

North Texas  NEWS

North Texas PC Users Group

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Deadline:

All ad material for publication in North Texas PC NEWS must be received by the NEWS staff by the 15th of the month. See copy deadline below.

Articles:

Please do not right-justify, indent or otherwise code the copy. If column alignment is critical, send along a hard copy, or written instructions. Article submission is preferred by NTPCUG BBS, StarMail MC 51563, or disk in ASCII format, unformatted. If you send a disk, please include a printed copy of the article to assure accuracy. If sending to the User Group Bulletin Board, use "mail" mode, to John Pribyl. Double spaced, typewritten copy is acceptable but must be received a week before the deadline. All material submitted will be considered for inclusion in the newsletter. The Editor reserves the right to edit as necessary to maintain standards of literacy, grammar, and length requirements.

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DEADLINE

**Copy deadline for December
NT PC NEWS:
Wednesday, November 18th.**

Meeting Dates:

Nov. Meeting - 2nd Sat. (14th)
Dec. Meeting - 3rd Sat. (19th)
January Meeting - 3rd Sat.
(tentative)

Editor's Notes...

How about a removable 650 megabyte disk for your PC?

WORM (Write-Once Read-Many) optical drives are getting with it! Laser Magnetic Storage International Co. has announced their LaserDrive 510 that offers 327 megabytes of storage per side of a double-sided removable disk. I don't think we'll be needing one of these for NT PC NEWS any time soon, but it's interesting to see one direction computer memory is taking.

Back in '83, I was working with RAMIS under TSO on an IBM mainframe. This is a fine 4th generation language, but it took quite a bit of memory to do the schedule analysis and planning I was involved with; thirty or forty megs or so as I recall. In a discussion with the computer department I proposed how nice it would be when I could get RAMIS working on my personal computer (I had my vintage 1982 PC at the time). Biggest joke they ever heard! RAMIS on a personal computer... never have that much memory on a PC!

Well, I don't think they have ported RAMIS to the PC yet, but I don't think the amount of memory required will be the determining factor much longer. When LSM International or someone gets WORM up and running (that's Write-Many Read-Many), and Compaq or someone breaks through with a "superconducting" computer, we won't even want to discuss the "great personal computers" we have today... hmmm... I'd give it another four or five years...!

Table of Contents

President's Message 1
Jim Hoisington
Telecommunications:
User Supported Software Compared 3
Jim P. Parish
BBS's - Important Source of Technical
Information for PC Users 5
Reagan Andrews, Ph.D.
Postponing the Inevitable Data Loss 10
Rod Edgar
Beware of Backup 10
David Schwartz
Modem and Software for Telecommunication . . . 13
Reagan Andrews, Ph.D.
RECALC - Beyond User Friendly 16
Bassam Hammoudeh
Danger in Mixing DOS Versions 19
Michael Thompson

Editor's Notes i
Agenda 1
Officers 2
Membership Application Blank . 12
Meetings & Times 21
Features:
Disk of the Month . . 8
SWAP SHOP 11
SIG Reports 17

November 14

Charles Kroboth, Program Director

9:00 AM to 9:45 AM

AUDITORIUM

*** COMPAQ COMPUTER ***

Compaq Computer Corporation will be discussing several new products that were announced in late September. The presentation will be given by George Thomas, Systems Engineer.

10:00 AM to 11:00 AM

AUDITORIUM

*** BUTTONWARE, INC. ***

Jim Button, President of ButtonWare, will be with us and will talk about his company's shareware products. They include PC-Write, PC-File, PC-Calc, PC-Tickle, PC-Style, PC-Dial, PC-Type, XD-Extended DOS, and ButtonWare Game Series.

Prez Sez**IBM User Group Support**

I received a letter last month from IBM detailing changes in their support of user groups. In the future, our support will be handled by IBM's Information Systems Group (ISG). They will no longer publish the EXCHANGE newsletter. When we want product information, we are encouraged to go to our IBM Marketing Representative.

The bottom line is that IBM has almost totally eliminated user group support. This comes at a time when many other vendors are increasing their support of user groups. The results of the survey that the NTPCUG did of its members early this year and the survey that INFOMART did in the middle of the year indicate that our group is made up of people who purchase or influence the purchase of a lot of hardware and software.

Time and the marketplace will judge the wisdom of IBM's decision.

Seminar at Microsoft

Dr. Neil Bennett and I have been invited to attend a seminar entitled "Focus on Technology" in Seattle on October 24th. People from the top 15 IBM user groups will be in attendance. Hopefully we will bring back lots of information about the future of MS DOS and OS/2.

If everything goes as planned, Microsoft will have a representative present at our November meeting to discuss some of the products that they hope to announce later this month.

Conversion to PARADOX.

We are working to convert our membership database from PC FILE to PARADOX which ANSA / Borland

donated to the group. Many things depend on the membership database including Bulletin Board registrations. If you have just now signed up for Bulletin Board privileges, please be patient as we switch over to PARADOX.

Laser Printer.

Our newsletter editor needs a laser printer to make the final copy of the newsletter for the printer. John has been taking his entire computer system to the print shop and plugging into their laser printer for the last three months. If your company would like to make a tax deductible donation of a laser printer to the NTPCUG, please give John Pribyl a call.

Brochures.

The brochures should be available at the November meeting. Charles Kroboth and I have spent a lot of time getting them done.

Many of our new members tell us that they wish they had known about the user group. These brochures are designed to communicate who we are and what we do. We will need your help placing them in stores, schools and wherever PC users hang out.

December and January meetings.

The December and January meetings are on the **THIRD Saturday**. In fact, our tentative schedule for 1988 includes quite a few third Saturdays. If you are in doubt, please call our telephone recording (214) 746-4699. And, please,

don't call me from the INFOMART on the morning of the second Saturday in December.

Jim



North Texas Personal Computer 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.

Board of Directors

Jim Hoisington, Chairman **Jim Grabam**
Reagan Andrews **Stuart Yarus**
Kathryn Crawford

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 issue, and send it with \$24 membership dues to the Membership Director whose address is shown at the bottom of this page. 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.

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Payment of dues, address changes, and inquiries about membership should be directed to
 NTPCUG Membership Director
 6015 Belmont Ave.
 Dallas, Texas 75206

(Check newsletter mailing label for your renewal date..)

TELECOMMUNICATIONS:

USER SUPPORTED SOFTWARE COMPARED

Jim P. Parish

This article is written to compare four of the User Supported Software's premiere communications programs. I am not wanting to insult anyone, so here is the disclaimer: I have used the latest updates since June, 1987. In today's rapidly changing environment any program that hasn't been updated into the Public Domain arena in the last four months is out of date. Procomm, Qmodem, Telix and GT Powercom: Procomm has been the touted standard by all the reviewers in the major computer magazines so I can't leave it out.

Research for this article about sixty days ago and as a "spare" time project. I played with uploads and downloads on the local BBS's. As well as installing, reconfiguring, set-up, and taking the programs apart. It has been a thoroughly enjoyable learning experience. I have met some real nice people, and gotten some interesting feedback on questions. I included a chart with this article to show the major features of each of the four communications programs. The chart, although helpful, can be misleading on some points. You will have to read the descriptions of each program to understand why. I had a clear favorite when I started this article, and I still have a clear favorite as I finish this article. It is not the same one, though. Each of the programs has strengths and weaknesses. I also find that personal preference plays a large part in the choice used for your telecommunications program.

The programs do all of the things that you get a communications package for: uploading and downloading, dialing directory(s), multiple protocols, multiple baud rates, configure to several types of modems, etc. I am not going to talk about each of these things with each package except when they are radically different.

Procomm has as its greatest strength the ability to emulate many terminals. It can go online with a number of mainframes as a terminal (VT-100, VT-102, IBM 3101, VT-52, WYSE 100, Heath/Zenith 19, Lear Siegler ADM 3/5, Televideo 900 Series, and ANSI-BBS), because of this it also offers a way to completely remap your keyboard to emulate the host systems own terminal. This feature is hard to find on many commercial packages, and especially done so well. Sincere respect to the programmers who accomplished this.

Procomm also has one of the finest script modes available with a lot of support from 3rd parties writing utility programs to support it. The Timed Execution Facility (TEF.EXE) for Procomm allows you to start it up at any specific time, and through the use of script files totally automate all the functions of Procomm. I have yet to go onto a BBS where they don't offer several utility programs for Procomm to do various tasks for the program.

On the negative side Procomm will only support a dialing directory of One hundred names, and that is all. Another feature that has problems is the host mode. I find mixed reports on the host mode, and the reports on various computers give various success stories. There was no consistency in the reports, so no conclusions like, it works on one brand better than another, can be drawn at this time. It is also limited to the functions upload, download, chat, and Shell mode. There were no reports that the shell mode works with any of the users contacted. Beyond a "DIR" or "CD" command it locks up and power off is the only cure. The other features of Procomm work flawlessly, and it deserves the good reputation that it has gained. This was my favorite going into the article.

Telix is very nice in that it is a very small program; approximately 220K for the total package. It supports several of the popular newer protocols SEALink, Telink, Modem7, and Ymodem. It is very easy to learn and quick to set up. I was into this one with screen color changes and all in about 15 minutes was downloading from a BBS here. It supports keyboard macros and has a good programmable file system.

It does have some of the same problems as Procomm. The host mode doesn't work well at all. I tried setting it up with the help of a local SYSOP and neither of us could get it to work correctly (He blamed my machine and I don't talk to him any longer). I couldn't find any success stories with it.

Qmodem is a superior program because of the installation routine. In the installation you can specify many external protocols, terminal emulations, and other features. It is so useful in fact, that you can go back into installation from the main program. Qmodem followed Procomm's lead on the terminal emulation and has done it with style. It does many other things like turning on music. It keeps track of usage in a user log and displays it in the dialing mode. You can tell when you accessed a board last, plus other good information. The program has something intangible about it that is smooth, and well defined. I congratulate John Friel for his excellent work.

On the downside of Qmodem, the host mode here isn't much better than any of the others. In addition the scroll back on the capture feature only allows you to

recall the last thirty six lines. These very small things bothered me in an otherwise outstanding program. Some of these turned out to be inconvenient for the way I work.

GT Powercom has the most incredible host mode I have used. We have BBS's in Texas running GT Powercom software. It allows you to design your own screens in color or B&W. It supports ANSI graphics. I had no trouble getting this up and running, even if it is a little time consuming designing screens with ANSI type drawing packages. It is worth-while to see the fruits of your labor. It does the same as Omodem in keeping a log of usage, but it also keeps up with how much you uploaded and downloaded. It is capable of multiple user's and can keep track of who and when. This could be very useful in the office environment. The capture feature took a minute to understand what it was doing. I was used to Procomm writing it all to disk immediately. GT sucks it up into memory until it is full then it will "spill" into a temporary disk file. The capture buffer can be scrolled back at anytime completely. This is great in the middle of a session online when you forgot what just scrolled across the screen. At the end of a session, or anytime in between, you write it to disk with a file name. You can pick your favorite protocol, but it will allow you to change your mind at the last minute. This is nice when you are on a BBS that doesn't honor your favorite. It has all of the fastest protocols. It has all of the commands used in the program placed with keys that are intuitive to me.

This program also has fossil drivers available for it that will run the Tandy 2000 machines. It supports some other compatible machines which I don't have complete information on.

On the downside this is a very large program that takes up about a Megabyte of space on a hard disk. Modules can be removed though, to make it smaller. It only has one terminal emulation VT-100. It is a little complex for a real beginner in communications.

I guess that you can tell which I chose for my particular needs. You're right, it's GT Powercom. When I turn on my machine I need a host mode that works reliably. I don't log onto many mainframes or use the terminal emulation so that isn't quite as important to me. I could hardly say that this is the best program, as each has its particular strengths and achilles heels. I am not trying to hedge my bets; I have found out that what works for one might not be best for another. I just hope that this article helps that typical person who walks up and asks, "OK..... which one is the best?"

About the author: The author is a software librarian for the Clone Sales library of Dallas, Texas. He has been a personal computer user for over 6 years and is a computer software consultant and teacher. He installs Novell computer networks and makes clone computers for selected clients. Ed.

Comparison of Four Popular Shareware Communications Programs

Feature	PROCOMM	OMODEM	TELEX	GT PWERCUM
Installation necessary		Y		
Installable protocols		Y		Y
PROTOCOLS SUPPORTED:				
ASCII	Y	Y	Y	
Telink	Y		Y	Y
1K Telink				Y
Kermit	Y		Y	Y
Xmodem	Y	Y	Y	Y
Xmodem CRC		Y		
Relaxed Xmodem		Y	Y	
Modem7	Y		Y	
Wxmodem	Y			Y
Ymodem	Y	Y	Y	Y
Ymodem Batch	Y		Y	Y
Zmodem				Y
Compuserve B	Y			
SEALink		Y	Y	Y
Megalink				Y

Dialing Directory	Y	Y	Y	Y
supports multi dial dirs		Y		Y
dial dir usage logs		Y		Y
automatic execution	Y			
programmable files (script, command, etc)	Y	Y	Y	Y
keyboard macros	Y	Y	Y	Y
auto redial	Y	Y	Y	Y

terminal emulation:	Y	Y		Y
install required		Y		Y
multi emulations	Y	Y		Y
remap keyboard		Y	Y	

DOS shell	Y	Y	Y	Y
dir of disk	Y	Y		Y
change dir's	Y	Y		Y
DOS commands			Y	
break key	Y	Y	Y	Y

Use word processor	Y	Y	Y	Y
set dial parameters	Y	Y	Y	Y
set screen colors	Y	Y	Y	Y
printer toggle	Y	Y	Y	Y
capture to file	Y	Y	Y	Y
capture viewing	Y	Y		Y
file viewing	Y	Y		Y
graphic screen dump	Y	Y		Y
music modes		Y		Y

Host Capability	Y	Y	Y	Y
install required		Y		Y
set up necessary	Y		Y	Y
User ANSI options				Y

BBS's — Important Source of Advice and Technical Information for PC Users

Real, user-oriented technical information, sans advertising, for PC owners is often difficult or impossible to obtain. BBS's offer the PC owner a forum for answers to difficult technical questions from other users who have mastered similar hardware/software problems. Often, participants in the various "Forums" and/or "ECHO Areas" are professionals and/or highly knowledgeable users who qualify as "experts" in the area of discussion.

The following are excerpts taken (logged) from local BBS's on the subject of hard disks and other PC hardware problems. First of these come from the "Flying Dutchman" OPUS BBS (metro 214-642-3436) sponsored by Tri-Logic Systems, Inc. of Grand Prairie, TX. Randy Van de Loo is the SYSOP of the "Flying Dutchman," and gave permission to use this material.

=====

From: Randy Vandeloo Rec'd
To: Tony Broadway Msg #5, 27-Dec-86 07:22pm
Subject: Optimum HD Interleave Factor

- * Original: FROM.....Steve Eppley (124/111)
- * Original: TO.....ALL (124/110)
- * Forwarded by.....OPUS 124/110

Disk Interleave revisited

Steve Eppley, Microcomputer Consultant
204 S. Holliston Ave., #12
Pasadena, CA 91106
(818) 577-0365

12/ 3/86

There has been a lot of discussion in the trade magazines about how a computer's performance is affected by different values of disk Interleave. But for some reason no one has been willing to perform (and publish) the benchmarks required to reveal the optimal values!

Various manufacturers recommend different values. IBM uses 6:1 for their 4.77 MHz PC/XT. Everex, a third party distributor of PC add-ons, recommends 5:1 for their Seagate/Western Digital disk subsystem. Western Digital's controller card offers a default interleave of 3:1, but it is unclear whether that is their recommendation for the XT.

To try to end this needless confusion I ran a series of tests with different interleave values to find the correct interleave value for both a standard 4.77 MHz XT clone and an 8 MHz Turbo XT clone, each equipped with a Seagate 20 Meg disk and a Western Digital controller card. My interleave benchmark series comprised three different tests with values ranging from 1:1 to 6:1 on each computer.

Theory indicates that the turbo XT should allow a greater throughput of disk data since the clock for the motherboard's DMA chip, which controls the transfer of data between RAM and the disk controller card, is derived directly from the system clock.

The results obtained should be valid for all disks which spin at the same speed and have the standard 17 512-byte sectors per track. (If that is incorrect I would appreciate hearing why.) Disks formatted using the new RLL 2,7 format do not meet this criterion because the sectors are denser and therefore the RLL controllers will probably require a larger interleave factor in order to keep the same optimal delay between reading of logically adjacent sectors.

Test series #1 used the disk performance test donated by CORE International to the public domain, available on better BBSes everywhere. The CORE test measures both data transfer rates and track access times. Only the data transfer rates are affected by interleave, so that is the value I recorded.

Test series #2 used Peter Norton's DISKTEST.COM which scans the disk surface for bad sectors. I used a stopwatch to measure the time needed to reach the 1000th cluster. I believe that my measurements are accurate to within one second.

Test series #3 used PC Magazine's PC Labs Benchmark Series Release 4.01 which was recently generously given out for BBS distribution to the public. Item 2 on the main menu chooses the disk performance benchmarks; Item 1 on the disk sub-menu chooses disk file access times. I instructed the program to run two repetitions and recorded the average times of the sequential create/read/write tests. The random access tests, as expected, did not show any dependence on interleave, and I did not include the random access results here.

The CORE and Norton tests can be run without performing FDISK.COM or DOS' FORMAT.COM. This can be a big time-saver for those of you wishing to confirm my results.

To perform the low level (physical) format using a Western Digital controller, the following instructions will work:

1. Invoke DEBUG.COM.
2. Load the desired interleave value into the AL register using DEBUG's rAX instruction. ("rax l", where l = interleave)
3. Start the physical format with DEBUG's "G=C800:5" instruction.

(New Western Digital controllers offer another choice called Auto-configuration selectable by jumper that allows the user to enter other parameters for the disk such as number of cylinders, number of heads, reduced write cylinder, precompensation cylinder, burst error length, and a mysterious parameter called "CCB". Since the Seagate drives have 615 cylinders but the controller's drive table defaults to 612 without auto-configuration, it is possible to gain some extra space, about 100 KB, on the disk with auto-configuration.)

Here is the hardware and software configuration used for the benchmarks:

- Seagate ST-225 with zero defects
- Western Digital 1002S-WX2 controller card
- XTek XT (4.77 MHz)
- XTek Turbo XT (8 MHz)
- CPU = Intel 8088-2
- PC-DOS 3.1 (cluster size = 2 KB, affects test 2)
- Monochrome graphics mode of Genoa

Spectrum card
ZENO screen speeder installed (reduces all times in test 2 slightly)

Test (1) CORE International disk test version 2.7
(measurement of data transfer rate)
Larger values mean better performance!

	4.77 MHz	7.89 MHz
Interleave = 1	28.5 KB/sec	28.4
Interleave = 2	26.9	28.6
Interleave = 3	29.7	166.8 - BEST
Interleave = 4	122.1 - BEST	125.8
Interleave = 5	98.5	100.6
Interleave = 6	82.6	84.4

Test (2) Norton Utilities version 3.1 DISKTEST.COM
(stopwatch measurements of time to scan first 1,000 clusters) Smaller values mean better performance!

	4.77 MHz	7.89 MHz
Interleave = 1	91 secs	76
Interleave = 2	96	77
Interleave = 3	94	36 - BEST
Interleave = 4	57 - BEST	41
Interleave = 5	61	44
Interleave = 6	61	45

Test (3) PC Magazine PC Labs Benchmark Series release 4.01 (measurement of 256K file sequential create/write/read times)
Two buffer sizes used: 512 bytes and 4K bytes
CONFIG.SYS contains BUFFERS = 3
Hard drive totally empty of files
Smaller values mean better performance!

Note:

I ran the CORE and Norton tests about a week before I obtained the PC Labs Benchmark Series. Due to the results of those two tests, it was clear that interleaves 1:1 and 2:1 were beyond the raw capability of the computers and were sub-optimal values. To save some time I ran the PC Labs' file access test on interleaves 3:1 through 6:1 only. (See next page.)

Buffer size:	4.77 MHz		7.89 MHz	
	512 B	4 KB	512 B	4 KB

Interleave = 3				
seq. create	10.44 - BEST	4.67	10.38 - BEST	3.52 - BEST
seq. write	18.93	4.31	18.82	3.22 - BEST
seq. read	10.19 - BEST	9.34	10.19 - BEST	3.16 - BEST
Interleave = 4				
seq. create	10.93	4.06 - BEST	10.82	3.84
seq. write	19.34	3.79 - BEST	19.28	3.68
seq. read	10.71	3.68 - BEST	10.66	3.68
Interleave = 5				
seq. create	11.48	4.61	11.35	4.10
seq. write	19.94	4.34	17.42	3.88
seq. read	11.20	4.23	11.21	4.18
Interleave = 6				
seq. create	11.95	4.70	11.84	4.59
seq. write	17.52 - BEST	4.45	11.92 - BEST	4.37
seq. read	11.70	4.37	11.70	4.32

From these tests it appears that 4:1 is the correct interleave for a standard 4.77 MHz XT, while 3:1 is the correct interleave for an 8 MHz Turbo XT. --- v1.36

* Origin: Arlington[OPUS]817-265-4859 (124/208)

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Special to NTPCUG members



DISK OF THE MONTH

Howard B. Hamilton, Jr., Ph.D.

The disk of the month for November 1987 is a card game called **SOLITAIRE**. **SOLITAIRE** version 1.10 (22 July 1987) is from **IBG SOFTWARE** ("Inexpensive But Good"), 1037 SW 12th Avenue, Boca Raton, FL 33486

Solitaire is a high quality game that is a delight to play with a color monitor, but is equally as much fun in monochrome. The game supports almost all monitors including PS/2. The graphics are good and an always present menu is available for **HELP** or **COMMANDS**. To begin right away indicate the type of monitor you have from the first menu and then press "1". The 46 page on-line **HELP** feature is excellent and also doubles as the manual.

The game follows the most popular Klondike style of Solitaire. The game provides for turning 1, 2, or 3 cards at a time from the deck for your style or "Vegas" style of play. By using the settings, the game can be made easier or more difficult. A random deal shuffles and distributes the cards indicating value and suit in graphics. The moves are made fast and easy by indicating the letter of the stack you wish to play to. By pressing a function key you can see if there are additional moves you can make and if there are more than one possible play, the game will ask you for your move. All cards must be played for a win. If you get snagged while playing, the game also includes a **CHEAT** feature with five different ways of getting a little extra help, but you pay for what you get! Reviewed by Rick Griffith

The demo version, **SOLDEMO.COM**, may used or uploaded to bulletin boards. Use of **SOL.COM** is fully functional and allows resetting of the deck. Registration of \$10 is expected with the use of **SOL.COM** and uploading of this version is not allowed. Run the **.COM** file of choice to begin.

We want to thank Rick Griffith for reviewing **SOLITAIRE** and writing the readme file for this disk.

We will also have a program called Extended Batch Language (EBL). **EBL v3.05a** (October 1986) is published by Seaware Corp., P O B 1656, Delray Beach, FL 33444. Extended Batch Language is a command programming language. It is a high level language that can be used as a replacement for or in conjunction with DOS batch files.

Some of the capabilities of EBL ...

- * Control screen attributes to create inverted video, blinking, underlined and colorful text.
- * Read input from the user.
- * Provide input to programs without user intervention.
- * Read output of programs as feedback to EBL batch files.

- * Assign both DOS and additional EBL variables.
- * Control program flow in several ways.
- * Utilize a full set of file I/O functions.
- * Redirect device I/O.
- * Implement graceful error recovery.

EBL can operate with PC/MS DOS versions 2.0 and above on the IBM PC family of computers and compatibles with monochrome or color displays. Pete Testa reviewed EBL and wrote the readme file.

While there will be other disks distributed in November, the only other one ready to go as of this writing is an update to **BOYAN**(communications), version D2 (July 1987). Other disks available for review as well as those currently being reviewed are listed in the DOM conference of the group bulletin board.

OCTOBER DISKS

Here's a quick review of the new disks last month. Make My Day (Disk 200) is time management **SHAREWARE** software that includes an appointment calendar with one time or recurring appointments; a job and task scheduler with due dates and a to-do list from those past due; an expense account manager that accumulates balances within categories; and a log that records time spent on specific projects or clients. See last month's DOM newsletter article for more details, or better yet, buy the disk and try it out.

Disk 201 is version 1.04 of **PC-DESKTEAM** (April 1986), the current edition of what used to be called **PC-DESKMATE**. It provides the desktop functions of alarm clock, calculator, calendar, note pad, phone directory/dialer, and a typewriter mode. I have replaced the 1986 holiday calendar with a 15 month calendar covering the period from October 1987 through December 1988. **PC-DESKTEAM** can also aid in sending control codes to your printer and to execute some DOS functions without exiting your current program. It can be run as a stand-alone program or in a memory resident mode. The suggested registration fee is \$25, quite a bargain for this quality software, which has been used by many users for so long. The disk was donated by Bernie Van Roekel, who also wrote the **README** file.

Disk 202 is a little difficult to describe. It is titled it "GETTING DOS TO OPEN 256 FILE SIMULTANEOUSLY!" 2.0 (July 1987), and subtitled "TSR Programs, Source Code, Tutorial, Commentary and More..." It is **PUBLIC DOMAIN** software from Steve Gibson of Gibson Research Corp., Irvine, CA. What it offers is the capability to have up to 256 file open at the same time, but only under DOS 3.0 thru 3.3! From the documentation, "The TSR programs included here make it easy with programs like **BASICA**, **Turbo Pascal**, **dBase III**, and **ALL OTHERS!** Well, I don't how many of you have so many of your own TSR programs that you need more than the 20 or so files that DOS will open for you; but if you do, this is the software for you.



This disk was donated by Tom Prickett, who also wrote a README file (which I edited, slightly).

Disk 203 is HELP!! / POP-HELP version 1.13 (April 1987), stand-alone/memory resident versions of a program to assist in the use of DOS commands and parameters. This version includes commands through DOS 3.2 and identifies the version in which new commands first appeared. Users can also build their own "help" files for any subject or program. Phil Chamberlain wrote the README file for this disk, which is a distribution diskette from the author, Brian Benson. This program sold out the first month, so we will have another batch made for the November meeting.

Disk 204 is Still River Shell, version 2.24 (August 1987) replacing an earlier version put in our library a little over a year ago. Still River Shell is a powerful DOS system utility providing a fast, precise, and simple tool for file and directory management as well as a high performance command interface to DOS. The author is Bill White, Still River, MA. The README file was written by William Bennett.

Top Dozen Disks

When I began producing the DOM disks this past January, I used Reflex, a handy little database and graphics package from Borland, to keep track of the inventory and sales of our DOM disk library. Would you like to know the best selling disks this year (exclusive of the catalog disks)? Well, I am going to tell you anyway.

DISK	TITLE	TOTAL
1.	8703 WAMPUM - Menu-driven dBase program	142
2.	8702 DRAW POKER v 1.0 and BASIC GAMES	139
3.	0172 PC Magazine Utilities, Volume 1	127
4.	0158A PC-FILE +, Program disk(1 of 2)	111
5.	0158B PC-FILE +, Utility disk(2 of 2)	109
6.	0192B DANCAD3D v1.30 (11/86) Demo disk	104
7.	0147 PC-GRAPH v1.0(1985) - Jim BUTTON	103
8.	0182B GT PowerComm v12.21 (Jun87)	102
9.	0182A GT PowerComm v12.21 (Jun87)	101
10.	0192A DANCAD3D v1.30 (11/86) Pgm disk	101
11.	0079 TUTOR Ver 4.2	96
12.	0063 PC-FILE III v4.0	95

We are looking for a few good people

Kathryn has asked me to remind you that we still need a couple volunteers to help with the DOM operations between meetings: setting up the DOM table work schedule, handling mail order of disks and of software registration, and a few other functions that have to be done if we want to keep the level of service we have tried to provide this year. If you can help, drop Kathryn Crawford a line on the group bulletin board or give her a call at the number listed on the inside front cover.

See you at the DOM tables!!

Howard

DOM Particulars

The North Texas PC Users Group copies these programs as a service to the club and its members. We try to test all the programs, but we do not warrant the programs in any way. You must decide if a program is suitable for your system and use. If you ask, we will tell you what we know about any program, but the final decision to buy and/or use these programs is yours. We will gladly and without question exchange an unreadable diskette for one of the same program

EXCHANGE: All members of the club are encouraged to contribute copies of public domain programs to the club library. For each new diskette of software contributed, you may select any diskette in the club library in exchange. The contributions will be reviewed before credit is issued at the next meeting

MAIL ORDERS: No mail orders until further notice.

SEE NOTICE BELOW.

PRICE: Members: \$2.00 per diskette (if the program is on two diskettes the price is \$4.00). Non-members: \$3.00 each diskette

CATALOG DISKETTES: Currently this is a two volume set priced at \$4.00. This has all of the readme files from each diskette in the club library.

MEDIA: QSD 5 1/4" Formated as 9 sector data diskettes. Public domain software only, standard full disclaimers

AVAILABILITY: We will do our best to have all past diskettes at each meeting. DOM sales will begin at the DOM counter around 9:00, and continue until 2:00 PM

IBM EXCHANGE NEWSLETTER: IBM has discontinued publishing the Exchange Newsletter and has also discontinued their previous level of User Group support.

Notice

Sale of disks by mail order will resume later. Tim O'Neil who has been handling this part of the volunteer effort, is moving out of town. Thanks for all your help, Tim... we'll miss you.



PSSSSST!

We still need a few good volunteers!

Postponing the Inevitable Data Loss

by Rod Edgar
Phoenix PC UG via GS-BUG

Do Frequent Backups

The best way of preventing data loss on your hard disk is to copy the data prior to the loss of the hard disk. Suppress the "it can't happen to my hard disk" feeling. Diskettes are dirt cheap compared to the manhour cost of replacing your hard disk data. Your hard disk cannot last forever. It will eventually lose data. Be prepared to restore the data.

Rewrite the Disk to Lessen Damage

DOS writes files in clusters scattered around the disk. Gather these clusters into a tighter group by using Disk Optimizer or some similar program. While the idea of these programs is to increase your disk access speed, a side benefit is this reduces the chances of more than one file being lost if a sector goes bad (and reduces the chaining vectors of the file allocation table).

Keep Track of Bad Tracks

When you find a bad spot on your disk, don't ignore it; reserve it by giving it a file name you'll never use. This ensures your disk doesn't end up trying to use this spot.

Make a Boot Diskette

Your hard disk may fail to work some early morning because one of the system files went bad. It is a good idea to create and keep a system diskette so you can boot up on the A: drive; it's quite possible most of the hard disk will still be usable, but you have to be able to boot up to find that out.

Retract and Park the Disk Heads

Retract and park the disk heads using the diagnostics to prepare your system for moving; if the heads are off the data area and your system is jostled, the data will not be disturbed.

Use a Solid Base and a Steady Temper

Put the hard disk on a solid table or desk; you want a supporting surface which minimizes vertical vibration and shock to your hard disk. Also, resist the temptation to beat your computer; retaliating by throwing heavy objects at a misbehaving computer does not help, and bumping the computer may cause the heads to touch the disk surface.

Control Computer Use

Finally, keep unauthorized persons from access to the computer; lock up your keyboard and lock up the room where your computer is located. This reduces the chances of some shadowy character mugging your PC. ■

BEWARE OF BACKUP!

by David Schwartz
GS-BUG

Now that the prices of computers and hard disks have steadily declined, it is not uncommon to transport data from one system to another. When file sizes exceed 360K, the maximum size of a double sided, double density floppy disk, an alternate method to the COPY command must be used to move the file. I have always used the DOS BACKUP and RESTORE commands to accomplish this task, but a few warnings may save you some data and a considerable amount of time.

The BACKUP and RESTORE you are using should be from the same version number, and preferably off the same original DOS diskette. Using BACKUP from one version and RESTORE from a different version may cause physical damage to the data on your hard disk when you RESTORE.

In order to minimize the risk, you should verify that the hard disk you are restoring to is formatted using the same DOS that you used to do the BACKUP. If they are not the same it is possible to wipe out the destination hard disk when you RESTORE.

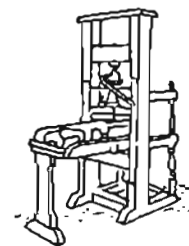
In addition to using the same version number, the same type of DOS should be used. PC and MS DOS are NOT the same, and may cause problems. There are even differences between MS DOS diskettes from different computer manufacturers. Your Compaq DOS 3.1 may not be the same as my AT&T DOS 3.1. Even Microsoft won't help. There is no source of reliable information about all versions and brands of DOS on the market today.

Follow these three rules; you should be safe and remember, nobody was ever sorry for backing up too often.

Always use the same version number of DOS

Always use DOS from the same manufacturer

Always verify that the hard disk is formatted with the same version of DOS that you used to do the BACKUP. ■



"...b..but... does it do Postscript?"

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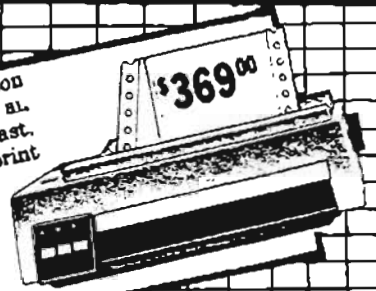
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The Library at INFOMART is looking for volunteers who like libraries, computers, and people. Activities include assisting library patrons with reference questions and helping with the administrative aspects of running the library. Prospective volunteers should be available at least 2 hours a week Monday through Friday from 8:30 to 5:00 or Saturday from 9:00 to 2:00. If interested, please contact Patty Zabel at the Library at INFOMART, 1950 Stemmons Freeway, Dallas, Texas 75207, 746-3646.

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North Texas PC Users Group, Inc.

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

Application Status: (Check One)
>>>> _____ NEW MEMBER
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ADDRESS: _____ (Suite/Apt) _____

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PHONE: Home (____) _____ Work (____) _____ (Ext) _____ (Check Preferred #.)

Do you want access to the Club RBBS? YES [] NO []

Please initial here _____ if you wish to have your address included on member lists sold for the club's benefit to advertisers of IBM compatible products.

The NTPCUG expects and encourages volunteer participation by members in helping put on the monthly meetings at the INFOMART. This usually consists of a few hours of your time each year. If asked, would you consider assisting the Group with one or more of the following activities:

(Please check all that apply.)

[A] Working with NTPCUG Volunteer Committees? (Circle selections)

- [IB] Information/Registration [MM] Membership [GP] Group Purchase
- [NL] Newsletter [ES] Equipment Setup [FB] Financial/Bookkeeping
- [DM] Disk of the Month (DOM) [PR] Publicity/Public Relations [ST] Startext NTPCUG Column

[B] Giving a talk or demonstration to a small group?

[C] Giving a talk or demonstration to a large group?

[D] Being a volunteer, informal "consultant" in your area of expertise for NTPCUG members?

Would you be interested if the Group arranges instructional courses (at various levels) in any of the following areas at a cost per student of approximately \$5/classroom hour?

(Please circle or specify, indicating level preferred, i.e., beginning, intermediate, advanced)

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Annual Dues are: \$24.00 (Regular Membership) _____ \$12.00 (Student Membership with ID) _____

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Modem and Software for- Telecommunications

-or-

I'd Really Rather Watch Elvira & the Late Movie

(Third in a series on Telecommunications)

by Reagan Andrews, Ph.D.

Final user-side link in the telecommunications chain is the software that makes it all possible -- and, hopefully -- easy and convenient for the user. Last point is crucial. The most powerful communications software ever written is worthless if the user is constantly angry and frustrated trying to access its features.

If the PC user wants the most his modem and software can deliver in terms of performance, functionality and convenience, both must be properly configured. How to attain this goal is subject of this installment.

The Inevitable Disclaimer/s:

This is NOT a comprehensive review of state-of-the-art communications software for power users. It began that way, though. Rather, this installment was made possible by the writers/programmers of a lot of communications software and my efforts to review it for the intended article. It came about when I approached these programs as a beginner and saw how difficult some writers made configuring and using their communications software for the beginner or novice.

My original intention was to restrict this to those communications programs Club members could obtain from NTPCUG DOMS. Several exceptions became necessary.

A notable omission will probably incur significant (and undoubtedly quite noisy) outrage from faithful QMODEM devotees. Don't look for mention of QMODEM in this article. Two attempts to update to later versions (2.3 and 3.1) were both thwarted by program flaws or packaging errors.

Software that was Actually Used:

Throughout this effort, I took each program below in it's delivered format and tried to follow the instructions in the documentation for installation and configuration. All programs that were NTPCUG DOM's or were downloaded from BBS's require that the user print the documentation (usually 40 - 60 pages) before use. This displays one real benefit of commercial programs -- the documentation is already printed and illustrated for you.

Pretending I was a beginner (not too difficult) I waded through installation and configuration of: PC-Talk III (5.0), ProComm (2.4.2), GT PowerComm (12.21), BOYAN (D1), Telix (2.12), Crosstalk XVI (3.6), and Smartcomm II (Ugh!).

Most Difficult Task -- Matching Software to Modem:

Set-up of communications software to match modem and other equipment characteristics often presents the greatest challenge to new users. It's also the area where lack of real standards in personal computing becomes most apparent.

Problem is two-fold. First, modem manufacturers haven't really adhered to 100% "Hayes" compatibility in their modems' command sets -- to do so would require a license from Hayes. Second, people who write communications software are ferociously independent and inexorably convinced their command structure is infinitely superior to anything else in the field.

This means lots of "homework" for the PC user. Before setting up, he or she MUST read the modem manual and the software documentation. Thoroughly. Remember the Hayes AT command set printed last month? At this point, the user must compare their modem's command set with the Hayes AT set and note ALL differences, no matter how insignificant they may appear.

This is worth repeating. Read ALL documentation for the modem and the communications software. Thoroughly.

Pay particular attention to the modem's "default" settings on initialization -- if these are close enough to the AT defaults, extensive modifications probably won't be necessary. If the modem is one of the newer types with built-in error detection and correction protocols such as "MNP", make a note of commands necessary to turn it on or off through software.

Getting Ready for the Big Fight -- Modem Preparation:

Read the software documentation for "suggested" modem configuration switch settings different than the manufacturer's default settings. (these are usually small DIP switches cunningly hidden by the manufacturer inside the modem case to prevent easy access.)

This may be "moot" since many modem manufacturers have abandoned manual configuration for software-controlled configuration.

Users with internal modems may be faced with additional configuration decisions. Communications port conflicts are critical and must be solved before other setup work can proceed. If there is no other serial port in use, this is simple -- go with the modem makers' default setting, usually Com1:. (Make sure, though -- it may be Com2:.)

Resolving Port Address Conflicts:

If there is another serial port in use, change the internal modem port address to the UNUSED port address. This may not be possible. In this event, the other (non-modem) serial port's address will have to be changed -- usually via DIP switch or jumper setting. At this point refer to the documentation for the original serial port

for instructions in making the shift. (Remember, all software using the original port address must be reconfigured to adapt to the port change as well.)

When neither serial port address can be changed to prevent conflict, there's not much left but changing one of the offending boards. (This is a point in favor of external modems.)

Regardless of which port address is used for the modem, be sure to record it for configuring the communications software. (This is often a really sneaky error source that can be difficult to track down later and holds significant potential for personal embarrassment.)

Software Configuration -- New Confusion and Conflict:

Assuming that the user has read, and re-read the software's documentation -- and made notes of necessary changes, this part of the set-up should be anticlimactic. It probably won't be because of "undocumented features" of either the software, modem or both.

Recent software will probably have a configuration menu (or menus) that is/are explained in the documentation with both default settings and user options outlined and elaborated in detail. (BOYAN D1 not only does this, but also includes a series of on-line, context-sensitive help screens available during configuration.)

Most critical issues here are the Modem Initialization String (or sequence sent to the modem on start-up), the default Dialing Prefix and default communications parameters. This is where the modem's full power is either employed -- or ignored. Your notes concerning your modem's operation are essential in doing this correctly. (This is also the area most prone to "undocumented features" that may require hours of patient debugging.)

Minimum initialization instructions will be to "wake up" the modem and set its defaults via transmission of the "ATZ" (Hayes) command. Usually, this is where dialing speed, results code selections, etc. are established. A typical string might look like this for a Mitsuba 2400 external modem:

```
AT E0 S7=45 S9=8 S10=9 V1 X4 L1 S0=0
```

Translation: (AT) attention -- wake up!, (E0) don't echo input back to program, (S7=45) set register S7 to wait 45 seconds before hanging up if it doesn't hear a carrier tone, (S9=8) carrier tone must be present 0.8 second before recognition as carrier, (S10=9) set amount of time, 0.9 seconds, carrier must be absent before disconnect, (V1) result codes will be English words, (X4) use extended result codes through "CONNECT 2400," (L1) sets modem speaker volume and (S0=0) auto-answer mode disabled.

Dialing Prefix, usually "ATDT" for Hayes compatible modems, and the Hang-up sequence, (wait) + + + (wait) ATH0 for Hayes, are also defined for the software. Here (wait) is replaced by the program's

delay symbols, usually " ~ ~ ~ ." Non-Hayes modems may require some juggling with these as well. If the program doesn't have a default initialization string as above, the same instructions can often be included in the Dialing prefix string between the "AT" and "DT."

Although often included in a separate menu, default communications parameters may sometimes be set in the main configuration menu. These are typically a series of Baud-rate choices ranging from low (300 Baud) to very fast (9600 Baud or higher) coupled with data bits, stop bits and parity selection. Baud-rate should be your modem's highest capability. (Software WON'T make a 1200 Baud modem work at 2400 Baud.)

The rest is pretty standard throughout the Metroplex. That is, 8 data bits, one stop bit and no parity, and might look like this as a selection "1200 N 8 1." (Some programs use "0" as "None".)

Default communications port address (Com1: or Com2:), ASCII file transfer XON/XOFF, and other choices are also usually available in this area and may be source of problems unless checked carefully during configuration.

Disk and File Handling Configuration:

The simplest configuration format should allow the following drive or directory management selections: selection of default drive and/or directory for the program and overlays, help files, etc., (if any), selection of both file download and upload drives/directories, selection of "logging" and drives/directories for screen-dumps/saves.

Downloading is receiving (or taking) a file or program from another computer system. Uploading is sending a file or program to another computer. Logging is recording of the communication session including user keyboard input.

(This article is an example of the above. After it was written, it was transmitted as an ASCII file to the NTPCUG BBS. Later, John Pribyl, NTPCUG Newsletter Editor, downloaded the file to his computer from the BBS for editing and formatting for the Newsletter.)

A single disk-drive machine, such as a laptop, makes the selections in the above easiest of all -- the default drive. Two floppy-drive machines are usually set up with the program files, etc., on the A: drive and all others set for the B: drive.

Hard disk users will probably want to make a number of subdirectories for these functions, often using the suggested defaults as directory names. Even if no other directories are used, separate downloading directories are one way of insuring good "housekeeping" and eliminating file clutter.

Where to Start then? Suggestions for Beginners:

Beginners should consider starting with the simplest, most straight-forward software available. PC-Talk III

(5.0) comes close to that ideal and has a number of advantages for the beginner. Because it really doesn't do that much (by current standards) it has a simple, reasonably-intuitive command structure that has been followed and extended by many of the more powerful contemporary software packages.

That means learning PC-Talk III won't hinder learning other, more powerful packages later. And, it does a reasonable job of handling most communications needs from the beginning.

Telix 2.12 and BOYAN D1, although much more powerful and somewhat more complicated, could also be first choices for the more experienced novice who's willing to read the documentation very carefully. Quality of the documentation makes learning both somewhat "easier" than competing software.

CrossTalk XVI (3.6) is an "iffy" choice because of its small size (a real plus), but is also plagued by its complex, unintuitive menu structure and somewhat limited file transfer capabilities.

Potential "Traps" for the Inexperienced User:

A beginner or "novice" at using computer communications really shouldn't start with one of the "full-featured," "does everything" packages currently available. You'll find enough frustration without unnecessary complications from your software. Several packages do belong in this category, beginning with GT PowerComm, Relay Gold, Ascom IV, etc.

Highly specialized programs, such as those designed for professional database searching and retrieval, or to emulate upper-level terminals for interaction with mini or mainframes, also fall into this category unless the potential user is highly familiar with the package's intended operations.

Next month, we'll discuss ways to wring the most out of some of these programs -- and others available to Club members.

Reagan

▲

Why Communications Software is so Important

- and Usually Very, Very Complex:

Software chosen to handle the communications task has a very complex and difficult job. A very brief (and incomplete) summary of the functions handled by the communications program/s include: instructing the computer to "open" the serial port (usually Com1: or Com2:); issuing appropriate commands to the modem to take the telephone "off hook", dial the desired telephone number and "connect" with a distant modem, (or recognize and "answer" an incoming call from a distant modem and "connect").

Once this is done, the program must establish an appropriate screen display of communications activities, program commands and data received while organizing data to be sent out in a standard form recognizable by the distant modem and computer. The software takes control of the keyboard to create an efficient way the user can manage the communications system.

The software also is responsible for arranging desired forms of data storage and transmission

or reception of computer files to the distant modem, often via "protocols" such as "X-modem" and others designed to detect and correct errors due to transmission problems or line noise, etc.

"Good" software manages to do this with minimal need for detailed instructions from the user other than simple commands that cover entire ranges of operation. The more automation here, the better. Interface between DOS, the computer and the modem should be "seamless" with intuitive command structures or sequences that seem "natural" to the user and consequently easy to learn.

In addition to all this, necessary program files should be compact and usable from "typical" floppy-disk equipped computers with minimal (256K) memory capabilities. That's quite a set of requirements.

Reagan

▲

{RECALC}

by Bassam Hammoudeh, HAL-PC

Beyond User Friendly...!

The term "user friendly" has lost its meaning from misuse by software publishers. If all the programs which claim to be "user friendly" had one-tenth of their claims, we all would own a lot less "how to use" books. Not to mention the software best-seller list would be much longer than it is today.

I have stopped paying any attention to claims of "user friendliness" by software publishers. Instead, I now evaluate new software on an "intuitive" scale. The definition of an intuitive software is "a program which follows established user flow and logic." With this definition, one should be able to load, install, use, and produce actual useful results from a software package within one or two hours.

Let us agree on some of the established user flow and logic items. I am sure I will not cover all of them because I have not used all of the software packages out there. However, I have come across quite a few in three years. I will list the universal meaning of some keyboard keys or combination of keys.

KEYS = MEANING

F1 = Help, or how to get help
 F10 = Main file operation menu, or file save, or main program menu
 Home = Go to beginning of line, or top left of screen
 End = Go to end of line, or bottom right of screen
 PgUp = Go one screen page up
 PgDn = Go one page screen down
 Ins = Toggle between overwrite and insert mode
 Del = Delete the character over the cursor
 Esc = To cancel the last command, or to step back one command, or to stop the current operation
 Backspace = Erase one character to the left
 Ctrl-Arrow right = Move one word, or screen unit to the right
 Ctrl-Arrow left = Move one word, or screen unit to the left
 Ctrl-Home = Go to top of file
 Ctrl-End = Go to bottom of file
 Ctrl-S = Save current file
 Ctrl-Q = Quit current application with option to save
 Ctrl-P = Print current file

Also, the software should have menus which can be used by pointing to or by pressing the first letter of the command name.

With these basics agreed upon, one can now load a program and within an hour or two, start producing the something which was the reason the software was purchased. This is not "user friendly" design, but rather,

"intuitive" design by the programmers. Actually, if we were to take the issue further, then there should be a standard user interface established so one spends time being productive with a new software instead of learning a new set of basic commands to even begin. On the other hand, I could be describing Microsoft Windows, with its standardized interface and command structure.

Recently, I had a chance to evaluate a new program which performed well on my intuitive software scale. I needed to create a function formula for twenty variables for an engineering materials problem. Lotus 1-2-3 was not the ideal solution because Lotus has only Linear Regression fit and not mathematical equation solving capabilities. The program available to me was Eureka from Borland. Eureka is a mathematician's best friend for solving many interesting math problems. I, on the other hand, had very little time to come up with a solution for a real world problem. What I needed was a function in the form of $[f(x) = a x^n + b]$ where " x^n " is " x to the power of n ". Then I would use this formula in my Lotus 1-2-3 worksheet to estimate the material strengths given " x " values.

Reluctantly I looked at the single disk and found no install. Then I loaded Eureka and a colorful screen appeared with logical menus. I pressed F1 key and got help. I then pressed "F" for the "File" pull down menu and pressed "L" for "Load". Eureka asked for a file name or "*.*", so I pressed "Enter" to see all files. Eureka opened a window showing all files which can be loaded. I saw one interesting file called "Bestfit" and loaded it. This example was exactly what I needed. The file showed how to setup the variable equations and perimeters. Within twenty minutes I had my input datafile ready for a solution. I pressed "S" for "Solve" and saw Eureka start crunching away at my problem and figure out the needed equation in under one minute. At this point I was very interested in this "intuitive" program and wanted to see other capabilities. I pressed "G" for "Graph" and selected "Plot" from the pull down menu. Eureka requested the first " x " value and the last " x " value on the " x " axis. Then Eureka, I've got it....!

So, in the final analysis, it took me one hour to use a program I have never used before and be able to produce the needed solution to continue my work. Furthermore, I have not read the manual and may not need to. I may or may not need Eureka again soon. But I am very sure that if I need to solve any equation or function, I will not hesitate to use and learn Eureka at the same time. This is a good example of "intuitive" software. You will notice that Borland has not mentioned how easy Eureka is to use, but instead, has stressed its power.

The next time you come across a software package which has claims of "User Friendliness," find out its "intuitive" design before you make a decision on the worthiness of the program and its ease of use.

▲

Selected **SIG** Happenings

News and Meeting Notes on Special Interest Groups

Personal Users (Beginners) SIG

We plan to change the name of this SIG, since it is intended not just for beginners, but for non-professional users who find some of the other SIGs to be more technical than their needs require.

The four hours will cover different subjects of interest to Personal Users. However, the subjects are not available at the time of publication.

Phil Chamberlain

Business Applications

Guess what's new, enriched, revamped, faster, advanced, revised, elevated, polished, improved, enhanced, refined, helped, amended, and just simply better?

The new wordstar products! These new versions have not only powerful word processing capabilities, but have enhanced graphics, multiple typestyles for over 400 printers, cruise control, speed write, key macros, mnemonic commands, and newspaper style columns with graphic editing and drawing capabilities.

Be the first in dallas to see two new vertical packages just released -- the Personal and the Legal Edition. come see how you can let your PC fill in the blanks with "fill-a-form." How to be ready for showtime with "show-text" and how to get organized with "PC-OUTLINE." Products so different, the label "word processor" is shed, as micropro unveils them as word publishers.

Come one, come all, you won't need your wallet, as the show is free, but please bring your imagination.

Bruce Schubert

"C" Language

At the November meeting, we expect to have Allison Conn from Microsoft. She plans to demonstrate, describe, and discuss Quick C. Note that she will also attend the Programmers' SIG.

Sid Nolte

Communications

The October 10, 1987 meeting started with an impromptu discussion of the file transfer time benefits of the Z-Modem Sliding Windows protocol as implemented in the GT-Powercomm communications software package and Z-Modem in general. The subject of sliding windows may even be an idea for a future discussion. Would anyone be interested in heading up such a talk at a Comm Sig meeting? A couple of Sysops, (RBBS System Operators) of neighboring boards shared much technical expertise with us at this Sig meeting.

Next came an interesting discussion about security in regard to users giving their addresses and phone numbers to RBBS's for the purpose of new user validation. It was pointed out that a new user can verify the legitimacy of an RBBS in a number of ways. Some of those being, checking RBBS lists to see how long the RBBS has been around, and leaving a message for the boards Sysop to contact you via some other means than the board. It was also noted that legitimate Sysops take much pain to provide security for both their users and their systems, and usually don't mind getting back with new users in regard to validation matters.

Along the way the use of Text Editors from within Comm software packages popped up in the form of a question about getting blown away when attempting their use. Due to lack of experience with editing from within Comm software, a few members said they

would give it a try during the month and report their findings at one of our future Sig meetings.

At the November 14, 1987 meeting the Comm Sig will host contributing member William Bennett doing an on-equipment overview of the latest version of the Q-Modem communications software package.

Pete Testa

Database

Mark McDonough, the inventor of RapidFile, an easy-to-use file management, reporting, and form letters program from the makers of dBASE, will be giving a presentation to our group. Anyone who needs an entry level data base with a built-in word processor, and dBASE file compatibility, will find this meeting invaluable. Also on hand from Ashton Tate, will be Mike Arrigo, Product Manager for RapidFile, as well as Scott Haynes from Technical Support. All those attending will receive a limited demo of RapidFile. Also, a full copy of RapidFile as well as Rapid-File books and T-Shirts will be given away.

David Hayden

dBase Programmers

You're going to get your money's worth this month. The meeting will start at 1:00 at the Database, for a presentation of the new database by Ashton Tate; RapidFile. On hand will be, none other, than the inventor of Rapidfile, Mark McDonough, as well as Mike Arrigo, Product Manager. A demonstration of RapidFile will be given, and all those attending will be given a limited demo of this fanatastic file management, reporting, and form letters program. There will be a drawing for a full copy of RapidFile as well as RapidFile books and T-Shirts. ▶

During our normal meeting at 2:00, we will be briefly discussing the specific features of RapidFile that will be valuable to dBase programmers. Well you asked for it, and you got it. Scott Haynes of Ashton Tate Technical Support, will be flying down to answer those questions that you couldn't wait (on hold long distance) to have answered by an expert dBASE programmer. This meeting will be a must for any serious dBASE programmer.

David Hayden

DOS

Everybody got a seat for a change! Major feature of October DOS SIG meeting was move to INFOMART's notorious 7001 -- the "Cavern". In spite of minor communications problems caused by both leaders' reluctance to use the lavalier microphone, the SIG meeting rolled along as usual with absolute disregard for the leaders' planned topical discussion of .BAT files in MS/PC-DOS. Instead (also as usual) SIG members focused on daily problems they were experiencing with DOS, particularly in the area of hard-disk operations, questions over updating to newer DOS versions and menu use.

Since neither of the SIG leaders, Reagan Andrews or Jim Hoisington, felt like the MENU questions had been answered adequately, these will be reviewed for

the November DOS SIG meeting, hard-disk and back-up questions permitting. Also, Jim Hoisington promised to arrange availability of his program allowing renaming of directories and subdirectories under DOS version 2.1.

Reagan Andrews

LOTUS

The October meeting covered uses of the END and directional keys to move around a spreadsheet. Also covered were some simple macros. The major focus of the meeting concerned use and construction of menu macros.

The topic for the November meeting will be Global Worksheet Settings and how they can make editing models easier. More advanced uses of the global settings will also be discussed.

We always try to have some time to answer questions from users attending the meeting. If you have some questions or have a subject you would like to suggest for a future meeting, come by and join us.

Peyton Weaver and Mark Gruner

Programmers

Current plans for the November meeting are to have Allison Conn from Microsoft demonstrate and

discuss the very newest version of their C Compiler.

Stock Market Investors

This SIG is for the individual investor who uses a personal computer to enhance his ability and skill as a trader. Our interest covers the full breadth of the market -- stocks, bonds, options, mutual funds, commodities, and trading systems. Serious software and data bases for market trading by the individual are finally emerging at affordable costs. The SIG reviews these programs and data base sources.

The October meeting featured a review of the Dow Jones News/Retrieval service. This service supports a broad segment of the market and business interests. We were given demo disks of the DJ Market Analyzer Plus and the Market Manager Plus. Copies of these will be available at the next meeting at the cost of the disk.

The November meeting will feature Donal Broome of E.F. Hutton, speaking on options. Mr. Broome is an options specialist who uses OPTION VUE PLUS by Star Value Software of Austin, TX. We look forward to his ability to remove some of the mystery from this subject.

Cliff Murphy



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Danger in Mixing DOS Versions

by Michael Thompson

(Reprinted from CPC via the BECS Newsletter)

Since DOS 3.0 and 3.1 came out, the Information Center where I work has averaged one or two calls per week from users who have either just had a hard disk installed in their PC or who have just upgraded to DOS 3.x and already have a hard disk. The calls I'm referring to center around problems they are having accessing files or programs stored on the disk. Sometimes the program will execute but the data is missing or garbled. Or one or more directories do not display correctly when the DOS DIR command is issued.

An examination of the differences between DOS 3.0/3.1 and 2.1 will help to explain the causes of these problems.

When IBM DOS 3.0 came out, hard disk formatting changed to allow for more efficient use of space on a hard disk of 20 megabytes or larger. This was accomplished by reducing the minimum amount of space used by any file on the disk from 8K bytes to 2K bytes.

The directory structure and bytes in the file allocation table (FAT) on the disk were changed to allow them to keep track of four times as many data segments (clusters) on the hard disk as DOS 2.1 could.

This is more efficient because now your 32-byte CONFIG.SYS file or your 50-byte AUTOEXEC.BAT file won't automatically take up 8192 bytes (8K) of physical disk space as it did with DOS 2.1. Even the smallest file will still take up a minimum of 2048 bytes (2K) of space on a hard disk, but you have to admit, that's a dramatic improvement over 8K.

That's all for the better, but problems may arise when a user copies *.* from the A floppy drive to the (hard disk) C drive. If the C drive happens to be logged to the root directory and the disk in drive A contains a copy of COMMAND.COM, then the COMMAND.COM on the C drive will be overwritten with whatever version was on the A drive. The result can be an unbootable C drive if the version of COMMAND.COM copied from the A drive was not the same as the one already on C.

This problem can be easily solved by recopying the correct version of COMMAND.COM back to the C drive after booting from a disk with the correct DOS version

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in drive A. In addition, it is a good idea to write-protect the files that you do not want overwritten. DOS 3.X includes an ATTRIB.COM command that allows files to be write-protected. A public domain program named ATTR.COM will allow you to write-protect files under either DOS 2.1 or 3.X.

A more serious problem arises when DOS versions are mixed on the same hard disk. Fortunately, DOS 3.X can read from and write to a hard disk formatted with DOS 2.1 without any problems. Also DOS 2.1 can usually read from a hard disk on a PC or XT that was formatted with DOS 3.0 or higher. A 10-megabyte hard disk still uses the older 8K byte cluster size and should not have problems with clobbered FAT's. Data disks (floppy disks formatted without the system on them) written with any version of DOS from 2.0 to 3.1 are interchangeable with other versions of DOS upwards or downwards.

The problem arises because, unfortunately, DOS 2.1 cannot write to a 20-meg or larger hard disk that was formatted with DOS 3.0 or above without damaging the FAT and the disk directory. Perhaps worse is the news that DOS 2.1 will TRY to write to a disk formatted with a later version of DOS without generating any error messages of any kind. As far as DOS and your application are concerned, when you save your data, everything goes just as you thought it would and your data is safely stored on the disk.

Later, however, when you try to retrieve your data, you cannot. A scan of the directory reveals that your files are not there and that some of the directory entries contain screen graphics characters as file names. And the directory name itself may be garbled. Another possibility is that when you try to reboot, you get a disk boot failure reading the hard disk or a message telling you that the disk is not a bootable disk.

IN either case, the solution is the same. First, boot from a diskette with the correct DOS version in drive A and TRY to un-install any copy-protected software on the disk (i.e., dBASE III or Lotus v.2). Sometimes this works and you can boot a proper DOS disk in the A drive and still retrieve some of the data files from the corrupted hard disk. Then you must reformat the hard disk. Sound drastic? It is! But that's the only solution when this foul-up happens.

There are some safeguards to follow to minimize the possibility of DOS versions being mixed with disastrous consequences. Since DOS 3.0 was first released, we have been using PCs with hard disks formatted with DOS 3.X and DOS 2.1 in our Information Center with no difficulty. Our AT and bulletin-board XT are running DOS 3.1, and all the other machines in the center are running DOS 2.1 whether they have a hard disk or

not. Not once (yet) has a disk directory been corrupted because someone wrote to a DOS 3.1 formatted hard disk with DOS 2.1

Here are a few safeguards:

First, NEVER boot a hard-disk-based PC from a floppy. In every case where the hard disk has been clobbered by DOS 2.1, it is because the user booted from a floppy disk in drive A. The floppy contained DOS 2.1 and the hard disk was formatted with DOS 3.X.

Second, there are a few programs (and only a few) that require that they be started by BOOTING from the A drive. I am not referring to programs that you merely start from the A prompt, but those that require that the PC be turned on or warm-booted (CTRL-ALT-DEL) with their disk in the A drive.

Run these programs, but do not store any data on the C drive. Then warm boot the PC after you've finished by pressing CTRL + ALT + DEL with the A drive door OPEN. This will reset the machine to its original configuration. Also, it is always a good idea to re-boot a hard disk machine that someone else has been using before you.

The problem that mixed DOS versions can cause may seem fairly remote until it happens to you. It cannot always be avoided either, especially if the PC is being used after hours, in an uncontrolled fashion, or by many people.

For a while this was, for us, a particularly insidious problem on one machine that kept turning up with a copy of COMPAQ COMMAND.COM in the root directory of an XT on Monday mornings. On those occasions, the machine failed to boot when turned on. The first few times that happened, panic ran through the office because all of a sudden precious information and programs had apparently become inaccessible. Once, the solution was simply to copy the correct version of COMMAND.COM back to the root directory. But that was only one time. On the other occasions the disk had to be reformatted because whoever had booted with the wrong DOS had also written to the hard disk and clobbered the directory. The problem had to be solved by putting a steel lock over the power switch and power leads, an inconvenience to everyone.

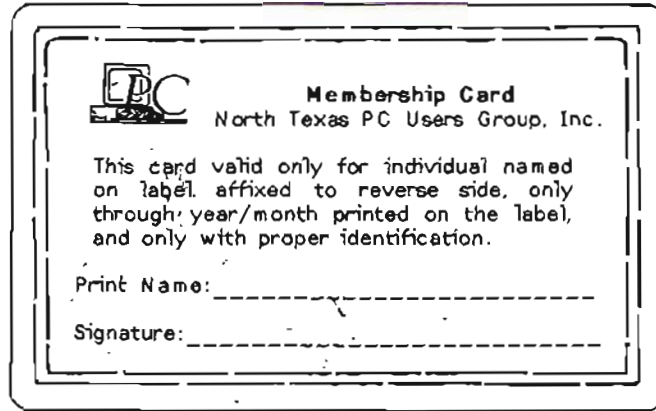
As PC hardware and software continue to become more powerful and complicated, the consequences of not following the "rules of the road" will probably also become more severe. It pays to understand as much of what is actually going on in your machine as you can. A little knowledge may be dangerous, but ignorance is far more lethal to your PC and your data.



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Trim card to wallet size.

—Meetings & Times...



Saturday, 14 November 1987

9:00 AM to 9:45 AM

AUDITORIUM

*** COMPAQ COMPUTER ***

Compaq Computer Corporation will be discussing several new products that were announced in late September. The presentation will be given by George Thomas, Systems Engineer.

10:00 AM to 11:00 AM

AUDITORIUM

*** BUTTONWARE, INC. ***

Jim Button, President of ButtonWare, will be with us and will talk about his company's shareware products. They include PC-Write, PC-File, PC-Calc, PC-Tickle, PC-Style, PC-Dial, PC-Type, XD-Extended DOS, and ButtonWare Game Series.

Scheduled SIG times could change. Check the Bulletin Board just before the meeting. Check room numbers on the overhead display in the lobby at INFOMART.

9:00 - 9:55

Assembler
DOS
ENABLE
Graphics
Hardware Solutions
Personal Users
Science/Engineering

9:00 - 10:30

Genealogy (w/Apple)

9:30 - 9:55

Orientation

10:00 - 10:55

Astrometry
Personal Users

11:30 - 11:55

Orientation

12:00 - 12:55

APL
C Language
Personal Users
Stock Mkt Investing

1:00 - 1:55

Artificial Intelligence
Business Applications
Communications
Data Bases
LOTUS
Personal Users
Turbo Pascal

2:00 - 2:55

Advanced Programmers
dBase Programmers
DAC Easy Accounting

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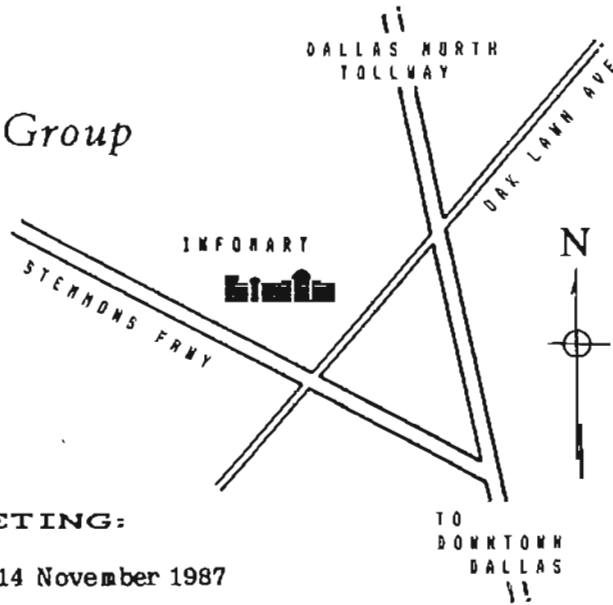
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NEXT MEETING:

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