



North Texas PC Users Group

10.6

June 1991



North Texas PC NEWS

Published monthly by members of North Texas Personal Computer Users Group for their use. Members each receive a free subscription; for others, price of the NEWS is \$2 per copy. Members are requested to notify the Membership Director in writing of address changes. Send all editorial correspondence to: Editor, North Texas PC NEWS, 10429 N. MacArthur, #360, Irving, TX 75063.

Publisher
John Pribyl (817)275-4109

Editor
Doug McQuaid (214)402-0538

Assistant Editors
Gerry Heine (214)937-7268
Alan Lintel (214)220-8285
Randy Lahd (817)861-1979

Newsletter Exchange Editor
Francis Bright

Advertising Director
John Pribyl, (acting) - (817)275-4109
(Mail all advertising material and ad payments to
North Texas PC NEWS
2025 Rockcreek Drive
Arlington TX 76010)

The opinions expressed herein are those of the authors and do not necessarily reflect those of the Group or its members. Copyright © 1991 by North Texas PC NEWS. (Articles without specific copyright notices may be reproduced unchanged by other not-for-profit User Groups if credit is given to the author and the publication.)

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:

North Texas PC NEWS circulation was 1946 last month. Member distribution was 1566; remaining copies were distributed to PC user groups around the country, and to advertisers, prospective members and others with common interests.

The editors of North Texas PC NEWS use Microsoft Word version 5.0. This issue of North Texas PC NEWS was composed using Xerox Ventura Publisher, Corel HEADLINE was used for some headings. Repro was printed on a NEC LC-890 Laser Printer. Typefaces include: Palatino, Helvetica and Zapf Chancery.

DEADLINE
Copy deadline for July
North Texas PC NEWS:
Monday, June 10th

Meeting Dates:

June Meeting - 3rd Sat. (15th)
July Meeting - 2nd Sat. (13th)
August Meeting - 4th Sat. (24th)
(tentative)

Write an article for the newsletter about your favorite computer subject.

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 selected 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 communication 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.

Table of Contents

President's Message	1
Jim Hoisington	
Hey Buddy, Got the Time?	4
Fred Williams	
On Complexity, No 52	7
Jim Hoisington	
We Ain't There Yet	15
Fred Williams	
hDC Windows Express	17
Neil Berkowitz	
Crosstalking in Windows 3.0	19
Tony Nogueres	
Membership Survey	21
1990 Membership Demographics	
The Adventures of PC Tech	23
Ben Thar	

Special Items:

Agenda	1
Variety Store	9
SIG Reports	11
Member Application Blank	20
Volunteer Guide	24
Officers, Meetings & Times	25

Program for June _____ Timothy Carmichael _____

9:00 AM - 10:00 AM

Intel Corporation

The Intel 386/486 C Codebuilder Kit

This C compiler/development software has features which programmers using the 80386 and 80486 processors can really appreciate. It is Microsoft-compatible and has a DPMI compliant DOS extender with virtual memory management. It comes with full libraries and debuggers, and allows royalty-free distribution of developed applications. Come learn more about it at this presentation.

10:00 AM - 11:00 AM

Software Publishing Corporation

Harvard Graphics Version 3.0

This will be a live demonstration of the versatile presentation graphics features of the just-released version of Harvard Graphics. There will also be a preview of the Windows version which is scheduled for release in the fall.

11:00 AM - 11:30 AM

NTPCUG Business Meeting

1:00 PM - 2:00 PM

Microsoft Corporation

Multimedia Presentation

The combination of CD-ROM, high-grade video, and hi-fi stereo audio hardware and software adds up to form an impressive system. This live demonstration of the system will let you experience it and learn about it first-hand.

Prez Sez

Welcome to INFOMART

If you are visiting our June meeting, welcome. The North Texas PC Users Group is one of the largest PC Users Groups in the country. We are a non-profit Texas corporation, a member of the Association of PC Users Groups, and a member of the Dallas Chamber of Commerce.

We meet at INFOMART one Saturday per month along with 13 other computer related users groups. We have approximately 1,600 members. During a normal Saturday meeting we have between 2,000 and 5,000 people pass through the INFOMART.

During the day, there are over 100 meetings or presentations on computer related topics. The schedule is displayed on the three overhead projectors located immediately to your left near the entrance to INFOMART. In the basement, there are vendors selling computer related equipment.

On the other seven floors of the building are showrooms of most of the major companies in the Computer industry. Many of them will be open during our June meeting. Information on membership for any of the groups can be obtained at the kiosks near the front entrance to the building.

Membership Cards

We print up a new membership card for everyone who joins or renews their membership. We have your card available at the Information kiosk near the front entrance during the next meeting. We encourage you to stop by and pick it up during the meeting. All the cards not claimed during the meeting will be mailed by first class postage in the week following the meeting. If you pick up your card at the Information booth, we save a little on postage.

Bad Software Idea

I have been a long time user of a disk back-up program called FULLBAK software made by Westlake Systems of Austin, Texas. However, an incident this last month may cause me to switch.

I needed to restore an old version of a database that had been backed up with FULLBAK about two years ago. Much to my dismay, FULLBAK told me the diskettes containing the backup were defective. I was about to give up when I decided to try an older version of FULLBAK. Sure enough, it restored the database just fine.

A call to Westlake's technical support, first yielded a response, "Your diskettes are defective." When I explained that they were in fact error free and that an "old" version of FULLBAK could handle them without

error, the techie explained that there was no guarantee that the software was compatible from version to version. I told him that I thought that that was an unusual attitude for a company that made backup software. Maybe I just shouldn't be so fast to upgrade. Or, maybe I should switch backup programs!!

Software Publishing

During April, I visited Software Publishing Corp. to see the two products that they are showing today. Since Harvard Graphics is the only door prize that I have ever won in my almost ten years in the user group, it was a real pleasure to meet the developers behind the product.

I have to tell you that there is a graph that I have done by hand for several years because I couldn't figure out how to do it using Harvard Graphics. During the hands-on lab, I started asking my tutor how to do this graph. He immediately called in his supervisor. She called in the fellow who originally developed Harvard Graphics. Wow!

After a couple of false starts, he drew my graph using version 3.0 of the product. I guess I feel better because he didn't get it right the first time.

We learned a couple of interesting things about the software business. First, when a new product of any size is about to come on the market, the publisher has to negotiate with the paper companies to make sure that enough of the right grade of paper will be available to print their manuals.

Second, we saw a room full of printers, plotters, and film recorders. Each new version has to be tested with software drivers for all the more "common" output devices. You always see a list of devices when you install a product, but it's impressive to see a room full of shelf after shelf of equipment.

We spent some time with the President of Software Publishing, Fred Gibbons. Since the 18 user group Presidents assembled represented over 210,000 users, he was anxious to question us about how we wanted future releases of software to be sold.

Those of us who use or install Local Area Networks (LANs) were united in wanting software licenses separated from manuals. We, (the LAN users), agreed that Borland has the best LAN licensing on the market with the exception that we cannot buy the licenses separately from the manuals. Hopefully more software companies will understand the unique problems associated with administering software licenses on Local Area Networks.

Tuesday evening, Software Publishing sponsored a Pizza & Beer dinner where all the user group Presidents and some of the Software Publishing employees got to sit around and "discuss" the software industry. Times like that are always good because I get to chat with old

friends like Steve Longo of Philadelphia, Steve Bass of Pasadena, Al Harrison of Houston (actually the State Bar of Texas PC User Group), Rollie Cole of Grand Rapids, Jerry Schnieder of APCUG, Don Kaufer of Salt Lake City, Judy Brown of Fox Valley, and Paul Curtis, the SYSOP of the APCUG BBS.

When user group people get together, we all learn from each other. It seems we all have the same problems and some people solve the problems more creatively than the others.

Thanks to Software Publishing for making it happen.

Microsoft & Multimedia

The other presentation scheduled for the June meeting is Microsoft's multimedia products. I saw a preview of these last October. If you are over 30 years of age, like am, then you might not be very excited about the products. Let me just say that my teenager is putting a lot of pressure on me to add a CD-ROM player to the network in our house.

We are planning to set up a demo area somewhere on the first floor. If you miss the presentation in the auditorium, maybe you will get a chance to see these products in the demo area.

Demographics Survey

Each fall we do a demographics survey of our membership. The results of last fall's demographics survey should appear elsewhere in this newsletter.

The survey is not an easy task. Dr. Reagan Andrew prepares the questionnaires each summer. Andy Oliv and helps distribute the questionnaires to the SIC Connie Andrews and volunteers at the Informatic Booth collect them.

This spring Di Di Mack did the laborious task of data entry. She left the data with Kathryn Loafman.

Kathryn and I meet at various places around Dallas. Our last rendezvous was the White Sale at Macy's. Sunday, we met at Neiman's and exchanged diskettes. (What can I say, Kathryn shops the expensive stores.)

I run the data analysis programs against the Parade database and Dr. Andrews takes the results and puts them into desktop publishing form.

The last of the results were transferred from my computer to Reagan's computer via our BBS tonight.

The demographics are a good example of how our user group works. A lot of different people volunteering their time to get a job done. I would like to thank all those who participated in this effort. I would also like to remind them that September of 1991 is not that far away.

Jim Hoisington

It's Never Been So Easy To Look So Good.

Get laser-like quality even on a dot-matrix because Ensemble™ is precisely tuned to use the maximum resolution of over 350 printers.

Multitask your message with nine built-in outline typefaces, scalable from 4 pt. to 362 pt.



Save time and paper with true WYSIWYG because what you see on screen is exactly what you'll print.

GEOWORKS ENSEMBLE

User Group Members Save 60%

For \$79 You Get A Great Deal.

The critics are raving, the competition is sweating, and now only for user group members, here's an offer designed to shake rattle and roll the industry. It's GeoWorks Ensemble for only \$79. Not a demo, a complete retail copy of the high performance multi-tasking environment and applications that is making headlines (including the one on this page).

Only \$79

As only you, the most influential community in the business, can do.

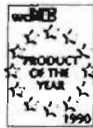
GeoWorks Ensemble: The Critics' Choice

"[GeoWorks] has produced a GUI capable of making the PC a more friendly and powerful creature to the millions of people Windows and OS/2 have left behind..."
 First Looks, PC Magazine, February 12, 1991

"[PC/GEOS] thrives in a 640K 286, and even performs respectably on an 8088. On a run-of-the-mill 386, [PC/GEOS] performs crisply in a way that Windows only dreams of..."
 Bill Machrone, Editor-in-Chief, PC Magazine, November 13, 1990

Why are we offering this \$199 wonder for only \$79? Because we hope that after you read what the critics are saying about

Critics rave about Ensemble, and so will you.



Now the only thing easier than creating dazzling documents with GeoWorks Ensemble™ is getting it in the first place. Because until August 31st, User Group members get *InfoWorld's Product Of The Year* for only \$79. Instead of \$199.

You get an intuitive windowing environment (PC/GEOS™) that makes it easy to cut and paste graphics together into documents that look published. And, you get all seven integrated graphical applications: Word Processing, File Management, Object Oriented Drawing, Planning/Scheduling, Address-Book, Communications, and America

On-Line. All of which work alike. So it's easy to do more on any PC, from an NT to a 386. Desktop to laptop.

For only \$79, you and all your documents can look like a million bucks. So order GeoWorks Ensemble today. And discover how easy it can be to look your professional best.

Only \$79. Order Today! 1-800-772-0001 Ext.300



GEOWORKS Offer expires August 31st, 1991. Call or send check/money order to GeoWorks User Group Office/GeoWorks Fulfillment Ctr., 3844 Sterling Center Drive, Westlake Village, CA 91391. (415) 241-8121 and handling. CA residents add 7.25% sales tax. PC/GEOS, Ensemble, and GeoWorks Ensemble are trademarks of GeoWorks, Inc. © 1991

Hey Buddy, Got The Time?

By Fred Williams

"Does anybody know what time it is? Does anybody really care?", from the lyrics of an old Chicago song. If you're running a DOS Batch file you really had better not care. So now I have an excuse to take a break from writing all this Paradox PAL code, C++, and horror of horrors C++! I think my brain is about ready to be a prop for a Bill Crosby Jello commercial. Time for a little mind clearing (altering?) double shot of GOD's Language.

I started my tape backup batch file the other morning and went to do my never ending job of moving the promotional mail (did I hear the word JUNK?) from my Post Office box to the Post Office trash can. When I got back I couldn't remember how long the backup had been running. I also had no idea which logical disk was currently being backed up.

After the backup finally finished, I decided to improve things. I put an Echo statement before each disk's backup command line. Anyone remember when you couldn't turn echo off? Since one of the disk's backup takes about twenty minutes to complete, it would be nice to display the start time for each logical disk backup.

Humm, guess what, there is no DOS Batch command for displaying the time. Never thought about it until now. I know I'm taking a big risk doing this again. The last time I did a similar article Kent Cobb insisted on doing the same thing in C. Seems he brushed off my pointing out his C routine required over ten times the memory and disk space to store. I guess he has more than 80 meg of disk space.

My greatest fear is that he will insist on doing it again, only this time it will most likely be C++. Grief, spare me the agony! An OOP's time display routine, really now? I'll bet the last client's unpaid bill that he will bust that ten times greater figure wide open. He's just lucky that I haven't had time to devote to countering his last assault with a QuickBASIC implementation of his C code.

For all the non-programmer types out there, I'll have to ask your patience with this apparent hole in your normally informative NTPCUG newsletter. For any non-programmers who would like to have a DOS Batch command that will display the current time, I promise you that reading this gobbledy gook is not required. The DOM people will have a disk available with a working copy of the NOW command that you may effortlessly copy to your system's disk.

For the rest of you, those that like poking themselves in the eye with a sharp stick. Stick around and attempt to cut this code to ribbons. I'm not going to

cover the instructions in as great of detail as in the ASK article. Most of you probably can follow along just by reading the well documented source code listing included with this article.

NOW is kind of a knock off of the UNIX NOW command. What it does is, when you issue the command NOW, it returns the system date and time in "DD day-mon-year hh:mm:ss" format. Now is implemented as a DOS COM file. This allows the tightest possible code module. It really is a shame to waste very much disk storage for such a simple problem solution. Sorry Kent.

I may have done a little overkill on the problem solution, displaying the elaborate highly formatted date and time, but I mostly did it to do a little table handling strictly for demo reasons. There has never been a perfect solution for any problem I know of. We come to think of it, deleting a COBOL compiler does come pretty close. So, I fully expect you to point out several questionable actions and assumptions.

Probably the most obvious questionable action is I just completely ignored the much discussed change of day problem related to time elapsing between the system time and date reads. This means you could end up with yesterday's time and today's date. Think about it. The odds of that ever happening on my system is slim and none. If my system is on midnight I'll guarantee you that I'm most likely trying to debug a \$*#&\$%* C function and really could care less what time it is.

For those of you who do not have a DOS Technical Reference Manual I'll describe the DOS function calls used in the program. The first one is 2Ch. 2Ch returns the system time. Upon return from the function call, register CH contains the hour (0-23), register CL contains the minutes (0-59), and register DH contains the seconds (0-60). Register DL contains the hundredths of seconds (0-99) but I'm not THAT interested in the correct time.

To request the system date we will use DOS function call 2Ah. 2Ah returns the day of the week (0 = Sunday thru 6 = Saturday) in the AL register. The year is returned in register CX in "yyyy" format (i.e., 1995). Month is returned in register DH (1-12). The month day (1-31) is returned in register DL.

Two DOS function calls are used for console display. Function 09H will display a string pointed to in register DX and terminated by a "\$" character. Function 02h displays the single character contained in register DL.

The last DOS function we will use is 4Ch. This function ends the current program and passes the contents of register AL back as the DOS Errorcode. You will notice that this program has to be perfect, it will never post anything other than a zero for a DOS errorcode!

The program logic flow is like General Patton going through Germany. You might recall his description of the event from the opening scene of the movie "Patton". I just coded all the DOS function calls in-line as nothing of any significance would be gained by imbedding them in callable sub-routines, and we would sacrifice some speed. There is only one subroutine and it is used for displaying the translated ASCII numbers.

The program begins by requesting the system time and stuffing the answer on the stack for later. The system date is requested next and pushed on the stack for safekeeping. Now that we have all the data we will need the only thing left to do is format the data and slap it on the console screen. Sometimes I really wish computer users were still required to read hex dumps. Sure would save a lot of silly output formatting effort!

The remaining bulk of the program will be devoted to making the date and time human readable. First we will use the day of the week value to search a fixed length entry table of day of the week day names. Once we have register DX pointing at the right day name, we issue the DOS function 09H to display it on the console. Then we use DOS function 02h to display a space to separate the day of the week name from the soon to follow formatted date.

The next step is to recover into register AX and resave the month and month day. Exclusive ORing the AH register isolates the month day in register AL. Once we have our day ready, we call the ASCII number printing routine to display our month day on the console. I would like to take total credit for the ASCII number display routine but I "borrowed" the guts of it from an ANSI Console routine I have acquired from somewhere.

To display the value in register AX as an ASCII number is a two step process. First we repetitively divide the value in AX by 10. Each time we divide by 10 we add the value of an ASCII zero ("0") to our result and push the result on the stack. To see how this adding of ASCII zero works,

NOW LISTING

```

;
title    now      'DOS Batch utility'

; Batch file utility which displays the date and time.
; Kind'a works like the UNIX NOW command.

;          (c) Copyright 1991 Systems Consultants
;          ALL RIGHTS RESERVED

;   Released, free of charge, for personal use of recipient only.
;   Not for resale or redistribution, either singly, or incorporated
;   in other products, for financial gain in any manner.

; WARNING:

; Must use DEBUG to rewrite the file as a ".COM" format, for
; proper function.

.code    segment
        assume    cs:_code, ds:_code, es:_code, ss:_code
        org      100h
begin:
        jmp      short start

days   label    byte
        db      'Sundays'      ; made them all the same storage
        db      'Mondays'     ; length, just to keep life
        db      'Tuesdays'   ; simple
        db      'Wednesdays'
        db      'Thursdays'
        db      'Friday$'
        db      'Saturday$'
months  label    byte
        db      'JanFebMarAprMayJunJulAugSepOctNovDec'

start:

; We ask for both the date and time close
; together to reduce the potential of
; having a date change between getting
; the date and time.
; ask DOS for the system time
        mov     ah,2ch
        int     21h
        push   dx
        push   cx
        mov     ah,2ah
        int     21h
        push   cx
        push   dx
        xor     ah,ah
        lea    dx,days
        mov     cx,10
        mul    cx
        add    dx,ax

; save year
; and month/day
; isolate the day of the week in AL
; point to the DOW table
; load length of a DOW table entry
; multiply the day of the week
; by the DOW table entry length.
; add this to our table pointer
; we should now be pointing at the day
; of the week
; so tell DOS to print the DOW string
        mov     ah,09h
        int     21h
        mov     dl," "
        mov     ah,02h
        int     21h
        pop    ax
        push   ax
        xor     ah,ah
        call   prtnum
        mov     dl,"-"
        mov     ah,02h
        int     21h
        pop    ax
        xchg   ah,al
        xor     ah,ab
        dec    al
        ; recover the month and day
        ; put the month in AL
        ; isolate the month
        ; adjust to a zero base for proper table
        ; lookup location calculation
        ; load the month table's entry length
        ; and multiply the adjusted month by the
        ; month table entry length
        ; put it in an index register
        ; point to the month table
        mov     cx,3
        mul    cx
        mov     bx,ax
        lea    si,months
        mov     smonth:
        mov     dl,[si+bx]
        ; load DL with the char from the month
        ; table address pointed to by SI+BX
        ; say print the character in DL
        mov     ah,02h
        int     21h

```

whip out your trusty ASCII character chart and calculator and do a little manual labor for a change.

When register AX equals zero, we have finished translating the number to ASCII and it is stuffed on the system stack in reverse order (LSD first in. No, No, No that is Least Significant Digit!) Also the total number of digits translated is stored in the CX register.

Displaying our converted number is now very simple. We just pop the first digit (MSD) off the stack into register DL. We then use DOS function 02h to display the digit on the console. We continue popping and displaying digits until register CX equals zero. Slick, huh!

Once the month day is displayed, we display a dash separator character. Next we pop the month and day off the stack for the last time. We do an exchange on the AX register halves, AH and AL, to get the month value in register AL. Again we do an exclusive OR on register AH to isolate the month value in AL. Now a slight problem arises.

We want to use a calculated pointer to locate the proper month abbreviation stored in a table. The basis for this pointer calculation will be the month value. The problem is that our table base is zero and the month value has a range of 1 through 12. That is why we use the DEC AL instruction to reduce the value in register AL by one.

Now that the month value has been adjusted to a zero base we can multiply the month value by the table entry length (3) that we loaded into register CX. The proper table offset value for the month is now in register AX. To use the offset we have to move it to a register that may be used for indexed addressing. We will use register BX. The last thing we have to do to establish a valid pointer to our desired date

is to load the offset of our month abbreviation table into another index register, register SI.

Remember that we loaded the length of a table entry in CX for the pointer multiplication. To display our month abbreviation we load the character pointed to by the sum of the index registers SI and BX. We then

```

inc      bx                ; point to our next character
loop    smonth            ; keep looping until CX is zero. Remember
                          ; that CX initially held the month table
                          ; entry length
                          ; print another separator character

mov      dl,"-"
mov      ah,02h
int      21h
pop      ax                ; recover year
call    prtnum            ; and go print it as an ASCII number
mov      ah,02h
mov      dl," "
int      21h                ; need another separator
pop      cx                ; remember we saved the hours and minutes
                          ; a long time ago (several micro seconds)
                          ; save the minutes a little longer
push    cx                ; zero the AX register
xor     ax,ax              ; move in the hour
mov     al,ch              ; and go print it as a two character
call    prtnum            ; ASCII string
                          ; print a time separator character

mov      ah,02h
mov      dh,":"
int      21h
xor     ax,ax              ; get ready
pop     cx                ; recover and
mov     al,cl              ; move the minutes we saved
call    prtnum            ; and print the ASCII minutes
mov      ah,02h
mov      dl,":"
int      21h                ; and another time separator
xor     ax,ax              ; recover,
pop     cx                ; move,
mov     al,ch              ; and print the seconds
call    prtnum            ; load a "line feed" character
mov      dl,0ah
mov      ah,02h
int      21h                ; print it
mov      dl,0dh
mov      ah,02h
int      21h                ; next load a "carriage return" character
                          ; and print it

xor     ax,ax              ; we will never admit an error!
mov     ah,4ch
int     21h                ; exit with return code in AL
                          ; back to DOS

```

; This little routine takes the number passed in AX and converts it to ASCII digits one digit at a time stuffing each converted ASCII digit on the stack.

; Once all the digits have been converted they are popped off the stack and printed one at a time in the reverse order they were converted.

; AX = number to be converted

```

prtnum:
mov     bx,10                ; divisor of 10
xor     cx,cx                ; zero the digit counter
next_count:
xor     dx,dx                ; zero the result
div     bx                    ; divide AX by 10
add     dl,"0"              ; convert result to ASCII
push   dx                    ; save our ASCII digit
inc     cx                    ; increment the digit count
cmp     ax,0                  ; done?
jnz    next_count            ; continue until zero
prtloop:
pop     dx                    ; fetch the next ASCII digit
mov     ah,02h                ; say print it
int     21h
loop   prtloop                ; if more digits, do it again
ret
_code  ends
end    begin

```

use DOS function 02h to display the character. increment register BX so the next time we will be at the next character in the month abbreviation loop. When the last character in the month abbreviation has been displayed register CX will equal zero and we will not repeat the loop.

ON COMPLEXITY

No. 52 in a Series

by Jim Hoisington

I was asked to write a program other day when I realized that it was the same program that I had written many times before. In fact, I was writing a program very similar to the first program that I ever wrote. Except I didn't write my first program, I wired it.

Got the Time? continued

Next we display a dash-separator character and pop the saved year off the system stack and into register AX. We then call the ASCII digit display routine to display the four digit year. Following the year, we display a space separation character. Remember way back when we stuffed the system time on the stack back at the beginning of the program? Well, its time has come.

I'll leave it to you to follow through the details of popping and displaying the hours, then minutes, and finally the seconds. Once the time has been displayed, we do a little display housekeeping by sending a "line feed" control code followed by a "carriage return" control code to the console screen. These two control codes cause the cursor to move to the line immediately following the console line where we have displayed the system date and time. With that last little chore done, we force a zero return code into AL with a XOR, load 4Ch into register AH, and bid a fond farewell to NOW.

When MASM gives you a clean assembly (MASM NOW;), run NOW through the linker (LINK NOW;), but do not try to execute it from the resulting NOW.EXE file. Once you have an EXE file, read it into DOS Debug (DEBUG NOW.EXE). When you get the Debug dash prompt (-), enter: N NOW.COM and press enter. Again from the Debug dash prompt, enter: W and press the enter key. Debug will display the number of bytes (in hex) written out to the new NOW.COM file. When you have the Debug dash prompt back, enter: Q and press enter. Delete the NOW.EXE file from the current subdirectory. Now you are ready to test NOW. From the DOS prompt enter NOW. If the system date and time doesn't immediately display on the following line with the DOS prompt on the line after that, your version of NOW didn't work. Go back and check your work, or consider attending the next C++ SIG and learn a REAL language. If all else fails, the Disk Of The Month people will have a DOM disk available with the complete source and a working NOW.COM file available for purchase at a nominal cost.

I can be contacted at 214-492-1315 most of the time if you have questions or comments.

Fred 

Back in the dark ages of data processing, we had these wonderful tabulating machines. They read in a tray of computer cards, did some limited calculations, and printed the results or punched them into other computer cards.

The tab machines were mechanical wonders, full of relays and solenoids and card brushes. They had some registers called accumulators. Counts or amounts that were read from the cards were added into the accumulators. Periodically, conditioned on some change in a hole or holes in the incoming tray of punched cards, the accumulators were printed or punched and then zeroed out.

For example, the quantity of items ordered could be added to an accumulator register until the product field changed. The total for that quantity and the product code could be printed, and then the accumulator would reset to zero to count the orders for the next product.

The programs to do all this were wires inserted into a plug board. We actually wired the electrical current from the brushes that read the holes in the cards to the various registers and relays in the tab machine. To check your program, you traced the wiring with your fingers to make sure that the electrical signal got from the card hole to the right device in the tab machine.

When the tab machines were replaced with digital computers, programmers found themselves programming the function of the tab machines over and over again in the computers. Some bright person got the idea to develop a computer language that simulated the old tab machines. All the programmer had to do was to provide the correct links between the parts, just like the wires had provided the links between the parts of the tab machine. The name of this marvelous language is RPG. It is still in use today. And even though a lot of programmers look down upon RPG as a simplistic language, it still solves a lot of common business problems with a minimal amount of programmer effort.

In my case, I was not allowed to use the RPG language in writing this program. The client had specified one of those modern languages. The kind that are supposed to solve the programmer productivity problem and make all programs bug free. At least until the next super language comes along. And, by the way, this was to be a windows application.

Well, at least I won't have any trouble deciding what to use for an icon. It's going to be a small picture of that IBM tab machine in beautiful IBM gunboat gray.

Jim 

INFOMART FROM APPLE TO XEROX.



INFOMART is where you can see and evaluate the latest information and communications technology. From more than 100 companies like Apple, Andersen Consulting, AT&T, EDS, Epson, GTE, IBM, NCR, Novell, Texas Instruments, Xerox and many more. Call today to get your free 72-page INFOMART Directory. It's the easy way to make your visit to INFOMART even more productive.

Call today to get your free directory.

1-800-232-1022

INFOMART.

Where the leaders in automation
share their knowledge with you.

INFOMART, 1950 Stemmons Freeway, Dallas, Texas 75207 INFOMART is a registered servicemark of IFM partnership



by Reagan Andrews, Ph.D.

The Variety Store

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

Will Blue's OS/2 overcome Windows 3.0 Landslide, Can hungry attorneys stage a PC-based comeback and, did WSJ show some subtle editorial humor?

Summer price wars start early

Blue's OS/2 ain't dead yet. Taking a tip from Borland and apparently arch-rival Microsoft, IBM will be dropping price of OS/2 1.3 and the coming 2.0 according to media sources. May be a good idea at that.

Users who wouldn't think of "experimenting" with a \$350 product may give a \$99.95 OS/2 a closer look. Borland sold an awful lot of *Quattro Pro* and *Paradox* this way. Microsoft is gambling they'll do just as well with *Word for Windows*, *Excel* and *Power Point*. Why not IBM too?

Time may be right for an OS/2 that has real *Windows* application and DOS compatibility as well as advanced features that (current) *Windows 3.0* lacks. Advent this month of DOS 5.0 and *Windows 3.0*, and the resulting complexity of their installation/configuration should remove one of the major media gripes about OS/2 - that it's too complicated for the average user. About the same hardware/resource demands here too.

Can use the same argument(s) for the possible resurrection of "average-user" interest in UNIX as well. Interesting.

OS/2 on the local front

Big block to early OS/2 sales (and installations) was lack of necessary device drivers. Micrografx, Dallas-based publisher of the *Designer* series, is good with device drivers while IBM doesn't have the best reputation in that area.

Micrografx is also very, very good with graphical user interfaces and programming for same. April saw a joining of forces with Micrografx agreeing to provide drivers for a number of OS/2 accessories, and some major utility software (*Mirrors*) that allows programs written for Windows to be transported and run in OS/2

Compaq sues Dell over "Unfair" ads while WSJ shows some humor

Dell Computers of Austin, TX, has been poking a sharp stick somewhere on Compaq's anatomy with its recent advertising campaign. Compaq struck back in April.

Compaq is fighting for users. Long a darling of the corporate buyer and noted for very high prices for quality hardware, Compaq seems to have realized that users now demand support and competitive pricing. Compaq's reputation as the "high-priced spread" apparently has been eating into sales. Dell's ads certainly haven't helped much either.

Result has been a Compaq move to reduce prices across the board, joining IBM, Toshiba and just about every other major hardware maker in April in substantial reductions. Compaq also brought suit against Dell for its ads. Dell thinks it will be free publicity.

Biggest winner(s) will be the attorneys.

The *Wall Street Journal* published their account of the issues in the April 17, 1991, edition with (perhaps) an unintended and humorous twist. Sharp-eyed WSJ readers should have noticed that the story on page B4 was just overleaf from the full-page Dell ad on page B3.

Does FTC believe two small Microsofts will be Better Than one giant? Hope not

I still have fond memories of all the benefits brought to us by the "Breaking of the Bells." Average phone bills are much higher, service is much worse and we've all been unwilling participants in this grand experiment in enhanced communications.

Rumors are flying that a similar fate may await Microsoft after the FTC gets through with their investigation.

I'm not sure I understand the basis (other than political) for the FTC action. There are a number of competitors to MS DOS including IBM, AT&T (UNIX), DRI (DR DOS), Theos (TheoDOS) and others. Several also produce applications

software as well. A number of media writers are wondering about this too.

Problem is that we'll all be suffering throughout the process. Microsoft will have FTC people delving through every facet of their business with the result that many functions may be slowed significantly, such as research and development and product support.

"Desert Storm's" legacy A growing bandwagon And, a new PC Virus

Just about everybody who had any product in Saudi Arabia during Desert Shield/Storm will be touting their involvement in the coming months. Only thing saving us to date is the long lag time on magazine advertising.

Before we get too euphoric over the technology involved, we really ought to take into account that almost none of it was "state of the art." Military development and procurement is so slow that many of the components utilized are actually obsolete and produced mainly by small companies for the military because the major manufacturers no longer make the parts!

What was up to date was the computer virus that knocked-out (temporarily) a computer database listing Iraqi POWs. Media source didn't identify whether the hardware was PC- or Mac-based.

Prodigy's no virus -- Or, is it?

Users irate in latest flap

Talk about self destructive. *Prodigy* must feel snake-bit over the latest user flap -- a possibility that *Prodigy* use reveals a lot about users systems, software and mail messages to the service.

A really nasty surprise to some users, revelation that the communication service program "possibly" can read a lot about their PC's, including E-Mail messages, began unfolding in April and May. So far, the latest media articles haven't reached the strident level of the "E-Mail censorship" series that began last year created.

But, implications are far more sinister -- and appealing to conspiracy and "Big Brother's watching" devotees. Can't help but think IBM wishes it never got into this business.

Intel 487SX Chip Seen at CompuAdd

I'm not sure I understand all this, but here goes. Browsing in a local CompuAdd in early May came across an Intel 487SX coprocessor chip on display. It's intended for those 486SX machines hitting the streets just now with the "hobbled" Intel chips.

No, CompuAdd didn't have a 486SX PC on display.

Appeal of the 486SX is that it will be significantly cheaper than the full 486DX PC's, but will lack the built-in coprocessor and/or caching capabilities of the "real" 486DX chip. Price of the 487SX coprocessor was not displayed, but would imagine it will (initially) be somewhere in the \$500 range if Intel follows its usual practice.

Why is the 486SX so much cheaper? One possibility (an unfounded and nasty rumor) is that the 486SX chips are really line-rejects. That is, the SX's began life as full 486DX chips, but were flawed and unsuitable for use unless the coprocessor sections were disabled. One way to tell will be the chip's power consumption.

Windows at Spring Comdex Wish we were in Atlanta

Atlanta is the place to be if you're interested in Windows 3.X this year. WindowsWorld took place May 20-23 at Spring Comdex, and was the launching site for a lot of answers (we hope) about Windows 3.X and coming Windows-based applications.

(I wrote that in past tense, but this column is being written several weeks before Spring Comdex, in early May.)

Windows 1-2-3 may help Lotus

What was/should be shown at WindowsWorld? One item should be *Lotus 1-2-3 for Windows*. Lotus would like to catch up after betting on OS/2 last year and early media reports are that the Windows version of 1-2-3 is in beta testing, and should be demonstrated at Spring Comdex.

According to beta testers, users will have both interfaces available in the new product -- Windows' pull down menus and the Lotus slash menu system.

Lotus reported a 71% decline in earnings for their first quarter in April, and stated that the Cambridge-based spreadsheet maker believed many customers were waiting for new Lotus versions to be announced in the next two quarters of their fiscal year.

Harvard Graphics for Windows?

SPC is expected to announce a Windows version of *Harvard Graphics* in mid May, and show the product at Spring Comdex. Software Publishing has long been the leading maker of business graphics software for DOS, and has been seen as potentially assuming a similar role in the Windows GUI. ▶

Selected **SIG** Happenings

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

After making some emergency changes to our presentation schedule, our May meeting consisted of a presentation of Assembler programming on the IBM RS6000 computer by Frank Cavallito. The term Reduced in RISC does not imply fewer processor instructions!

Our tentative schedule for June and July still includes presentations on Protected Mode Programming and the use of Spontaneous Assembly. Given that the order is uncertain,

please check the BBS for last minute changes to the SIG schedule.

Frank Cavallito

Communications SIG

In May, Mr. Moyez Thanawalla of Dallas FAX discussed and demonstrated the overall operation of hardware and software used to transmit and receive data by FAX (facsimile). As both designer and vendor, Moyez and associates really understand their product, offering us valuable insight into just what a

FAX/modem card should do. With the tremendous growth and interest in FAX, we might all have FAX boards in our future.

The club's bulletin board system (BBS) is an ongoing topic of interest. In June, we are fortunate to have Mr. Tom Prickett and Ms. Andrine Stricherz available to demonstrate how to access and use the NTPCUG BBS. Tom is SYSOP (SYStem OPerator) of the BBS, and Andrine has for some time contributed articles and expertise on its use. We'll have a phone line hookup in place for on-line demonstration of all the shortcuts to sending and reading personal and conference mail. The entire meeting will be focused on the BBS.

Our July meeting may focus on use of one of the commercial BBS facilities, such as CompuServe. Comm SIG participants are encouraged to share their expertise with the club, and one of our astute membership has tentatively agreed to chair this discussion.

See you there at noon!!

Doug Gorrie

The Variety Store *continued*

According to media, SPC will also announce an upgraded version of the DOS product, *Harvard Graphics*, at the same time. This latter is somewhat surprising since 2.3 is a quite recent release and media sources were not expecting a revision this soon.

Disk backups in Windows focus For Norton and Central Point

Shortly after *Norton Backup* (Symantec) was announced for Windows, Central Point Software responded with *PC Tools 7.0*, including a Windows backup utility. The new suite of DOS and Windows utilities should heat up the utility wars.

The new PC Tools will also include Virus Protection, a utility to detect 600 viruses. Virus Protection works on local and network drives.

More interesting note: Central Point Software is joining Borland and Microsoft in offering greatly reduced pricing to owners of competing packages. *PC Tools 7.0* will list at \$179, but owners of competing packages will be able to swap to 7.0 for \$59. Upgrade for registered users will be \$49.

A final Windows note: Corel's "Annual Report" Stunning graphics display

Now this is graphics! Corel Systems Corporation, publishers of *CorelDRAW*, just released their 1990 "Annual Report" and it's a stunning display of business graphics.

Bulk of the report was produced in *CorelDRAW* and makes extensive use of its power. I received earlier Corel Quarterly Reports that were un-

derstated and beautifully done. Although somewhat flashy, the Annual Report is what you'd want to see from the #1 PC graphics editor maker. Excellent graphics, color use and typography went into this showpiece for their flagship product.

Equally interesting is the Corel balance sheet and statement of earnings. Very impressive for a young company.

What you didn't see this month...

No PostScript, font or printer stories this month. Doesn't mean there weren't some interesting items here, just that I wanted to wait to see what would come out of Spring Comdex.

C++ SIG

In May, we moved on to Phase 2 of the project, and discussed the design and implementation of the text-window class. This is a more complex subject than we had originally anticipated, so we'll spend at least one more month (and probably two) debating the implementation and uses. Our plans are to use the design we presented in May to implement a text file viewer, testing our claims of reusability. All of the code and notes for the text window class are available on the BBS in the file CPPSIG05.ARC.

Our plans for June are still up in the air as I write this on May 10th. We've been trying to arrange a presentation by Intel, but the details have not been finalized. If they do join us for the June meeting, they will be demonstrating their new 32-bit C Code Builder Kit, which includes a DPMI-compliant DOS extender, along with the ANSI C compiler and standard utilities.

If they don't make it, we will continue discussing text windows, and Intel will be rescheduled for a later date. More specific plans will be posted in the Meetings conference of the BBS as they become available.

Kent Cobb

Community Service SIG

There will be no meeting of the Community Service SIG in June. Please join us in July for more fun and frolic.

Jay Shilstone

DOS SIG

We're off and running at 5.0!

Microsoft's DOS 5.0 should/will be on dealers' shelves by the June DOS SIG Meeting. Expect a lot of hoopla when it's announced. Expect a lot of tears when unwary users try to install it without READING the documentation.

Of course, that won't apply to any of our SIG members, since we all read the doc's first - don't we?

NTPCUG President Jim Hoisington and Reagan Andrews, past NTPCUG President, will focus the June DOS SIG Meeting on successful installation of DOS 5.0 for the typical, non-typical

user. We will be looking at most (we hope) of the traps lurking in this powerhouse DOS if it's not handled properly at installation time.

Major areas we'll discuss are HIMEM.SYS, EMM386.SYS, DEVICEHIGH=, UMB's, LOADHIGH - and the memory they'll free up. Running 5.0 also means learning about low and high memory addresses, video memory, SCSI and IDE interface problems, special program memory address "gotcha's" and other components touched by the "new" DOS. This means looking at CONFIG.SYS and AUTOEXEC.BAT files in an unusually intimate light. Might as well, we know DOS 5.0 does.

Tip to the wise: most important documentation is on .TXT files on the installation disks. Print and study them before trying to install 5.0. Also, keep a backup boot disk handy, "just in case." 'Nother tip: keep all your hardware documentation handy as well.

Is DOS 5.0 worth the trouble? Absolutely! Come to the DOS SIG Meeting in June and see why Jim says this is the first DOS worth buying since 3.30.

Reagan Andrews

Lotus SIG

The subject for the May meeting was a demonstration of the CD/Prompt product from Lotus. CD/Prompt is a CD that contains product documentation, demonstration programs, driver updates, software updates, and technical notes for all of Lotus' products ranging from the popular 1-2-3 (all versions) to Lotus Notes, the groupware product. Lotus Magazine is also included on the disk. The information is indexed so that you can search based on keywords. CD\Prompt has been provided to the NTPCUG free through their user group support program.

The subject for June is somewhat unclear at this point. One possibility is that Lotus Development will be coming to the meeting to demonstrate a new product that is not available on the market as of this writing (5/7/91). If Lotus is not here in June then Mark will discuss his trip to Cambridge, Massachusetts, where he attended Lotus Week. During his visit, Mark will be meeting with other SIG leaders from around the country,

Lotus officials, and attending various meetings and presentations throughout. Whichever program happens, it should be interesting so come on by in June.

Have a question about 1-2-3, just send your message to the Lotus SIG mailbox on the group BBS.

Mark Gruner

OS/2 for End Users SIG

Want to find out more about OS/2 and how to use it? Then give us a visit. Those involved with OS/2 Standard or Extended Edition as well as DOS and Windows users are welcome to attend.

Usually we try to use an LCD projection unit to show the whole group actual examples of the points being discussed.

Recently, we covered the LAN Server, and in June we hope to discuss Novell for OS/2.

Future meetings will focus on the following:

June Novell for OS/2
July High Performance File System (HPFS)
August OS/2 Std. Edition 2.0
September Performance & Tuning
October Data Base Manager

We hope to see you soon at 12:00 Noon each meeting Saturday,

Bob Fermier

Paradox SIG

The April SIG meeting actually went better than I could have hoped for. I may plan another free form "learn as we go" session. The best part of the meeting naturally came after I finished with the "formal" Forms design presentation.

May's presentation was presented by Borland. Our new Borland system engineer, Randy Haben, did an excellent demo of the Quattro Pro/Paradox hot keyed interoperability. I'm sure he has heard this before, but, Karen really is much better looking. Too bad she got promoted back to the shaky city by the bay. Thank you, Randy, we really appreciate your spending time with us on a Saturday. And I promise, no more leg jokes.

One of our very own Paradox users has volunteered to do our June program. Bill Capps will present a program tentatively titled "Paradox From

The Users Perspective". Bill has basically taught himself Paradox and has developed a Paradox system to meet his business needs.

July looks like it is going to be Terry Brantley. His program will be a demonstration of a Paradox application he developed for disk cataloging. I'm looking forward to that one myself. I have 80 Meg. on-line, plus who knows how many three-and-a-halves stored literally everywhere, My favorite mode always seems to be, "I know it's here somewhere".

By the way, who was it that mentioned they might want to be the Assistant SIG Leader? I hope you haven't sobered up yet.

Well, see you at the SIG.

Fred Williams

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 hand-out 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 YOU ARE ENCOURAGED TO JOIN NTPCUG AND VOLUNTEER YOUR TALENTS.

This 16-class curriculum of PC fundamentals is specifically designed to be the kind of learning experience you always wished existed... where you are accepted just as you are, and where you can gain knowledge without the hassles... and best of all... the classes are FREE!

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

The four classes for JUNE 1991 will be:

- 9:00 am Class 9.2 Genesis & Overview of Computer Languages
- 10:00 am Class 10.8 NTPCUG Disk of the Month (DOM) Library
- 12:00 Noon Class 11.2 PC Graphics Modes
- 1:00 pm Class 12.2 Bulletin Boards & Archiving Programs

Bob Presley

Advanced Programmers SIG

This month's meeting brought the long awaited tug-of-war at the creek behind INFOMART between the proponents of the RPG II language lead by Fred Williams and the proponents of the FORTRAN language lead by Bill Cotten. By the time it was over, the contestants were so muddy, we're not sure who won. Join us next month for more dirt on the computer industry.

Jim Hoisington

ROOTS III (Genealogy)

The Dallas Roots meetings have expanded from one hour to 100 minutes. The May meeting featured a demonstration of a new COMMSOFT release called SESAME. It's tough to define exactly what Sesame does as it is so very powerful. Information can be stored exactly as it is found in the original source; the sources of all information can be precisely described; and information is easily entered, displayed, moved, and edited. SESAME comes with both the MACINTOSH and MS-DOS version in the same package. The MS-DOS version requires MS Windows version 3.0.

While SESAME comes with over 50 pre-defined tables, one can design as many tables as one wishes. With its wide range of data transfer capabilities, your invaluable research results can be rapidly moved to a genealogy publishing

program, a word processor, another database system or the Casio B.O.S.S. for research trips.

Also displayed and discussed at the May meeting was RPLOT, a COMMSOFT product that prints very large pedigree and drop charts in color.

As with past ROOTS meetings, there was a Q&A session, but this time it was expanded from 30 to 70 minutes.

Al Sanford

TI-Pro SIG

We are planning the following event times for the June and subsequent months' meetings of the TI-Pro SIG:

- 10:00am - 10:55am dBase for the TI-Pro
- 11:00am - 11:30am *** Open for NTPCUG business meeting
- 11:30am - 12:30pm TI-Pro General Discussion
- 1:00pm - 2:00pm TI-Pro New Users

Charles Sullivan

Word SIG

Crashed PC's make for hard demonstrations! The NTPCUG demo PC we us for the WORD SIG apparently went down for the long count in April. If it's back, or replaced, we'll be looking at add-ons for DOS Word (5.0 & 5.5) at the June Meeting.

Meanwhile, there are some questions about Word's future that may be answered in late May and early June. What's in store for the Microsoft Word family this summer?

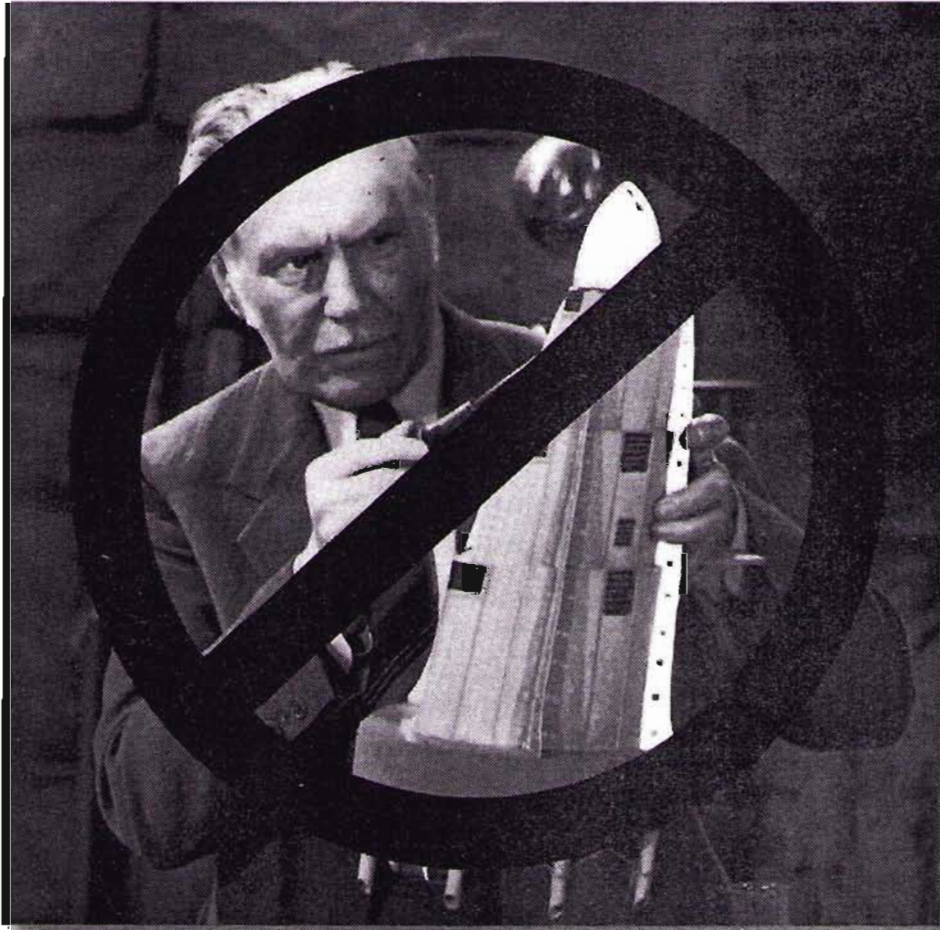
One bet is that Microsoft will "do something" with Word for Windows (WfW) version 1.1. It's still better than the other Windows-based competition, especially at \$120 during the Windows 3.0 application(s) drive. But, WfW has a long way to go in terms of speed and graphics handling.

DOS Word's 5.5 version was an unexpected surprise this fall and has been met with mixed reviews from users. Raises a question about abandoning a substantial group of Word 5.0 users - who may decide to opt for the Word-Perfect alternative if they have to learn a new interface at this stage of the game.

If you are curious about Word 5.5, come to the June Word SIG Meeting where we'll give away a copy to some lucky SIG member.

Reagan Andrews

You don't have to be a rocket scientist to program in BASIC.



Granted, with Microsoft's BASIC Professional Development System, rocket scientists can work wonders every day of the week.

But if you want to work better in this stratosphere, Microsoft® QuickBASIC is all you need.

Instead of an I.Q. test, you get a step-by-step printed tutorial that guides you through a complete working program. And our handy on-line electronic manual lets you put your finger on anything you want to know instantly, or copy and paste sample code into your program window.

Meanwhile, our on-line training and Easy Menus make you feel at home in your new environment in minutes — not hours. And to simplify things even more, our intuitive interface offers context-sensitive help. Plus a debugger that gets your program up and running in record time.

Naturally, this BASIC also turns out code at record speed — 150,000 lines per minute.

Not surprisingly, *PC Magazine* called it "... perhaps one of the greatest software programs ever written" and gave it their Editor's Choice Award.

All of which only goes to prove one thing: you don't have to be a rocket scientist to conquer new frontiers.

Just smart enough to get a hold of our Microsoft QuickBASIC.



Microsoft
Making it all make sense™

Customers within the 50 United States call (800) 426-9430. Customers in Canada call (416) 673-7638. Outside the U.S. and Canada, call (214) 942-4992. © 1991 Microsoft Corporation. All rights reserved. Microsoft and the Microsoft logo are registered trademarks and Making it all make sense is a trademark of Microsoft Corporation.

We Ain't There Yet

by Fred Williams

Author's Note:

I wrote this a few months back and, at the time, felt that although the content is fairly accurate, the overall tone was somewhat negative. I have recently reread it and have decided it might give some computer novices some hope and insight into what the PC world is really like. So, if the NTPCUG editorial staff agrees with me, here we go.

Just spent a frustrating couple of hours working with my favorite PC database product, Paradox. Seems our man Reagan Andrews has been backed into the use of Paradox courtesy of his employer. He doesn't have a pre-disposition toward the product as I do. If his attempts to use Paradox don't improve dramatically I fear he will become just another unhappy user.

I might preface this article with a disclaimer. Much of the discussion is going to relate directly to one of my favorite products on the market, Paradox. I do want to insure that I'm not singling out Paradox as the whipping boy. What I'm going to attempt to do is use the Paradox fiasco as an example of how much farther we have to go in the "User Friendly" department.

In this era of GUI, SQL, QBE, point and shoot, menu driven, and any other marketing hype term you can think of, any results, other than the most trivial, are still extremely hard to come by. The marketing types do a really good job of presenting the slick and colorful demos, but when its fourth down and long yardage, the current product's unadvertised limitations usually jump up and zap you right between the eyes.

I cannot in good faith blame all the problems a user has with his PC on the software and hardware marketers. The problems are only exaggerated by the false atmosphere that develops when the user is promised the old warm fuzzy feeling in the ad campaigns. Most of the problems I see repeatedly is the direct result of lack of real information.

The reasons for this lack of information are legion. But the root cause is that the user community has been sold a bill of goods. These new fangled computers ain't near as easy to use as the ad campaigns have lead you to believe.

Sure, we have pretty pictures on the monitor in a multitude of colors. Why, on a MAC you can even substitute a toilet for the trash can, with sound effects to match! That is not where the real use of computers is. Windows and high resolution colors only make a weak attempt at glossing over the truth about

computers. Computers are complex devices that are intended for use to solve complex problems.

Well, back to the reason for this tirade against the status quo. Seems Reagan had two tables of patients that had visited his establishment on various occasions. What Mr. Andrews needed to do was query the two tables and produce a simple list of patients who were in table number one and not in table number two. The second query needed to list those patients that were in table number two and not in table number one. Simple enough right?

Ok, Jim, and all the rest of you with "baby duck" database packages, please line up and take a ticket. Then you can tell me how easy this would be in your favorite (insert name here) database. Now serving number one! I'll guarantee you that I can find an equally dumb situation in your favorite database package also.

I might interject here that we are not dealing with your basic smucks when it comes to PC's. Reagan, (That's Dr. Andrews to you. Thank you very much!) is not what I would call your average PC lightweight. He, contrary to all outward appearances, could not be classified as a "learning disabled" either, even if he does have a PHD. As most of you know, I've been playing with these little rascals since before IBM blessed them. As to my ability to catch on (not withstanding Kent Cobb's, opinion), I feel I'm at least average.

An interesting aside to those of us guilty of generalizing about our Federal Employees, Reagan called me on a Saturday afternoon. There are good apples in most any barrel. It's unfortunate that the good ones have to endure the stigma of the few others.

Seems Reagan had spent some amount of time trying to get his desired answers before calling me. You know he had to be desperate if he called me!

I am, I fear, guilty of taking a software developer's attitude toward most every piece of software I use. I have a reasonably extensive background with Paradox. The first work I did with Paradox was with release two of the product. Rather than bother using Paradox to do a lot of ad-hoc queries on data, I have mostly designed and coded entire systems in the Paradox programming language, PAL.

I have designed and developed a fairly elaborate specialized marketing system using Paradox. I am currently working on a couple of systems for use in my wife's new company as well as my company also. My weakness with Paradox is in the interactive use. Paradox has, as the marketing literature says, and I paraphrase here, ". . . an easy to use Query By Example user interface . . ." The question might be, "Easier to use than what?"

Reagan has had some past exposure with Paradox. The NTPCUG database was recently in Paradox. That was before Jim Hoisington ported it to his favorite database, Advanced Revelation. Don't knock another man's decision, especially if he is doing all the work free!

Well, being the on the spot professional Paradox user, I said, "That should be no problem. Have you got Paradox up on your system?" It was all down hill from there. I ended the phone call with, "I'll keep messing around with this, and get back to you." I mean, we even had the Paradox User's Guide out and open.

I took a rough description of the tables, and using some similar data, I whipped out some dummy tables to work with. After about an hour of trying every combination known to man in Query By Example, I finally got very close to the answer Reagan wanted. The only thing missing was the Patient's social security number. For the life of me I could not trick Paradox into including the social security number in the answer. The reasons for this are not within the scope of this article.

I called Reagan back and described the procedure I used. He called back a short time later and told me he basically got the answers he wanted. He said he could manually look up the required social security numbers. A full house 386, over 300meg of storage on line, some of the highest horsepower software known to man, and he could look them up manually!

I don't want this article to reflect on the state of affairs too negatively. You can look at what we have to work with today in relation to what we had in 1982 and know we have, as the commercial says, "Come a long way baby!" I think what is happening now, is that everyone is focused on the easy thing to fix, how the PC looks and feels to the user.

What really needs more attention is how to make it easier for the average user to do an "outer join" or an "everything, but" query against a database. How you install the modern state of the art software package without having to be a rocket scientist. How to make heads or tails out of the quagmire of word processor, fonts, and printer configurations. Which mostly boils down to, how to write a User's Guide that adequately explains the complexities of the average software or hardware product.

One of the most refreshing things I found about PC's back in the old days, was how easy it was to read and understand the manuals. The only thing I forgot was that they were easier to read than what I had been use to, mainframe computer hardware and software documentation. Still my favorite phrase, "XXXXXXX - Error message self explanatory." My second favorite, "This page intentionally left blank."

With the giant leaps forward in software and hardware capabilities has come an equally dramatic increase in complexity. With this has come ever increasing downward pressure in product pricing.

In the dark ages of computerdom those who knew, lived by a basic truth. One did not buy a piece of software or hardware, one bought levels of support. The less expensive the product the less likely vendor support would measure up when the chips were down. The one true measure of a "computer" company was the support of its customer base.

The PC revolution has blown that concept completely away. Manufactures have strived mightily to provide user friendly products that are easy to use without outside assistance. Current PC products are pushing on the edge of the envelope of unsupported products. The weakness in the total scheme of things is that the marketing departments don't know the truth or won't tell the customer. To reap the true benefit of the capabilities buried within modern PC products, the user should receive formal training on that product.

I don't mean those one day, or worse yet, half day overviews of a product that are passed off as user training. Unless a user has the time and motivation to learn things on his own the computer never really becomes the powerful tool it could be. I suspect that is why I see so many PC's either sitting idle or not even turned on in many sites I visit. The reason Reagan's computer is in use, is because Reagan spends some of, no, a lot of, his own time fooling with things like Paradox.

Most people are not like Reagan and I. They will not waste endless hours messing around with something that is to make their job easier. If it makes their job easier, why do they have to spend their spare time learning to use the tool, by trial and error no less? All the slick windows and multi-tasking operating systems in the world won't make the average PC user more productive, only an in depth understanding of the tools he or she is trying to use will cause that to happen.

Many of us involved with computers are here because we like them. I feel an even larger number is here because they feel the pressure to use them, not because they like them. Over all I have to say that Borland and many other companies in the PC marketplace provide some very useful products at ridiculously low prices. One of the greatest challenges of PC product vendors is to provide easy to use and understand documentation on unbelievably complex products.

The customer has been lead to expect to install the product, read the interesting and informative User's Guide, and sit down and make the thing sing. Well,

►

Clayton Williams and I have a comment for that (well, in deference to our "home computer" users, I won't even use the letters BS.) Boys and girls it just don't work that way any more, and it really never did.

I just love receiving a software update. I expect a large increase in the number of hernia claims filed by ex UPS drivers any day now. I've started gauging the software deliveries in bound inches of documentation and diskette count.

Oracle still holds my current personal record at 10+ inches and 11 three and one half inch diskettes. Borland's Turbo C++ professional is running a distant second at only about 5 inches and 7 three and a halves. Borland's cheating though they are "compressing" the files.

When I received my copy of Quattro Pro, I looked at the size of the documentation and said, "Explicative delete, I'm not so sure I want to learn how to use it that bad!" So far I haven't. I'm beating the devil out

of what I use to do with Multiplan, but I haven't even scratched the surface of Quattro.

What's the answer? I'm not so sure. I am sure several bright young minds are working on it somewhere. Don't say it will solve itself when the computer literate kids come along either. I can write assembler with the best of them on several platforms, but I'm a wee bit dangerous around Word Perfect and your basic laser printer.

Now I'm wondering why I wrote this article anyway. I guess it's just to blow off some pent up frustration about a growing problem. I hope the newer PC users who have read this far will gain some insight into their current situation from knowing that even so called "Power Users" (God, I love that term!) have some very frustrating sessions with our computers. The only down side to that is, it appears it ain't going to get much better, you will just learn to expect it and try to take it in stride.

Fred a

hDC Windows Express

A review by Neil Berkowitz

A major reason why Microsoft Windows is successful is because it is almost infinitely modifiable. Many companies have introduced add-ons to configure Windows to individual's specific liking. hDC is one of those companies and has three products that to simplify and improve the usability of Windows. hDC Windows Express, their flagship product, replaces Microsoft's Program Manager. The second hDC product, First Apps, is a collection of utility programs which can be evoked either from a specific icon or from any window. The final product, hDC Icon Designer, is an addition to the First Apps used to build and modify the Window's icons.

Microsoft's Program Manager has a good graphical interface but has dropped the hierarchal nature of directories and subdirectories. Every application resides within a group but there is no way to embed groups within groups. This results in either many groups on the desktop or a large number of applications within a few groups. hDC Windows Express replaces the Program Manager window with a file folder approach. The initial Express window is a graphical representation of a file folder on which are icons corresponding to the Program Manager groups. However, unlike Program Manager, these icons can

represent either applications or subfolders. Each of these subfolders can then contain more applications or additional subfolders. As the operator accesses each level of subfolder, a graphical representation is made to show the current level.

hDC Express's permits superior separation of applications. In addition, applications can be cross linked to multiple icons in more than one folder. For example, separate folders can be established for word processors, data bases, and spreadsheets. If a program fits into more than one category, separate icons can be set up within the applicable folders with all the icons associated with the appropriate program. This permits launching programs from multiple logical paths.

Express is superior to Program Manager in other ways. In addition to the icon and associated name, the icons can have a textual description and a help screen explaining the icon. The specific icons can be protected with passwords preventing unauthorized users from executing specific applications or getting into specific folders. Windows Express protects the novice user or unauthorized person from accessing the more advanced functions. Express consists of

two programs, the run time program and the editor which can be used to modify the run time folders. hDC has also provided two manuals with Express to isolate the functions of Express user and Express programmer. Graphically the icon and text on the file folders can be of several sizes. Express provides a library of icons to give the developer a greater selection of icons than Windows provides. And for those individuals who desire even more choice, Express also provides an icon editor permitting modification of any icon. The modified icons can be saved or added to the icon library as desired.

Express also provides a screen blanker within the run time program. A variety of patterns are selectable as is the time delay before the screen blanker is initiated. While not as fancy as either Screen Peace or Idlewild, the screen blanker serves its purpose. A quick launch provision also exists to run programs that are not within any folder. Other provisions to fine tune Express exists to launch applications with either single or double clicks, start Express either in a minimized or maximized state, to enable and disable a status line, and to assign specific applications to the function keys.

hDC's second program, FirstApps is actually a collection of programs run under the hDC Micro Apps Manager. When installed within Windows, the Micro Apps Manager appears as a small box in the upper left-hand corner of all windows. When clicked on, the manager brings up the list of Micro Apps that can then be chosen. The Micro Apps manager can be compared to Sidekick or other TSR's that are readily accessible at all times but which remain innocuously out of the way when not desired. What is of greatest significance of the Micro Apps manager is that further applications can be written to run under it, providing a single interface for all future hDC products. The Icon Editor, released separately, is the first of these additions.

The actual list of applications is extremely varied and provides a mixed degree of usefulness. The Art Gallery provides the user with the ability to examine and maintain a library of graphical images. The Memory viewer provides a visual look at how memory under Windows is being used. While useful, the actual display is very busy and almost unreadable if all memory viewing options are enabled. The Font Viewer provides a very handy - and quick- method of observing the currently loaded fonts within Windows. Using the Font Viewer is far easier than modifying the font within most application programs. Another fairly simple but invaluable when needed application is the Character Set. With this application any character in the IBM character set can be chosen from a matrix box, cut, then pasted into the desired application. The Auto Save feature is self explanatory. With it the work in progress is periodically saved based on either a number of

keystrokes entered or by a time period expiring. The System Enhancer provides the operator with several shortcuts to Windows operations. The first shortcut provides a way to quickly start any program while examining a directory. Other shortcuts allow the operator to close all open windows and to exit from Windows.

Probably the most dramatic application is the Desktop Micro App. Microsoft's Program Manager permits the user to change the background, the wallpaper. The FirstApps desktop not only provides the capability to change the wallpaper but also permits several other options. The operator can generate a fractal pattern for the wallpaper, make the wallpaper one of the bitmaps in the Art Gallery, use a basic pattern for the wallpaper, select a series of bit maps for an animation effect, or use a fully usable desktop calendar for the wallpaper. If the Desktop is selected to be run at Window's start-up, the Desktop can also be used to affect the start-up screen. A variety of effects can be used for the start-up screen to zoom, fade, or shift the desired pattern onto the screen. The most interesting start-up affect is the "coalesce" feature. The pattern appears on the outside of the screen as random colors and forms the image over a short period of time determined by the processor speed and the complexity of the picture. Included in the Desktop is a screen blanker.

The remaining applications continue the mixed nature of the Micro Apps. The Alarm Clock provides a multifunction alarm clock feature to Windows, the Work Set application permits multiple programs to be started as a group. The final application, Rocks, is a game comparable to asteroids.

The Icon Designer is the latest product from hDC. It provides a full icon editor permitting a user to select, modify, and create icons for the Windows environment. In addition there are three libraries of icons provided that the user can select from.

Overall, the hDC programs are a mixed lot. The features of Icon Designer are contained within Express and if that program is used, Designer is superfluous. Several icon editing programs are on the market, both shareware and public domain, that further reduce the value of Designer. The Micro Apps cover the full spectrum from extremely useful to generally not used. While it is hard to justify First Apps at the suggested list price of \$99.95, significant discounts can be found. With these discounts in mind, First-Apps a program that deserves to be in the library of most Windows users. Express is definitely the best program of the three. It is extremely useful and can justifiably replace Program Manager as the start up Windows program.

Neil

■

Crosstalking in Windows 3.0

GLI Communications

by Tony Nogueres

If you want to run Microsoft Windows, you really need to run Windows applications. Windows applications make it easier to switch from the DOS environment to the Windows environment. The basic applications one might need are a spreadsheet, a word processor, a database and a communications package. After finding a Windows word processor and spreadsheet, I decided to look for a communications package. I decided to give DCA's Crosstalk for Windows a look and see if it measured up to the old faithfuls, like Procomm.

First, the installation is easy. Crosstalk for Windows holds your hand every step of the way. This includes configuring your system, modem, and your WIN.INI file. It also allows you to set the directories as you wish.

Once Crosstalk is installed you need to add names and phone numbers. Crosstalk doesn't use the standard spreadsheet-like format: numbers and names in columns and rows (all in one file); rather, Crosstalk uses a file for every entry. This file contains all the information to make the connection including: modem parameters, display parameters, transfer protocol, logon, password, start-up script file, and up to 24 user-definable keys. The file system is convenient because of the amount of information you can have for different sessions. The drawback is Crosstalk does not provide a method to tag multiple files to dial automatically. After a little digging, I was able to find DCA's BBS number in the manual and I downloaded two scripts that allowed me to tag and autodial the numbers I wished to call.

After I connected to the one of my favorite BBS's, I found Crosstalk for Windows to be a real charm. I was able to use my mouse for virtually every function of the program. I defined the user function keys to meet my needs, and was able to work my way through the BBS with mouse clicks. After listing files on the BBS, if I wanted to download a file, I would:

- 1) Go into the scroll mode and find the file I wished to download (Crosstalk includes an adjustable scroll window (0-64K)).
- 2) Highlight the filename and copy it to the clipboard.
- 3) Exit the scroll mode.
- 4) Instruct the BBS to download.
- 5) Paste the name of the file at the BBS download prompt and then click on the Enter function key.

Crosstalk would automatically start downloading the file. With Zmodem and a 2400 baud modem, I received files at about 233 cps. Of course, while the file was downloading, I could play a little Solitaire (in 386 enhanced mode).

I did not have any problems configuring, connecting and communicating with any of the most common BBS's (RBBS-PC, Remote Access, Fido, PC-Board, Chairman, etc.)

I also tried Crosstalk for Windows on the network at my office. I was able to configure Crosstalk to emulate a DEC VT-102 terminal. I had a little difficulty configuring the definable function keys to use the Escape sequences, but it worked better than the terminal emulator I had been using.

In addition, Crosstalk supports Windows' Dynamic Data Exchange (DDE) which allows Crosstalk to act as client or server with other Windows applications. The powerful script language includes over 200 commands for automating just about any feature of Crosstalk for Windows, including DDE.

I found the user manual short and to the point. It described every option of the software in a direct method without too much of the why's and how's. It supplied enough information to carry on normal everyday computer communications. The programmer's reference manual for the script was very comprehensive. It included information that you find in standard programming reference manuals: syntax, structure, command reference and appendices. The programmer's reference assumes one has prior programming experience.

Crosstalk for Windows includes most of the features found in character-based communication packages:

- 1) all the popular transfer protocols
- 2) terminal emulation
- 3) capture (to file or printer)
- 4) a fully functional host mode
- 5) an extensive script language
- 6) a script recorder (to automatically create logon scripts)
- 7) definable function keys

With all these common features, easy setup/installation and an understandable users guide, I found switching to Crosstalk for Windows easy. I have since dumped my character-based communication software, and I have embraced the crisp graphical interface. I like having all the features of this software just a mouse click away.

Tony

▲

Microsoft Windows™ Training

The Art of Windows Programming™

- 5-week programming class
- On-site training
- On-site consulting

Development systems:

- Microsoft Windows SDK
- Borland® C++

DIGITAL
Artistry™
214-618-1266



THE NORTH TEXAS PC USERS GROUP...



MEMBERSHIP APPLICATION
North Texas PC Users Group

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.

Member # _____

Name: (Last) _____ (First) _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: (Check Preferred No.) Home _____ Metro? Y ___ N ___
Work _____ Ext. _____ Metro? Y ___ N ___

Occupation/Profession: _____

Check one from each column below:

Payment:	Membership Classification:	Application Status:
Cash <input type="checkbox"/>	Regular (\$24.00) <input type="checkbox"/>	New Member <input type="checkbox"/>
Check <input type="checkbox"/>	Student (\$12.00) <input type="checkbox"/>	Renewal <input type="checkbox"/>
Credit Card <input type="checkbox"/>	(full-time with ID)	Address Change <input type="checkbox"/>

Please initial here _____ if you do not wish to have your address included on member lists sold for the NTPCUG's benefit to advertisers of IBM compatible products.



North Texas PC Users Group, Inc.

Membership Survey -- October 1990

The North Texas PC Users Group (NTPCUG) is an independent, nonprofit organization of approximately 1600 members who regularly meet to exchange ideas and facts about IBM and compatible personal computers. Beginning in February, 1987, the NTPCUG began regular surveys of its membership. These surveys sample members' occupations, corporate and personal computer purchases, current hardware and software, expected future purchases and general user personal demographics.

The following results are based on a survey conducted at the October, 1990, meeting at Infomart. 279 valid surveys were collected during the meeting, representing a 19% sample of NTPCUG membership current at the time of the October meeting. All numbers are rounded to the nearest whole percent.

NTPCUG -- 1990 Membership Demographics in Brief:

Based on the October, 1990, survey, the NTPCUG membership appears to be a group of people who are working in professional-level positions, and exert significant influence over corporate computer purchase decisions. Our members are evenly distributed in age, report median family income levels above \$50,000, are well-educated and invested in continuing education efforts.

NTPCUG Members' professional Roles

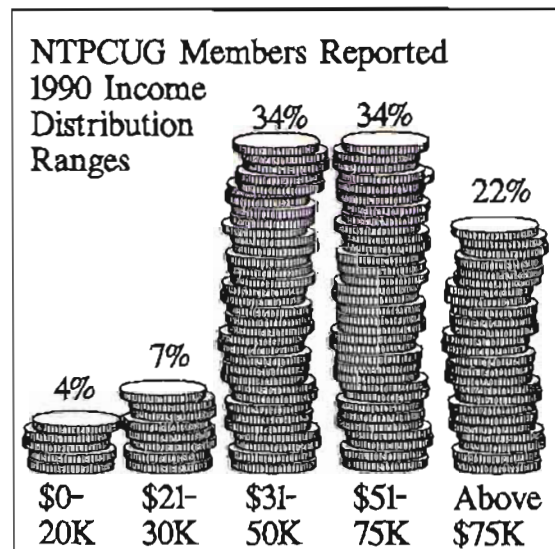
In their professional roles, NTPCUG members felt the most appropriate description of their jobs were:

A) Chairman/ President CEO	6%	G) Software Engr./ Programmer	13%
B) MIS Manager	5%	H) Representative	1%
C) Engr./Hardware	5%	I) Educator	4%
D) Consultant	17%	J) Mgr. (Non-MIS)	9%
E) Systems Analyst	6%	K) Scientist	1%
F) Data Base Supervisor/ Administrator	3%	L) Other	29%

- 72% of our members are married (this figure is not broken down by sex)
- 12% of our members bring their spouses or significant others to meetings
- 58% use their PC's more at work than at home
- 75% report they are the primary PC user at home
- 74% of the 1989 membership sample had 4-year Bachelor degrees or higher,
25% of members report degrees at the Masters level, M.A., M.S., M.B.A., etc.
- 7% of the respondents hold doctoral level degrees, including Ph.D., L.L.D., Sc.D., M.D., etc.
- 62% report that they regularly participate in continuing education
- 79% classify themselves as skilled or expert PC users – 28% report expert-level knowledge
- 73% have and regularly use modems with their PC's, and 25% report two or more telephone lines at their residences.

Membership survey highlights

- 89% of NTPCUG members report a significant amount of their work involves them in evaluation, recommendation, design manufacture or sales of computer hardware or software:
58% of total sample in computer hardware
84% of total sample in software
- 53% of those members sampled who are not Computer Professionals state they are considered PC Experts in their area(s)
- 85% of NTPCUG members are males
15% of NTPCUG members are females





NTPCUG -- 1990 Membership Demographics

NTPCUG Members tend to use PC's widely both at work and at home. 100% of members in this sample report they use computers on the job, with 55% of this sample reporting primary use of desktop PC's.

Portables and laptop PC's accounted for 6% of members' primary at-work computing, and 37% of the sample reported mainframe computers as their primary work machines. Minicomputers lagged somewhat this year in reported usage, perhaps due to confusion over terminology, i.e., difference between mainframe and minicomputers.

Home PC Purchase Patterns

Members personal home PC spending patterns reported for the year were:

Hardware: 271 members reported they spent an average of \$1,459 on hardware in 1990 for a total of \$395,450 in purchases.

Software: 275 members said they spent an average of \$1067 on software during 1990 for a total of \$293,650.

Total: PC purchases averaged \$2,527 for 278 members responding to the survey. Total spent = 689,100

Home PC Use Patterns

Home PC ownership has continued shifting away from the "name brands" since the last survey. Largest group of members, 69%, said their primary home computer wasn't made by IBM or Compaq. Other brands, such as Dell, Compu-Add, Northgate or Zeos were specified in the current survey.

IBM accounted for 26% of the primary home machines. Of the total sample, 23% were PC's and 3% were PS/2's. (IBM PC's, PC/XT's and PC/AT's were grouped as "PC's".) Compaq accounted for only 5% of members' primary home PC's.

Broken down by CPU's, results of the survey indicate that a majority of members have either an 80286-powered PC (35%) or an 80386-powered PC (25%).

27% of members still have 8088 or 8086 CPU's for primary home computing. "Other" accounted for 7.5%. 20% of the sample reported more than one home PC in this survey.

Planned Purchases: NTPC members state they are planning to upgrade their current systems by:

A) Adding a Hard Disk to a PC	11%
B) Adding a Larger Hard Disk	34%
C) Adding a (faster) Modem	19%
D) Adding an AT or Clone	6%
E) Adding Memory	31%
F) Adding an Impact Printer	2%
G) Adding a Laser Printer	26%
H) Adding Accelerator Board	5%
I) Adding 386 Machine	36%
J) Add high-quality color /graphics VGA+ etc.	19%
K) Add multiple scan-rate or high res monitor	17%
L) Adding 486 Machine	11%
M) Adding a CD-ROM to PC	12%
N) Adding a FAX Board to PC	14%
O) Adding a Tape Drive Backup	17%

NTPCUG Members exert significant influence on computer-related purchasing decisions within their companies and organizations. Figures below are rounded to nearest whole percent based on survey responses.

NTPCUG Members report they recommend computer and software purchases, but have NO FINAL AUTHORITY OVER them, in the following amounts:

A) Below \$2,000.	30%
B) \$ 2 - 5K	12%
C) \$ 5 - 10K	11%
D) \$10 - 20K	14%
E) \$20 - 50K	9%
F) \$50 - 100K	11%
G) Over \$100K	12%
Other Code or No response	1%

HARDWARE: NTPCUG Members approve, recommend, or purchase the following computer hardware annually:

A) Mainframe/s	5%
B) Minicomputers	19%
C) Microcomputers [PC's]	67%
D) LAN's	37%
E) Laser Printers	57%
F) Impact Printers	49%
G) Monitors	64%
H) Modems	56%
I) Hard Disks	61%
J) Tape Backup	49%
K) Add-In Cards	46%
L) Video Projection Systems	19%
M) Communications Equipment	32%
Z) Other	23%

NTPCUG Members report they recommend and HAVE FINAL AUTHORITY OVER the following amounts of computer-related purchases annually:

A) Below \$2,000.	46%
B) \$ 2 - 5K	16%
C) \$ 5 - 10K	14%
D) \$ 10 - 20K	9%
E) \$20 - 50K	6%
F) \$50 - 100K	4%
G) Over \$100K	5%
Other Code or No response	1%

SOFTWARE: NTPCUG Members approve, recommend, or purchase the following computer software annually:

A) Accounting	30%
B) Order Entry / Inventory	15%
C) Payroll	17%
D) Time Billing	15%
E) Spreadsheets	67%
F) Word Processing	71%
G) Communications	46%
H) CAD / CAM	26%
I) Project Managers	24%
J) Database	61%
K) Programming Tools	41%
L) Graphics	44%
M) Statistics / Analysis	0%
O) Electronic Mail (E-Mail)	21%
Z) Other	16%

The Adventures of PC Tech

Chapter 3

by Ben Thar

The dam broke. The programs and data files were not on the computer; the company president was standing over her shoulder; it was 6:00 pm and PCT started in on the story of what she had been doing with the computer. She didn't leave anything out, and after a while she forgot that she was talking to the president. When she finished, he asked "Did you keep a backup copy of the files that you were working on?" "Yes," she answered. "Then can you reload the program, with the backup-copy of the data, and reprint the reports?"

She never realized that the company president knew that much about computers. PCT started loading the programs, and she was a little surprised when the Human Resources Manager stuck his head in and said that he was working with the President and what type of pizza would she like for dinner. "I like pepperoni," was her answer and she continued working. After printing the reports again, PCT took them to the President. He looked them over and asked for the data sorted in a different way. She went back and sorted the data again. The Human Resources Manager told her she could go home and be at work on time tomorrow.

In the morning the office was buzzing as PCT made her mail rounds. At the Human Resources Department, the secretary told her come back as soon as she finished delivering all the mail. The HR Manager greeted her in his usual friendly manner and closed the door behind her, making her quite nervous. He said, "What I am about to tell you is strictly confidential. Your old boss and two of the warehouse workers are no longer with us because your spreadsheet pointed out inconsistencies in the inventory of company supplies." PCT gasped. "Also, procedures are being put in place to permanently monitor the purchasing in this company; something that has been overlooked in the past. You are being promoted to the position of PC Technician with a 15% increase in salary. You probably will receive numerous requests for other managers with regard to how p.c.'s can improve productivity in their departments. From now on, you will report to me. If we ever bring our contract data processing in-house, then you will work in that department. Congratulations, you have done a fine job. Your mailroom replacement will start next week. If I can help with the transition in any way, let me know."

PCT ran to the freight elevator, went down to the basement and let out a big "ALL RIGHT" at the top

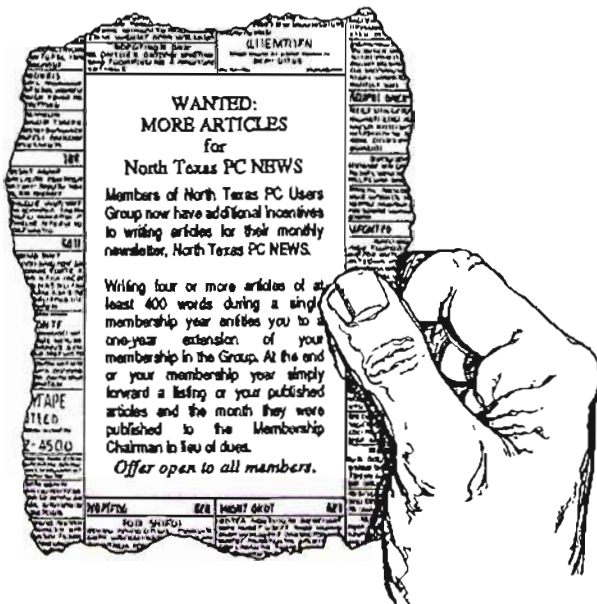
of her lungs. After that, she went back to the p.c. and did some more input and another backup.

During the next few weeks, PCT started looking at advertisements for personal computers. One read, "PERSONAL COMPUTER - \$495." This sounded good, until she read the fine print. "256K RAM, 1-360K floppy disk drive, monitor and keyboard extra." She called anyway, out of curiosity and found that once the extras were added to the price, the advertised \$495 system cost more than what the company paid through the office supply store. PCT researched the computer magazines at the public library and found that there were more brands, flavors, and types of p.c.'s than could be reviewed by a library of magazines. She decided that to narrow her selection down to a manageable few, she would have to set up selection criteria.

- Is price important? Yes
- Is toll free technical support necessary? Yes
- Is quality important? Yes
- Is brand name important? No
- Is local service important? Not if the warranty includes quick 3rd-party service.
- Is the company's reputation important? Yes
- Does the company need to carry a large enough variety to fill most needs? Yes
- Should I rely on magazine reviews? Yes

Armed with this information, PCT went out to find a few vendors that she could use for future company purchases.

...





Inside the North Texas PC Users Group Community

Connie Andrews

Over the last several years we have profiled a number of volunteers and volunteer areas in this column. Granted, these have been no more than introductions and thumbnail sketches of members and their volunteer activities, but most of you who attend the monthly meetings have found a chance to meet these folks "up close and personal" - at the business meeting, at SIG's, at the DOM Booth or the Information Booth, in the cafeteria, or just plain lurking around.

Many of the folks mentioned here over the years are still going strong as volunteers, and we believe that's a real tribute to both the volunteers and to our Users Group. We recognize our volunteers, because they give so much of their time, and our Users Group, because its reason for being inspires its members to participate with so much enthusiasm and energy.

We need approximately 150 volunteers each month to prepare for and staff our meetings at Infomart and to deliver all the other benefits of membership, such as the newsletter, the BBS, DOM, etc.

So, next time you run into one of our volunteers, please say thanks. And if you're one of them, give yourself a big pat on the back. Our profound thanks for your contributions.

In this issue we are acknowledging volunteers listed below who served for the month of APRIL. In addition to those listed below, our officers, directors, SIG coordinators and leaders, newsletter publisher, editor, staff and writers, newsletter exchange, and BBS SYSOP and staff are all volunteers; their names are listed in other sections of this newsletter.

INFOMART Liaison

Stuart Yarus

Presentation/Equipment

Setup and Breakdown
Timothy Carmichael
Chris Jung

Information/Registration

Booth
Conley Andrews
(Anchor)

Dianne Arnold
(Anchor)

John Arnold
(Anchor)

Mike Ashley
(Anchor)

Ralph Beaver
(Anchor)

Randi Boucher
(Anchor)

Darwin Brouwer
Eteta E. Eta
(Anchor)

Paul Fredd
(Anchor)

Jan Frost
(Anchor)

Rick Griffith
(Anchor)

Judy Griffiths
(Anchor)

Allan Harbaugh
(Anchor)

Hank Holt
(Anchor)

Glen Hunt
Bettina May

Don Mayfield

Claude McClure
(Anchor)

Charles Mooney
Joe Nail

Andy Oliver
(Anchor)

Margaret Reeves
Raymond Reyes
(Anchor)

Fred Steadman
(Anchor)

Andrine Stricherz
(Anchor)

Connie Testa
(Statistician)

Larry Tucker
(Anchor)

Jose Valenciano
(Anchor)

Paul Williams
(Anchor)

Tom Zabel

Disk of the Month (DOM):

DOM Central Committee

Roy Bales
Preston Brashear

Charles Carter
Mark Gruner

Howard Hamilton
Kenneth Loafman

John Puckette
Virginia Salter

Ben Weatherall

DOM Booth

Joe A. Allen

Mike Ashley

Robert Bender

Preston Brashear

Gene Carleton

Charles Cashion

Jay Chambliss

William Chambliss

Paul Corbett

Bill Drissel

Kent Haven

Pat Henley

Jo Johnston

Bob Karleback

Duane Martin

Bob Post

Virginia Salter

Elaine Stephens

Jerry Stone

Special Thanks to:

Joe A. Allen

Mike Ashley

Bob Karleback

DOM Review/Presentation

Roy Bales

Mark Gruner (8 reviews)

Steve Lanier

John Puckette (2 reviews)

Virginia Salter

VOLUNTEER INFORMATION

1. Via BBS: (817) 461-0425 (metro) or (817) 461-0506 (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 331-6303 (h)
661-4626 (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)

Meetings & Times



9:00 AM - 10:00 AM

10:00 AM - 11:00 AM

11:00 AM - 11:30 AM

1:00 PM - 2:00 PM

Intel Corporation
The Intel 386/486 C Codebuilder Kit

Software Publishing Corporation
Harvard Graphics Version 3.0

NTPCUG Business Meeting

Microsoft Corporation
Multimedia Presentation

(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
Software Review
Windows Applications
WordPerfect

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

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

11:00 - 11:55
Family Roots - Grngy.
Roots III - Genealogy
TI Pro General Mtg.

11:30 - 11:55
Orientation

12:00 - 12:55
C++/Advanced C
Communications
Community Service
Investors

12:00 - 12:55 cont
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

SIG Coordinator Andy Oliver (214)223-4044 h
(214)871-5854 w
(214)349-9690 h
(214)747-0209 w
K. B. Barton (214)423-9221 h
Assembler Frank Cavallaro (214)458-9711 w
Basic Programming Kent Kingery (214)317-0125 h
(214)271-2292 h
(214)205-2215 w
Steve Dixon (214)775-1503
Beginners C Lang. Stan Milam (214)233-8353 w
Business Applic. Bruce Schubert (214)343-3862 h
C++ / Advanced C Kent Cobb (214)341-1890 w
Tom Cook (214)618-8002 h
Communications Doug Gorrie (214)464-7942 w
(817)731-1308 h
Bill Green (214)827-5751 h
Community Svc Jay Shilstone (214)361-9681 w
(214)298-1789 w
Comp Aided Design Bill Sephton (214)327-4172 h
DAC Software Greg Cohen (214)669-9633 w
Putt Shaw (214)235-2559 h
DOS Jim Holsington (214)416-3101 h
Reagan Andrews, Ph.D. (214)629-0699 h
Kevin White (214)644-7536
Fox Pro Al Sanford (214)278-7888 h
Genealogy David McGehee (214)681-0202 h
Hdw Solutions Gary Johnson (214)937-9876 w
(214)937-5851 h
Investors Harry Widing (214)350-4611
Nash Kappoor (214)458-9158
Local Area Net Bernie Van Rookal (817)451-4540 w
Francis Bright
LOTUS Mark Gruner (214)964-8174 h
Pat Henley (214)271-4911 h
(214)229-9216 w
(214)279-1738 h
(817)962-4598 h
OS/2-Windows Dev James Dunn (214)550-2604 w
OS/2 for End Users Bob Fermier (214)492-1315
Paradox Fred Williams (214)867-1679 h
Personal Users Bob Presley (214)422-4269 h
Bob Russell (214)458-9711 w
Programmers Kent Kingery (214)317-0125 h
(214)416-3101 h
R:Base Jim Holsington (817)467-4581 h
Richard Hauslein (214)352-0888 h
Don Branham (214)271-4911 h
Software Review Pat Henley (214)229-8216 w
TI Pro James Corbett (214)821-4788 h
(214)634-2380 w
(214)348-3786 h
Unix/Xenix Kurt Krider (817)267-0758 h
Doug Scott (817)878-0367 w
(214)240-1085 h
Jim Stallworth (214)604-3683 w
(817)481-7184 h
Windows Applic. Roy Cassas (214)604-1004 w
WORD Reagan Andrews, Ph.D. (214)829-0699 h
David McGehee (214)681-0202 h
Dorothy Bertina (817)387-9993 h
WordPerfect K.B. Barton (214)349-9690 h
(214)747-0209 w
Mich Milam



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
Chairman Kathrine Loafman
Reagan Andrews, Ph.D. Andy Oliver

Officers

President Jim Holsington (214)416-3101 h
President-Elect Andy Oliver (214)223-4044 h
(214)871-5854 w
Program Chair. Timothy Carmichael (214)661-4626 w
Treasurer Ken Connor, CPA (214)669-3377 w
Secretary David McGehee (214)681-0202 h
Membership Dir. Jim Holsington (214)416-3101 h
Advertising Dir. John Prbyl (817)275-4109 h
Disk of the Month Kathryn Loafman (214)596-2539
Group Statistician Connie Testa
Volunteer Coord. Connie Andrews (214)828-0699

Members Emeritus

Phil Chamberlain John Prbyl Stuan Yarus

NOTE: To access the BBS Metro line from outside Area Code 214, use Area Code 214. (This is NOT a toll call from Area Code 817.)

NTPCUG BULLETIN BOARD (214)387-2751
(214)387-2752

SYSOP: - Tom Prickett
Asst. SYSOP: - Maggie Mooney
Technical Advisors: Fred Williams
Pete Testa

User Relations: Kent Cobb
Information Mgt: Dan Marmion
Technical Services: Leroy Tension

TI PRO BULLETIN BOARD (214)484-5122
SYSOP: - Bill SL John

Address Changes, etc...

Payment of dues, address changes, and inquiries about membership should be directed to

NTPCUG Membership Director
P.O. Box 780066
Dallas, Texas 75378-0066

(Check newsletter mailing label for your renewal data.)



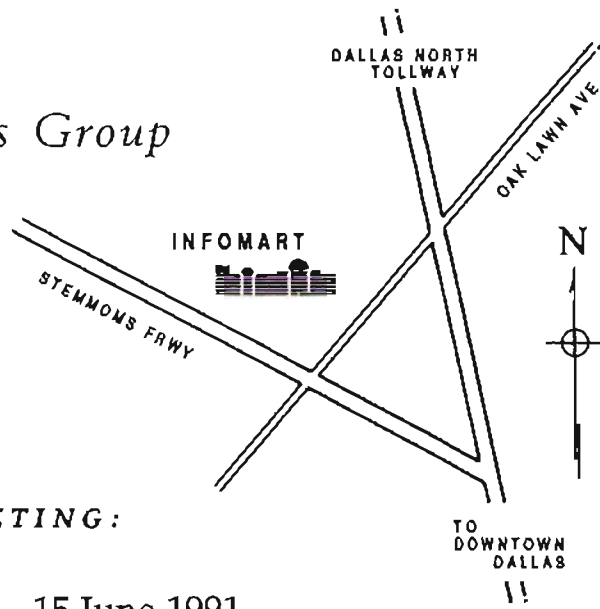
North Texas PC Users Group
P.O. Box 780066
Dallas, TX 75378-0066

Non Profit Org.
U. S. Postage
Paid
Arlington, TX
Permit No. 823

Address Correction Requested.



North Texas PC Users Group



NEXT MEETING:

15 June 1991