

**K. B. Barton**  
(214)747-0209 w  
(214)423-8221 h  
(214)317-0308 w  
(214)317-0125 h  
(214)271-2292 h  
(214)206-2215 w  
(214)775-1503

**Assembler** Frank Cavaliato (214)233-8353 w  
Basic Programming Kent Kingery (214)343-3862 h  
(214)341-1880 w  
Steve Dixon (214)618-8002 h  
(214)464-7942 w  
(817)731-1308 h  
(214)827-5751 h

**Beginners C Lang.** Stan Milam (214)361-9681 w  
**Business Applic.** Bruce Schubert (214)296-1799 w  
**C++ / Advanced C** Kent Cobb (214)669-9633 w  
Tom Cook (214)235-2559 h  
(214)416-3101 h

**Communications** Doug Gorrie (214)828-0699 h  
(214)644-7636 h  
(214)278-7888 h  
(214)681-0202 h  
(214)937-9678 w  
(214)937-5851 h

**Community Svc** Bill Green (214)350-4611 h  
Jay Shistone (214)458-9158 h  
(214)231-1511 h  
(214)243-1000 w  
(214)635-9379 h  
(817)451-4540 w

**Comp Aided Design** Bill Saphton (214)984-8174 h  
**DAC Software** Putt Shaw (214)271-4911 h  
(214)229-8216 w  
(214)618-1608 h  
(214)279-1738 h  
(817)962-4598 w

**DOS** Jim Holsington (214)560-2804 w  
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Al Sanford (214)422-4269 h  
David McGehee (214)458-9711 w  
Gary Johnson (214)317-0125 h  
(214)416-3101 h  
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Rex Gifford (214)272-4127 h  
(214)404-8400 w  
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(214)821-4788 h  
(214)634-2360 w  
(214)348-3768 h  
(817)267-0758 h  
(817)878-0367 w  
(214)596-7807 h  
(214)604-2441 w  
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**Hdw Solutions** Gary Johnson (214)937-5851 h

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(214)634-2360 w  
(214)348-3768 h  
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Doug Scott (817)878-0367 w  
Jim Stallworth (214)596-7807 h  
(214)604-2441 w  
(214)618-1266 h

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Reagan Andrews, Ph.D. (214)681-0202 h  
David McGehee (817)387-9993 h  
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K.B. Barton (214)747-0209 w  
Mich Milam (214)252-3514



## North Texas PC Users Group, Inc.

P.O. Box 780066, Dallas, TX 75378-0066

Phone (214)746-4699 for recorded information about the User Group and meeting dates.

The North Texas PC Users Group, Inc., is a non-profit, independent group, not associated with IBM or any other Corporation. Membership is open to owners and others interested in exchanging ideas, information, hardware, predictions, and other items related to IBM Personal and compatible computers. To join the Group, complete the application blank printed elsewhere in this newsletter, and send it with \$24 membership dues to the Membership Director whose address is shown below. A subscription to the newsletter is included with each membership. The Group meets once each month, usually on the second Saturday. See cover for date, time and place of the next User Group meeting.

### Board of Directors

Jim Holsington, Mark Gruner  
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Andy Oliver

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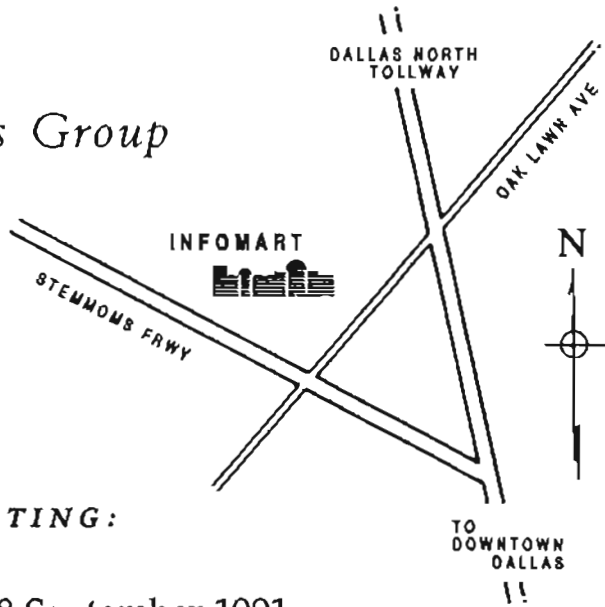
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NEXT MEETING:

28 September 1991