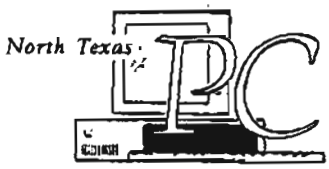
Price $2.00



NEWS

North Texas PC Users Group

6.3
March 1987

North Texas PC NEWS
(STARMAIL ADDRESS 51563)
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Deadline:
All material for publication in North Texas PC NEWS (articles and ads) must be received by the NEWS staff no later than the 15th of the month.

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 modem (817/275-4109 or Startext 51563), or disk in ASCII format, unjustified. If you send a disk, please include a printed copy of the article to assure accuracy. Double spaced, typewritten copy is acceptable but **must be received a week before the deadline.**

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D E A D L I N E
Copy deadline for April PC NEWS:
Sunday, March 15th.
(... one week BEFORE the March meeting!)

Future Meeting Dates

April Meeting - 2nd Saturday (11th)
May Meeting - 2nd Saturday (9th)
June Meeting - 2nd Saturday (13th) tentative

North Texas Personal Computer Users Group, Inc.
P.O. Box 780066, Dallas, TX 75378-0066

(Send membership dues, renewals & address changes to Membership Dir. address at bottom of this column.)

Board of Directors

Jim Hoisington, Chairman	Jim Graham
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 address 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.

Officials:
President - Jim Hoisington (214)245-0973 h
President-Elect - Reagan Andrews, Ph.D. ( ) -
Program Chair. - Charles Kroboth (214)245-4763 w
Treasurer - Joe Brophy (214)891-8187 w
Secretary - Laura Murphey (214)824-1885 h
Membership Dir. - Bob Russell (214)422-4269 h
Disk of the Month - Tim O'Neil (817)267-8981 h
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Special Interest Groups:
SIG Coord. - Phil Chamberlain (214)243-5034 h
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Artificial Intel. Jim Bender (214)423-3470 h
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Turbo Pascal - Warren Ferguson (214)692-2506 w

BBS: SYSOP: Tom Prickett (214)418-6969

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

NTPCUG Membership Director
135 Skyline Drive
Plano, Texas 75074

Check newsletter mailing label for your renewal date.

March — Charles Kroboth, Program Chairman

9:00 AM, Auditorium *** Wordstar 2000 Release 4 ***

A representative from the local office of MicroPro International will be presenting the new features in the latest version of Wordstar 2000.

10:00 AM, Auditorium *** Microsoft ***

Greg Lobdell, Product Manager, Languages/Systems, will be flying in from Bellevue, Wa. to brief us on the direction Microsoft is taking with language products. He will also fill us in on how that fits in with upcoming version of DOS.

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ELECTION RESULTS

The election results were very close. After final count and verification, the following persons have been elected to assist the President in running the Users Group for the year 1987.

Reagan Andrews - President-Elect

Board of Directors:

Kathryn Crawford

Jim Graham

Stuart Yarus

DOOR PRIZE

Our thanks to Xerox Corporation and Data Systems Computer Centre of Dallas for donating the door prize at the February meeting. A copy of Xerox Ventura Publisher was given away. And the lucky winner is... couldn't have happened to a nicer guy... your newsletter editor, John Pribyl. John is quoted as saying, "This will be a big help in production of North Texas PC NEWS." I'm sure it will!

NORTH TEXAS IBM USERS GROUP

Special Offer

March 14, 1987 Meeting

MicroPro International will be demonstrating WordStar 2000 Plus, Release 2 along with the new Release 4 of Original WordStar Professional. There will be a one time only opportunity to buy WordStar 2000 Plus for $150 (Suggested Retail: $595) and an opportunity to sign up for the WordStar update for $89. (Visa, Master Charge or personal checks will be accepted.)

WORDSTAR 2000 PLUS, RELEASE 2.0 $150 (one time only)

Very Powerful AND very Easy to Use.
Ultimate Laser Printer Support.
Unlimited Font Changes within Document.
Direct Lotus Import - no need to print to disk.
Telecommunications Built In.
Fill-in-the-Blank Mailing List Database.
Columns, Math, Sorting, Windows, Spelling Correction.
Currently with Wordfinder Thesaurus!

WORDSTAR PROFESSIONAL, RELEASE 4 $ 89 (Update Price)

Over 125 New Features.
Including. . . . . .

Line & Box Drawing
14 Function Math
Thesaurus
Keyboard Macros
Excellent Spelling Correction
Onscreen Bold, Underline, Justification
Loads of new programming features and shortcuts
Increased customization capabilities
and more!

MicroPro

Prez Sez . . .

Nobody Knows We're Here.

In January, our group got listed in the PC WORLD "clubs" section. What followed was a sack full of mail. A lot of people told us that they would have joined a year ago but didn't know we existed.

In order to correct the situation, Charles Kroboth, our Program Chairman prepared an excellent press release announcing the desktop publishing companies that presented their products at the February meeting. We called both Dallas papers and they assured us that they would consider publicizing the announcement.

But, that only solves part of our identity problem. You, our members, are our best advertising. Let other people know about the NTPCUG. We try to meet the needs of both beginning and experienced PC users. It is our hope that this group can provide answers to questions and training that is not readily available elsewhere.

Membership Renewals.

While I'm on the membership topic, we're making some changes in the area of renewals. In the past, it has been up to the individual member to check his membership renewal date on the address label of the club newsletter.

I got a lot of calls in mid-January from people who did not get their newsletter and did not realize that the meeting date for January was past.

To help you remember to renew your membership, we will be sending you a renewal form early about a month before your membership expires. Hopefully this will cut down on the "I didn't get my newsletter this month!" telephone calls.

One more item under renewals. It really speeds things up if you send the renewals and address changes to the membership director, Bob Russell rather than the NTPCUG's post office box. Bob's address is:

NTPCUG Membership Director
135 Skyline Drive
Plano, Texas 75074

INFOMART Survey in March.

INFOMART wants to know more about the people in all the clubs that meet on Saturday. At the March meeting, they will be handing out a questionaire near the entrance. Please take time to fill it out and return it to them.

C-CAD in April.

During the first week in April, the Center for Computer Assistance to the Disabled will be meeting for three days at INFOMART. The theme of the conference will be "High Time for High Tech for the disabled and the elderly."

They have requested that we provide some of our people to help their members learn how to use computers. If you are interested, I will have the name and telephone number of the person from C-CAD to contact at the March meeting.

Jim

The Impact of Section 1706 of the 1986 Tax Reform Act on Independent Computer Consultants

Note:
This should not be construed as a legal brief. Consult a tax attorney or CPA before taking any personal actions in this regard.

There is much confusion regarding the true impact of Section 1706 of the Tax Reform Act on independent computer consultants. The real question raised in most consultants' minds is whether clients MUST hire you as an employee or if clients can still deal with you as independent contractors. To understand what 1706 really means, we need to develop some background.

Prior to 1978, the IRS was allowed to classify certain trades and practices as being those of employees, rather than being independent businesses. The classifying was done using the so-called 20 Common Law Tests. If you failed enough of them, you were an employee of your client, no matter what you called yourself on your business card. The client would then have to take withholding and FICA out of your earnings.

In 1978, Section 530 of the tax code (called the Safe Harbor provision) halted the reclassifying. In essence, if your practice was commonly considered to be that of an independent contractor, the IRS could not require the client to withhold payroll taxes for you (i,e,. make you an employee).

Section 1706 lifted the moratorium on reclassifying programmers and engineers working as consultants using three-party arrangements (i.e., where a broker finds clients for you, but you are neither an employee of the broker nor the client). Now, if you fail the Common Law tests, the broker will have to consider you an employee and begin withholding. However, IF you, as a consultant, are operating a bonafide business, Section 1706 will have no effect on you since you will pass the Common Law tests. This is the key to the whole issue.

The expressed purpose of 1706 was that it would increase tax revenue since itinerant consultants would no longer be able to take business deductions and because FICA is 2% greater than Self Employment Tax. You should know that Section 1706 was a floor amendment in the Senate; it was never debated in committee.

It is in the best interests of all consultants, brokers, and clients to STRONGLY lobby for the repeal of Section 1706. It would not actually raise tax revenue, since many consultants would earn much less as regular employees. It would also discourage the beginnings of small consulting businesses in the computer software and engineering fields, since many companies might be afraid to use them as independents.

Section 1706 does have strong advocates in the industry, so it will not go away just by wishing. You need to write your congressman expresssing your dismay with the bill and asking for immediate repeal before further damage is done. Some companies have already refused to use consultants in the future and are demanding that previous consultants sign W4's (this ends any future work as a consultant with that client).

It should be emphasized that 1706 does NOT affect the more traditional two-party relationship between client and consultant. Safe Harpor rules are still in effect in that case. Some "job-shops" are telling many MIS users that they must have all of their consultants become employees of either the job-shop or the client before the consultant can continue work for the client. Do not let someone force you out of a two-party relationship with a misinterpretation of 1706 such as that.

Do not be confused; Safe Harbor does not relieve you of the responsibililty to run a bonafide business. It only keeps the client from having to prove that you are not an employee by the Common Law tests. You must look and ➤

act like a business, and not an itinerant employee. Otherwise, an IRS audit may disallow your business deduction.

For example, do you have a business name registered with the County Clerk, a business checking account, a place of business (even an office in the home), business cards and stationery, a business phone listed in the White and Yellow Pages, etc. Are you open for business to the public? Are checks made out to your business name, rather than your name? All dealings should be business-to-business, not "Mary doing some work for Widget Washers". Remember, the burden is upon you to show that you are a business.

The client should be contracting with your BUSINESS to get a job done, not with YOU as a person. If you are a contractor, you should have the right to substitute anyone you want in your place, so long as the JOB is getting done on time and within spec. That should be allowed in your contracts.

A key issue with the IRS is whether the client can fire you. A client can hold your company liable for noncompliance with the contract, but your company can not be dismissed otherwise without liability on the client's part. Also, can you quit at any time without liability to the client? Employees can, but contractors can not.

There is much more, but this should help clarify some of the issues. You may wish to contact the Independent Computer Consultants Association for further informaton as it becomes available.

Richard H. Browne, Ph.D
RHB Consulting Services
(214)522-6729

A - B - C

And Other Fine Stories

Ben A. Stephenson, P.E.

What is 'C'. Where did it come from? Why use it? Why learn a new language anyway?

Lately, I have been trying to convert a major (350K) fortran program to work on a micro computer. The program that I have been working with works very nicely on a Harris mainframe; unfortunately, the program was written several years ago and has a great many calls to assembly routines. These assembly routines pass a number of variables, or operands that do not make any sense to me. So as I see it, I am faced with a problem that has one of four solutions: 1) forget using the program, 2) learn both Harris assembly and IBM assembly and rewrite the Harris assembly into IBM, 3) learn a portable language that will allow me to do bit manipulations, or 4) pay someone who already knows how to do all of this stuff to do what I want done.

Before I begin my discussion, perhaps a few words about myself would be appropriate. I am an engineer, but don't kid yourself, I make a living by making water run down hill. Computers, while they seem to be some type of obsession, are actually a necessary evil - a professional hazard - with me. What I am trying to say is that while I can get onto a micro computer, and I have a little knowledge of Basic and Fortran, I am NOT a whiz at programing. In fact, I use only use one Basic Language program that I actually wrote. All of the other programs that I use were written by someone that really knows what they are doing.

So, why would I want to convert a major Fortran program into 'C' language? In part, the program is one that I need to make a living. In part, because I have an unjustified interest in learning a powerful programing language, an in part, because it is my opinion that it will not be very long before Fortran will prove too cumbersome for future programing efforts. To support this statement, Microsoft Fortran is, for the time being,* still batch related. In ►

* This week, I received an announcement that Microsoft has announced a new, updated version of Fortran that is supposed to right all of Fortran's wrongs - We will see!.

other words, Fortran is not a language that allows for very much in the way of screen control. On screen, graphics under Microsoft Fortran 3.31 are almost out of the question. Even simple things like painting a form on a screen and having the user answer a question in an appropriate box are very difficult and time consuming from a programing standpoint.

With this in mind, why not go to Basic? It allows for easy screen manipulation, peeks and pokes that allow easy bitwise manipulation, on screen graphics, and I know Basic reasonably well. Further, Basic has come out of the dark ages in the last year. With the new Basics that have appeared, True Basic, Microsoft QuickBasic, and some of the others, many of Basic's problems are no longer problems. QuickBasic compiles the programs so that speed is no longer much of a problem, both of the listed Basic compilers require more of a STRUCTURED APPROACH to programing so that someone else (or yourself for that matter) can follow what you have done, and at least QuickBasic allows for real subroutines that pass variables from one part of the program to another. In other words, Basic is no longer the toy that it once was.

Unfortunately, basic has one major drawback: it still must be coded in 64K or less. Of course, one can design a program so that overlays are used, but the program that I wish to convert has no less than 96 variables that would have to be passed from one module to another. Needless to say, the idea of global variables appeals to me when this is considered.

Why 'C', why not Pascal? I have tinkered with Turbo Pascal from Borland, International. Turbo Pascal, while it is very fast, it is compiled, it is structured, it is relatively easy to learn, and it has excellent graphics, is still limited to 64K. Again, overlays can be used, but the 96 variables make the memory limit a bit of a chore. I understand that Microsoft Pascal and a few others will allow you to build 64K modules, compile them separately, and link them together so that a program as large as 1 megabyte can be produced. But, if I have to buy a compiler that will do this, why not choose 'C'?

In the days of my first Osborn 01 computer, I was given a language called "CBASIC". For the longest time, I thought that CBASIC was 'C'. How I was mistaken! 'C' quite simply, gets its name because it followed a language called 'B', and 'B' came from a language called 'BPCL'. A fellow named Dennis Ritchie who was at Bell Laboratories in the early 1970's actually created the language for use in developing the UNIX* operating system. In fact, 'C' was used to write the Unix operating system. While the use of 'C' throughout the 1970's was rather limited, since 1981, 'C' has become more popular because Unix has been promoted as a "standard" operating system.

'C' itself is what might be called a middle level language. What I mean by middle is that the code is not as understandable as Basic, Fortran, or Pascal, but it is certainly more readable than assembly. Further, 'C' was developed as an alternative to assembly language so that 'C' allows for low level machine instructions as well as high level data handling and program control constructs. The astute programmer is therefore not limited by the language in doing whatever he/she wants to do. Bit manipulations, low level file access, and great speed are all the result of being able to program in 'C'. Another aspect of 'C' is that it is extremely portable. In other words, if one designed and wrote a program in 'C', within certain limits, then not only could an IBM or compatible computer run the program, with very little modification, a Macintosh or a main frame could also run the same program.

How is it possible for a middle level language to have such portability? If one programs in assembly (a very low level language), the programs have to be completely rewritten for each new environment. A new environment means that almost anything can change and you have a new environment, i.e., if you have a new operating system, or even a new version of an old operating system, a different computer, or even a different video card can change the environment enough so that the assembly code may have to be rewritten. On the other hand, 'C', by itself, has no actual facilities for talking to the machine in which ➤

* UNIX is a trademark of Bell Laboratories

it is running. These are supplied in the form of various standard libraries that come with your 'C' compiler. Anything that is environment specific is included in a library. This means that 'C' can be used to control elevators, machine lathes, personal computers, and any other machine that a library can be written to control. You, as the programmer, simply choose the proper command, and the libraries do the work to make it happen.

'C' has some other things going for it. Among these are the way the code is actually written. The code is written in the form of modules or "functions". Under BASICA, when you need a variable or a function, you simply wrote what you needed. It is possible to have the same code in a Basic program, doing exactly the same thing, several times in several locations because the programmer was too lazy, or unknowledgable, to use a subroutine. Further, one of the major complaints that many people have about Basic is that frequently, Basic programs develop into spaghetti code. At any given instant, the programmer is not likely to have any idea what code the program is executing. In 'C', each programing step is broken down into a manageable function. While it is not likely that it would show up in anybody's code, it would be possible to write a multiply function where the two numbers to be multiplied are passed to the function and the answer is passed back.

While the above example is somewhat simplistic, consider what might happen if you wrote many programs. You might find yourself with several "standard" libraries that did most of what you needed doing. Your programs would then begin to look like a series of called building blocks, or functions. Because 'C' is so structured, no line numbers are allowed. One of the reasons that I dislike programing in Basic is that to re-use code that I have already written requires a major effort to keep line numbers and variables consistent throughout the program. In 'C', this is not only encouraged, it is simple to do.

'C' has many, many other reasons to consider the language as a programing tool. To editorialize a minute, it is my opinion that while the 8088 processor is being phased out, and the 80386 processor is on the up-swing. Programing languages are going to have to keep up with the hardware. There are trillions of lines of Fortran out there; but under the coming new environments, languages like Fortran and Basic are going have to learn some new tricks to stay healthy. 'C', being extremely portable, and being the "mother tongue" of the popular Unix operating system, is likely to be one of the major languages of the future.

How difficult is 'C'? Only two weeks ago, I purchased a copy of the Mark Williams 'Lets C' Compiler. I bought it at Soft Warehouse for $39. This particular version of 'C' is limited to a 64K program. At the time, I thought that I would be able to learn a little about the language and make a more intelligent decision about the "big" compiler that I may want in the future. The 'Lets C' Compiler comes on two disks, it has all of the standard libraries for I/O routines (I/O = input / output), it has math libraries (no 8087 support in this version), and in short, it seems to be a reasonably complete package. The manual that is included contains a short description of the libraries and a brief description of how the language works. However, the manual states that it is not the intention of the authors to teach 'C' to the purchaser, rather it is the responsibility of the user to find appropriate instruction in how to program. As I have some idea of how to program, i.e., how to break actions into the component parts. I went by a local book store and purchased several books on 'C'. Among the books that I purchased are:

1. "FROM BASIC TO C" by Harley M. Templeton, Compute Publications, Inc., Greensboro, North carolina, 1986 (210 pages $16.95 retail)

2. "VARIATIONS IN C" by Steve Schustack, Microsoft Press, Bellevue, Washington, 1985 (344 pages $19.95 retail)

3. "THE C PROGRAMING LANGUAGE" by Brian W. Kernighan and Dennis M. Ritchie, Printice-Hall Software Series, Englewood Cliffs. New Jersy, 1978 (228 pages $24.95 retail)

4. "C MADE EASY" by Herbert Schildt, ►

Osborne McGraw-Hill, Berkeley, California, 1985 (292 pages $18.95 retail)

I was surprised to see how many books there are on the 'C' language. I searched for months for good books on Fortran and have yet to find one or several that can answer the questions I have about that language.

Unfortunately, it did not take long to discover that my plan to learn the language in small modules was not a very good one. (However, if I were looking for a smaller compiled language to learn, I would still work with the Mark Williams Lets C compiler.) One of the first things that must be done in the Fortran Program that I wish to convert is to produce a large floating point array. In fact, this array is 10 rows by 30 columns. As near as I can tell, the Lets C compiler will not handle an array this large. It would compile with no errors, but when asked to reproduce the information, the program locks.

I therefore bit the bullet and bought the Microsoft C compiler. Though the compiler retails for over $450, it was $259 at Soft Warehouse. Mark Williams has a full system that should be able to handle the 350K program that sells for $495 retail but it is available for $239 at Soft Warehouse. I have in the back of my mind porting this program to the Windows environment. Therefore, I suspect that it will be easier to port to the windows environment if I am using Microsoft C. This compiler comes on a total of eight disks, six of which are actually the compiler, one of which is a Windows update disk and the final disk is a demo of the CodeView program that accompanies the C Compiler.

The Microsoft C Compiler allows four memory sizes: small, medium, compact and large. As you might have guessed, each of these sizes appear to allow for different sized programs. Further, numerous libraries, including 80x87, 80x86, and 8088 subsets are supported. Installation is straight forward, but to find the directions in the three volumes of documentation that come with the program is somewhat difficult. This is a complex compiler capable of handling just about anything that you can through at it. As a result, to begin to use this program, you have to be willing to spend about a month reading all of the manuals. So, this is where I will leave you. It is my intention to take a class in 'C' from Brookhaven College (my class begins March 28). If everything works out, I will let you know how the classes are and how my quest to learn 'C' is going.

Ben

Disk of the Month

By Tim O'Neil

As Tony the Tiger would say, "We had a
G R E A T T T T T
time at last month's DOM! Thanks for your support.

We'd like to thank Howard Hamilton for all his hard work. He did all the readme files on the new disks we introduced this month plus, he did new labels on all the disk in the library.

WE doubled our inventory last month so that when you asked for a disk, we had it! All except two, that is! We ran out of only two disks, AM-TAX and Lotus Template Church Membership.

This month we changed suppliers of our disk duplication service. Mid West Magnetics in Dallas is now duplicating our disks. A big thanks to Chris who handles our account. He went beyond the call of duty this month.

I need help:

Qualifications:

- Must live close to Plano Road and Spring Valley Area.
- Must have a PC with a modem.
- Must have 10 hours a month to donate.
- Will assist us in doing the readme files.
- Pay: A lot of thanks from your fellow members.

If you have registered one of your shareware programs and have a more current update than we have in the library please send us a copy. We will give you a new disk from the library. If you have a questions as to which is the lastest version give me a call at 267-8981 and I'll check what we have in the library.

All the workers at the disk of the month table are volunteers. We will do everything we can to answer your questions. We really have lots of fun trying to make you happy with your disk selection. If you want to share in some of the fun give me a call at 267-8981 and volunteer to work. You will get 1 disk free and I promise that you will learn a lot in one short time.

Again thanks to my Committee and thanks to members who buy our disk.

March Disk of the Month:

Wampum (A dBase III clone)
(You asked for it.)

New Public Domain Disks:

PD-123------A-86
PD-124A-----File Express
PD-124B-----File Express 2nd Disk
PD-125A-----Generic Terminal Communic.
PD-125B-----Generic Terminal 2nd Disk
PD-126- ----Family History Update
PD-127------Genealogy on display Ver. 4
(update)
PD-128------Checkmate
PD-129------Fido News
PD-130------Fido Utilities
PD-131------Fido Communication program
PD-132------Fido 2nd disk
PD-133------Lotus Templates-123 Investor
PD-134------123 Macros
PD-135------123/Sym tech notes
PD-136------Whiterock #1--123 Templates
PD-137------Sym Personal Finance System
PD-138------Sym Command lang instr disk
PD-139------SYM Insurance Industry Demo
PD-140------SYM Medical Industry Demo
PD-141------DBase Templates
PD-142------DBase Templates
PD-143------DBase Templates
PD-144------Typing for KIds
PD-145------Nutrient-tracks diet/nutrients

►

New Public Domain Disks - continued

PD-146A--|
PD-146B | PC Type Jim Button
PD-146C--| (three-disk set)

I will replace your old PC Type for $1.00 for the first disk and $2.00 for the other two disks. You must bring in your old version.

Since this article is being written in the middle of February to meet the newsletter deadline, we may have to make some last minute changes. Check at the DOM counter. We will have updates at the DOM table and also upstairs.

Some of the changes we have made in the Disk of the Month:

A: We now take order in the mail by sending your check + $1.00 for mailing. Mail your order to Tim O'Neil Box 396 Bedford, Texas 76021.

B: We do have Master Card and Visa so you can charge you disk.

C: We will replace your catalogue disk for $1.00 for both disk. Return your old disks.

D: We will register your software for you.
1> All Buttonware at a 30% Savings
2> AM-Tax for only $35.00

We've starting to put new versions in old slots. for instance, PD-37 PC-Calc is now Version 3.

If you have any problems with our disks let me know. If you have a program you want in the library let me know. If you are in a SIG and want some disks to review, let me know. Tim O'Neil Box 396 Bedford, Texas 76021 Phone 267-8981.

Final word --Our beginner package is a huge success! That's a 6-pak of beginner programs and information that sells for only $12.00. If you're just starting out, you can't afford NOT to have this set. Let us know what you think about it. This is your library and suggestions are welcome. We can only grow with your help.

Tim O'Neil
Disk of Month Chairmen

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: At prevailing prices plus $1.00 for mailer and postage. Mail your order to Tim O'Neil, Box 396, Bedford, TX 76021.

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

AVAILABILTY: 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: The EXCHANGE for the current month will be avaliable at the auditorium AFTER the main meeting, at no charge to paid up members of the NTPCUG. ►

North Texas PC User Group
Disk Of The Month Library
Subject index - Update February 1987

Legend:
PD-----Stands for Public Domain
Date---Disk of the Month Year
LT-----Stands for LETUS Files
Demo---Demo Disk

All these disk are avialable by mail:
$2.00 Member - $3.00 Non Member
Tim O'Neil
Box 396
Bedford, Texas 76021
Add $1.00 per order (not per disk) for postage.

NOTE
All programs that have a common number are on the same disk.

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[ ] 123 Business Tools #2 . . . . . PD0111
[ ] 123PREP, ASCII files to LOTUS 123 . PD0012
[ ] 123PRINT, printer control LOTUS 123 PD0019
[ ] 3BY5 ver. 1.0 . . . . . PD0050
[ ] 747, flight simulator . . . . . NOV 83
[ ] Accounting package, dBASE II PD0017
[ ] Accounts ledger, double entry PD0048
[ ] AccuTax, 1985 Income Tax . . . . . FEB 86
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[ ] Alphabet tutor (for children) . . . . NOV 84
[ ] AM TAX . . . . . JAN 87
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[ ] Analog clock, learn to tell time on . . NOV 84
[ ] APL language PD0062
[ ] APL tutor PD0062
[ ] APL*PLUS/PC PD0062
[ ] Application development utility . . . PD0008
[ ] Appointment calendar & logbook . . . AUG 86
[ ] Appointment calendar & logbook . . . SEP 86
[ ] Appointment calendar program PD0059
[ ] ARCHIE!! (game) . . . . . NOV 84
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[ ] ASCII file encoder . . . . . JUL 83
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[ ] ASCII files, BASIC cross reference . . MAR 83
[ ] ASCII text file, display contents . . . PD0027
[ ] Assembler, CHASM ver. 4.07S PD0077
[ ] Assembly language, access to DOS . . PD0059
[ ] Assembly Language, class examples . . PD0015
[ ] Assembly language, MASM 1.25 . . . . PD0023
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[ ] Auto expenses, LOTUS 123 worksheet PD0019
[ ] AUTO, LOTUS 123 worksheet PD0019
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[ ] BASIC program, utility to structure . PD0008
[ ] BASIC programmers utility, SQUISH . PD0002
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[ ] C language: Source, ASM, DOC, & EXE PD0028
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[ ] Cheap Assembler PD0077
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[ ] LOTUS 123, create flowchart with . . MAY 84
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[ ] Music, JUNIOR MUSIC MACHINE . . PD0081
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[ ] Music, PIANOMAN tunes PD0067
[ ] Music, PLAYER PIANO tunes PD0067
[ ] Music, Puff the magic dragon PD0007
[ ] Music, SONGS . . . . . JUL 83
[ ] Music, SONGS PD0007
[ ] Music, The William Tell overture . . . PD0007
[ ] Music, three songs in basic . . . . . JAN 83
[ ] Music, Yesterday PD0007
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[ ] ONE RINGY DINGY (communications) FEB 84
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[ ] PC-DESKMATES ver. 1.01 . . . . . PD0065
[ ] PC-DIAL ver. 2.0 . . . . . OCT 86
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[ ] PC-FILE III, full-screen editor for . MAY 84
[ ] PC-KEY DRAW, with library (2 disks) PD0082
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[ ] PC-TALK Best82
[ ] PC-TALK III directory sort PD0004
[ ] PC-TALK III for PCjr PD0021
[ ] PC-TALK III ver. 5.00 . . . . . PD0021
[ ] PC-TAX PD0001
[ ] PC-TAX84 . . . . . MAR 85
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[ ] PC-TICKLE ver. 1.0 . . . . . SEP 86
[ ] PC-TOUCH, typing tutor . . . . . AUG 84

[ ] PC-TYPE (evaluation copy) . . . . . NOV 86
[ ] PC-VT ver. 7.6 . . . . . PD0031
[ ] PC-WRITE ver. 2.7/3 . . . . . PD0086
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[ ] PD PROLOG PD0090
[ ] PEASHOOT (game) . . . . . MAY 83
[ ] Personal Appointment Locator . . . PD0059
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[ ] PIANOMAN (music) PD0044
[ ] PIANOMAN (music) PD0049
[ ] PIANOMAN TUNES (music) PD0049
[ ] PIANOMAN, sample tunes PD0067
[ ] PLAYER PIANO, sample tunes PD0067
[ ] PONG (game) . . . . . JAN 83
[ ] PONGPONG (game) . . . . . MAY 83
[ ] POWER WORKSHEETS (LOTUS 123) . PD0022
[ ] Print BASIC programs with hilights . . . Best82
[ ] Print compressed on Epson printer . . PD0012
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[ ] Print letters and files . . . . . AUG 83
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[ ] Print spooler PD0059
[ ] Print spooler for color monitors . . . . JUL 83
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[ ] PRINT statement, accelerate . . . . DEC 84
[ ] Printer control for LOTUS 123 . . . . PD0019
[ ] Printer customization for WORDSTAR AUG 83
[ ] Printer fonts, prints all 12 MX80 . . . . Best82
[ ] Printer fonts, will select Best82
[ ] Printer setup program . . . . . AUG 83
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[ ] Printer, command to advance a page PD0012
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[ ] Printer, set up Epson . . . . . JUL 83
[ ] Printer, swap defined PD0004
[ ] PROCOMM ver. 2.4 . . . . . PD0075
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[ ] Programming solutions, linear . . . . JUL 83
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[ ] PROLOG PD0090
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[ ] QBERT (game) PD0026
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[ ] QSORT Best82
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[ ] RAM disk, 360 K PD0012
[ ] RAM disk, re-size from 5-255k PD0012
[ ] RAM disk, variable size PD0071
[ ] RAM drive utility, add floppy drive . . PD0027
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[ ] RATBAS (a BASIC preprocessor) . . . APR 83
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[ ] READING (educational game) PD0007
[ ] Real Estate, Symphony templates . . . PD0119
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[ ] RIPAMORT (LOTUS 123 worksheet) . PD0001
[ ] ROULETTE (game) PD0043
[ ] RUBIK'S CUBE SIMULATION (game) PD0007
[ ] S/370 VM Oper.Console simulation . . PD0007
[ ] SA CASTAWAYS (game) PD0091
[ ] SATELITE, display elevation . . . . . NOV 84
[ ] Science, LOTUS 123 templates PD0112
[ ] SCRAMBLE PD0038
[ ] Screen editor PD0070
[ ] Screen, blank after 5 min. nonuse . . NOV 83
[ ] Screen, blank after 5 min. nonuse . . PD0030
[ ] SCREENCODE PD0070
[ ] Scroll lock key toggle PD0012
[ ] SD [sort and display directory] . . . . MAY 83

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[ ] SEAWOLF (game) . . . . . NOV 84
[ ] Shareware, SEE User-Supported... . . X-REF
[ ] Shift lock keys, set (BASIC) . . . . . JAN 83
[ ] SHORTCUT ver. 1.12 . . . . . JAN 86
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[ ] SIGNAL, "Beep", then press any key PD0030
[ ] SIMPLEX . . . . . JUL 83
[ ] SIMTERM, terminal simulator HP/UNIX PD0035
[ ] SIREN (sound effect) Best82
[ ] SLIDE ver. 1.0 . . . . . PD0121
[ ] SLOTMACH (game) . . . . . MAY 83
[ ] SMALL-C:PC PD0036
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[ ] Sort, heap Best82
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[ ] Sound effect, wailing siren Best82
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[ ] SPACE PROTECTOR (game) . . . . . MAR 84
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[ ] SPEEDUP Best82
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[ ] SQUISH, BASIC programmers utility . PD0002
[ ] STAR TREK (game) Best82
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[ ] STARGATE (game) PD0043
[ ] STARLANE (game) . . . . . MAR 84
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[ ] STARTREK (game), fixed version . . . NOV 83
[ ] STARWARS (game) PD0007
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[ ] Stock tracking system (BASIC lang.) . PD0019
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[ ] STOP GAP EDITOR . . . . . AUG 83
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[ ] Subdirectories, list files across PD0059
[ ] Subdirectories, move files to diff. . . PD0012
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[ ] SWPTR, swap defined printer PD0004
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[ ] SYMPHONY #2, templates/ macros . . PD0041
[ ] SYMPHONY Real Estate templates . . PD0119
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[ ] SYSTAT . . . . . AUG 83
[ ] System information (drives, etc.) . . . PD0012
[ ] TALKSORT, PC-TALK.III dir sort . . . PD0004
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[ ] TENKEY (Demo) DEM002
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[ ] TOUCH, change file time/date stamp PD0059
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[ ] TUTOR ver. 4.2 . . . . . PD0079
[ ] Tutor, for APL PD0062
[ ] Tutor, for BASIC . . . . . JAN 85
[ ] Tutor, for typing . . . . . AUG 84
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[ ] ULTRA-UTILITIES ver. 4.00 . . . . . PD0018
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[ ] User-Supported Software, MPM-print JAN 86
[ ] User-Supported Software, PC-DEAL AUG 85
[ ] User-Supported Software, PC-TAX84 MAR 85
[ ] User-Supported Software, Pianoman . SEP 85
[ ] User-Supported Software, Shortcut . JAN 86
[ ] UTIL ver.1.63 . . . . . SEP 84
[ ] UTIL, DOS 2.0 utilities PD0004
[ ] Utilities for Mavericks PD0120
[ ] UTILITY 1-2-3, LOTUS 123 macros . PD0020
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[ ] WORDSTAR, install various printers . . JAN 83
[ ] WORDSTAR, install with color . . . . JAN 83
[ ] WORDSTAR, makes files printable . . . FEB 83
[ ] WORDSTAR, makes files printable . . . MAR 83
[ ] WORDSTAR, printer customization . . AUG 83
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[ ] XREF, cross-ref generator (Pascal) . JAN 84
[ ] XWING (game) . . . . . NOV 84
[ ] YAHTZEE (game) . . . . . MAY 83
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On Complexity

No 7 in a Series

by Jim Hoisington

One of the hot topics in the trade press this month has been the lawsuit by Lotus Development Corporation against some of the companies that make products that "have the look and feel" of Lotus 1-2-3. The articles brought to mind a conversation that I had a couple of months ago with an old hacker who was still using one of the early 8 bit microcomputers.

He was extolling the virtues of his machine and all the great software that ran on it.. He couldn't understand why people insisted on using the obviously inferior 16 bit microcomputers like the PC. His logic was that the PC design was flawed and that you could really do anything that you wanted to with Dbase II, Visicalc, Wordstar and CBASIC.

I mentioned some of the products that are available on PC's like Paradox, Lotus 1-2-3, Microsoft Word and Professional Basic. He replied that if the programs were any good, someone would take the time to disassemble them and get them to work on his 8 bit computer. He mentioned a product that had been "hacked" from one popular 8 bit machine to his one type of machine.

That got my attention. I can't speak from experience on any of the products except Professional Basic. But, Professional Basic consists of over 180,000 lines of assembly language code. And it is not heavily commented. I assume that the other products are equally big because more and more products require at least 320k of memory meaning there is a lot of code supporting the product.

Products get this big because they offer more features and capabilities than the earlier products and the computer architecture supports a larger memory workspace. The 8 bit machines only gracefully supported 64k of memory with the additional memory usually being paged like the above-board cards.

It occured to me that even if this hacker had the orginal source code to Professional Basic, it would take him a year or two to get it into another machine's assembly language. And then he'd have to solve the difference in memory architecture.

And even if he did all this, he would probably find that it wouldn't work in the same way as it does on the PC. In the end, he would find himself changing the design and improving on it.

It's always easier to take an existing design and improve on it rather than to come up with an entirely new product. And it's even harder to exactly duplicate a product without "fixing" some of its flaws. (As an example, read the review of the compatibility problems suffered by some of the EGA card makers because they fixed some of the "flaws" in IBM's original design.)

To my way of thinking, Lotus 1-2-3 is a redesign and and improvement upon the original Visicalc design. Unless the people that make the look alike products stole the Lotus code through disassembly or other means, they probably put a lot of effort into developing their software packages. They may have known the user interface but they undoubtedly had to solve all the technical problems of making that interface work. And, unless they had access to Lotus's code, they probably solved those problems differently than the people that wrote 1-2-3.

The reason I have this opinion is that over my 24 years of writing programs, I've had many occasions to write the same program, or at least, programs that did the same thing. And no two of those programs are identical.

In solving each programming problem, I see ways of improving on my earlier solution. I reuse a lot of code but each time I see something that I can do better.

And it's not just me. Others that I consider to be good programmers tell me that they do the same thing. It brings to mind one of Will Baden's sayings about programming. "Anything I can do, you can do better. Anything you can do, I can do better. Anything I can do, I can do better."

As I understand the law, Lotus will try to prove that the other programs are "copies" of the 1-2-3 program. Previous cases have been resolved by comparing the source code of the programs. My bet is that the source programs are significantly different.

Jim

CCD News

February '87

More BIG news from this month's meeting of the Computer Council of Dallas (CCD) Board of Directors meeting. With the certification of size, the various affiliates' appointed Directors were officially seated on the Board.

CCD has signed a contract with INFOMART that is an improvement for all concerned. While the monthly guaranteed rent is increased, the amount retained by CCD in excess of this is also increased. Per the current contract. all dates in excess of 60 days in advance are subject to change. Dates scheduled for 1987 are: 3/21, 4/11, 5/9, 6/13, 7/11, 8/8, 9/12, 10/10, 11/14, and 12/12.

The electrical hookup fees in the vendor area have doubled since the December Forum. Therefore, effective with the March User Forum, any CLUB or VENDOR in the basement requiring electrical power must pay a $10 hookup fee. This nominal charge was adopted in lieu of increasing table rentals.

The February User Forum set a new record for meetings scheduled at 107. In the vendor area, 57 tables were sold, a welcome and expected increase over the small turnout in January. Remember that the vendors' support lets the User Forum meet in the great facilities provided by INFOMART. Support those who make it possible. And, if you favorite vendor isn't joining us, let him, and us know about it!

There have been a few instances recently where audiovisual equipment set up in one room has mysteriously changed rooms during the Forum, understandably upsetting the company from which it is rented. DO NOT DO THIS! If you need AV equipment, REQUEST it. Scrounging it may bring unwelcome wrath upon your head!

Based on the proportional representation based on membership, each affiliate Director will have the following number of votes for 1987. Affilitates not mentioned have not yet certified their membership.

APPLE CORPS	13
DALACE	3
DALCOGS	1
DALTRUG	4
EPSON	2
NTPCUG	10
NTSTU	1
SCOPE	3
TIHOME	2
TIPRO	3
TIMEX/SINCLAIR/AMSTRAD	1

The EPSON group will be starting a new SIG in March for Epson printer owners. Guests are welcome. Check schedule for time and room.

jlpellet mc92019

Quote of the Month...

Allan S. Greenberg when discussing why he was late getting a review article to the editor of UCLA PC UG Newsletter said:

> " I had bought my computer to save time. But ever since then I haven't had time to do anything else except save even more time working with the computer."

WIN A FREE TRIP
TO THE 1987 FALL COMDEX
IN LAS VEGAS!!

If you write an article that is published in the Newsletter and your article is selected as the best one published during the period of the contest, you will win an expense-paid trip to Comdex.

The Contest Rules are as follows:

1. All dues-paying members are eligible to win.

2. Articles must be submitted between December 1, 1986 and May 1, 1987, and must be published in the Newsletter before the entries are judged.

3. The articles must carry the name of a single individual as author, must be original, and must not have been previously copyrighted.

4. Articles will be approved for publication by the Newsletter editor, with the assistance of the Board of Directors. Their decisions are final. Articles received within the time limits of the rules but not selected for publication within these rules will not be eligible to win, but may be published in a later issue of the Newsletter.

5. Articles may be on any subject that is of interest to PC users.

6. No minimum size of articles. Lengthy articles (over 5-6 pages) may be "serialized" by the editor, appearing in successive issues of the Newsletter. Each part of a serial article will be considered a separate article in the contest.

7. The editor may judiciously edit articles, and they will be judged as published.

8. A ballot will be published in the Newsletter at the end of the contest, listing all of the entries published. All recipients of the ballot, including other Users Groups, are eligible to vote. The author of the article receiving the most votes will be declared the winner. In case of a tie, the winner will be selected by a drawing to be held at the main meeting. The winner need not be present.

9. The prize will include airplane, taxi, and hotel costs for the COMDEX Meeting. Approximate value $600.

10. If a conflict arises regarding interpretation of contest rules, decision of the Board of Directors will be final.

MEMBERSHIP APPLICATION

North Texas Personal Computer Users Group

The NTPCUG is a non-profit independent organization of individuals learning to apply personal computers to practical problems. For additional information call 242-4187 and leave message on the answering machine.

Check one: >>>>> NEW: ___
>>>>> RENEWAL: ___
>>>>> ADDR CHG: ___

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Comember's name (in your family): _____

Phone: (Home): _____ I prefer calls at this No. ____

(Work): _____ I prefer calls at this No. ____

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

You will be asked to assist for a few hours each year. Please check all areas of interest that apply:

BB. Bulletin Board
DM. Disk of the Month
ES. Equipment Setup
FB. Financial/Bookkeeping
GP. Group Purchases
IB. Information/Registration Booths
MP. Main Meeting Programs
MM. Membership
NL. Newsletter
PR. Publicity/Public Relations
SI. SIG Setup/Coordination
ST. Startext NTPCUG Column
VO. Volunteer Coordination

1. APL
2. Assembler
3. Basic
4. Beginners
5. Business Appl.
6. C Language
7. Communications
8. Databases
9. Eagle Computer
10. Genealogy
11. Graphics
12. Integrated Software
13. Investment
14. Programmers
15. Science/Engineering
16. Turbo Pascal

Membership Dues are: $24.00 regular ____ $12.00 ____ Student(Show ID)

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PCTALK
A PC Newsletter
By Carrington Dixon (ID 2302)
Vol. 5 No. 4
Monday, February 2

Displays

There are currently four official IBM displays (that is, monitors or "tubes") that can be used with the PC family (not counting the PCjr only display). This week I shall try to provide a general overview of all of them.

For nearly five years, my own display of choice was the IBM Monochrome Display driven by the IBM Monochrome and Parallel Adapter card. This is one of the few IBM supplied multi-function cards; that is, it did more than one thing, in this case driving the display and a printer. This choice supplies excellent character resolution; one really has to look closely to see the dots.

Unfortunately, this choice does not support any graphics beyond what can be created with the IBM extended ASCII character set. This is the fault of the adapter card, not of the display itself. Several companies now vend adapter cards that will support graphics on the IBM monochrome display. The most well known of these, the Hercules, has its own set of graphics calls that take advantage of the displays 720x350 pixel resolution. Others attempt to emulate the calls of the IBM Color Graphics Adapter, albeit in shades of green. The later option will run a wider range of existing software, but several important programs, e.g. Lotus 1-2-3, have the ability to take advantage of the Hercules card's very high resolution graphics.

Originally, the only other IBM supported option was the IBM Color Graphics Card. This card supported color and graphics but was anything but a clear winner over the Monochrome. The resolution was only 320X200 pixels in 4 colors. The characters were generated in an 8x8 pixel box as compared to the monochrome's 9x14. The letters were rather coarse with obvious horizontal 'lines' due to the relatively few pixels in the vertical direction. IBM's card flickered annoyingly whenever the text was 'scrolled'. In general the Color Graphics Adapter was the choice mainly of those who had to have color and/or graphics. Many of us waited for IBM to announce a better display.

A little over three years after the original display adapters IBM announced two more, the Enhanced Graphics Adapter and the Professional Graphics Adapter, along with new displays to match. Both adapters are very impressive. The first is quite expensive and the second is outrageous; thus, only the first, the EGA, is really suitable for the non-specialized PC.

The Enhanced Graphics Adapter, or EGA, is capable of driving three of the four official IBM displays, the new Enhanced Color Display and the two older displays. It can provide graphics on the monochrome display, but these are compatible with neither the Color Graphics calls nor with the Hercules 'standard'; I know of no program that uses this capability. It can also drive the old Color Display in a mostly compatible manner -- it supports more colors and does not flicker during scrolling. However, the EGA is seen to its best advantage when driving its own special display, the Enhanced Color Display. On the ECD the character box (in text mode) is 8x14 pixels -- almost the resolution of the monochrome display. The characters are not quite as seamless as on the monochrome, but they are certainly of acceptable resolution. In graphics mode, the EGA supports 640x350 pixels in 16 colors -- a major improvement over the old CGA.

The EGA has only two draw backs, price and the fact that it is not 100% compatible with software written for the old Color Graphics Adapter. The EGA and CGA use different controller chips and chip specific software may not work on the newer card. I cannot name specific programs and do not know how serious this problem is, but I do know that it exists. Several of the "EGA clone" adapters are more nearly completely CGA compatible than the IBM board. I would judge the EGA to be the best all around display that IBM currently supports. The monochrome remains a viable alternative for those who need only character display, but the older Color Graphics Adapter is clearly superseded (and thus I have spoken of it in the past tense even though IBM still markets it.) ►

I shall give the Professional Graphics Adapter relatively short shrift. This card supports 640x480 pixels in 256 colors from a palette of 4096! It has all kinds of wonderful built-in graphics features. It is intended as a professional graphics workstation for computer aided design (CAD), computer aided manufacturing (CAM) and computer aided engineering (CAE), and is priced accordingly -- the adapter and display together cost a little over $4000. As you might expect, software for the PGA is correspondingly expensive and restricted pretty much to the areas mentioned. In a few years we shall all have displays like this, but not yet.

Last year I purchased an EGA clone and display. I chose the STB EGA Plus card for a number of reasons -- mostly price and availability. I ran a two display system for the first couple of months. As the CGA and monochrome adapters used different areas of memory for their video buffers, they could both co-exist in the same computer. The EGA in turn can co-exist with either as long as only one color and one monochrome display are connected to the system. I can give the two display system only a mixed review and would recommend it only to those who may be adding color to a system with an existing monochrome display -- and then only with reservations.

The EGA's text resolution is good enough that one does not really need the monochrome; although, some programs (e.g. Word Proof) may run noticeably faster on the monochrome display. However, it takes some special arrangements to position two monitors so that each is easily viewable; it may well not be worth the trouble and possible expense. A more serious problem would seem to lie the fact that some software packages to not respond well to finding two monitors on a system. One public domain EGA program that I downloaded would not work when the monochrome monitor was the 'primary' monitor; that is, the one that is chosen when the system initialling comes up. This program worked fine after I had reconfigured my system to make the EGA the primary display. However, Microsoft Windows, behaved erratically and eventually locked up as long as the monochrome adapter was installed, regardless of which display was the primary. It worked perfectly when I removed the monochrome adapter.

If I were buying my EGA system now, I would look very closely at the VEGA EGA-clone adapter and at the NEC Multi-Sync monitor. The VEGA card is held to be one of the most compatible of the EGA-clone cards, and it is widely discounted in this area. The NEC monitor has special circuits so that it can match the sync signals of all of the various IBM graphics cards. CGA, EGA and PGA. This could make upgrading a piece at a time much simpler.

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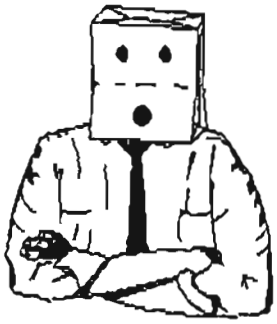

CLONES: Atari's PC clone which was due to be on shelves in March has been postponed until later in the year. The major obstacle has been FCC approval, but some industry observers feel it may be "vaporware".

While the big clone makers are cutting prices to stay competitive, the mail-order fellows are planning to do them one better. PC Network, for instance, plans a 12MHz, zero-wait-state, AT for under $800. It includes 512K, one 1.2M floppy, and a 150-watt power supply.

STOCKS: Compaq Computer Corporation finished its fourth quarter with an impressive 62% increase in net income. IBM's stock has risen 10% since Jan. 1, even though the company experienced almost flat revenue growth for 1986. In a report released last month, IBM stated it had reduced spending by 22% and inventories by 13%. Microsoft is expanding it's headquarters and doubling capacity at its U.S. manufacturing plant due to a 76% sales increase in application software, a 65% increase in languages and operating systems, and a 149% increase in hardware sales.

NEW RUMORS: By the time this newsletter reaches you, Compaq should have introduced it's Portable III featuring; a high-speed 80286 processor. gas- plasma display, have optional 20 or 40Mg fixed disk, 2 expansion slots, and weigh in at 20 lbs. Another rumor being denied by both parties at press time is that Bell Atlantic is trying to unload recently purchased CompuShop. CompuShop posted a $37 million loss for 1986. John Scully, Apple president, recently was heard saying IBM PC compatibility will soon be as important as CP/M compatibility.

NEW VENTURES: EDS has announced joint ventures with Ing. C. Olivetti Co., of Italy and Lucky Gold Star, of Korea to try and duplicate EDS' success overseas.

RADIO: Who's the guy that wrote the new radio commercial for Nynex Computer Centers? "Just call 1-800-368-nienex nynecks". I guess if you live in New York you know how to spell it.

MICROSOFT: Bill Gates, Chairman at Microsoft, addressed a meeting of the Capital PC Users Group and stated that his company would release a new version of DOS every year. Beginning with 286 DOS this year and 386 DOS in 1988, he said 486 DOS was currently under development and projected for release in 1989. Billy will be speaking to the Houston PC user group (HAL) in March and our fantastic Program Chairman, C. Kroboth says we will have him this fall (sooner if Gates' schedule permits).

QUOTE: "If IBM chooses to move away from the established standard, two standards may emerge - one that is truly compatible with the industry standard and one that goes down IBM's proprietary path" - Rod Canion, Compaq President/CEO.

386 NEWS: Digital Research is expected to announce a version of concurrent DOS compatible with 80386-based computers. DOS VXM applications can run concurrently in virtual 8086 mode and use the 4 Gbyte address space.

QUOTE.TWO: "The Ventura drawing was not fixed!" - J. Hoisington, NTPCUG Pres.

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BOOK REVIEW

The IBM XT Clone Buyer's Guide
(Version 2.0)
Written by Edwin Rutsch. Modular Information Systems, 431 Ashbury St., San Francisco, Ca. 94117 (ISBN 0-939325-12-8),1986. 126pp. $9.95

Reviewed by Andrew Chalk, Ph.D.

In 1986, the price of IBM PC "clones" fell roughly in half. The cost of a functioning machine went from about $1,000 in January to $500 by December. The average person could obtain a genuine working computer for the same price as a VCR, stereo, or other household appliance. At the same time, the huge family of software for the IBM PC saw a large decrease in prices, that enabled the new user to obtain full-function word-processing, spreadsheet and database programs for less than $100 each. By any measure, 1986 was a great time to be a computer consumer.

That was also the year that I went shopping for a clone, and although the exercise is only slightly less treacherous than walking through Piranha-infested waters in sneakers, Five months later I can report that there are good clones out there; that it is not true that clones do not run "half the software"; and I will happily choose another clone as my next machine. You really can get twice the machine for your money. However, you can also make costly mistakes, and it is worth the effort to find out accurate information about different machines, vendors, and prices in advance. In this respect, Edwin Rutsch has performed a valuable service to the microcomputer consumer with this short, clear, and generally carefully-researched book on the clone market.

This book is for two types of person. First, its principal audience, the potential XT clone buyer who has used a computer before but is starting "from scratch" insofar as getting into the details of how a computer is put together. Second, the hacker who decides to build his own machine (in which case the last chapter is the one of interest). For either type of person, this book represents good value, and I recommend it. This book is not about AT clones, but much of the information in it is as useful to the AT clone purchaser as it is to the intended audience.

The book begins with a short history of the microcomputer from the Apple II up to the IBM AT. This account contains just enough detail to give the reader a sense of context as to where the XT clone fits into the computer scene. It is also a useful prelude to the next chapter in which Rutsch makes a persuasive case for the clone as the machine of choice. He shows that although clones represent good value-for-money (as most people know), in addition they are not vulnerable to the drawbacks with earlier machines whereby rapid obsolescence dramatically reduced the usability of the machine due to vendor bankruptcy or absence of new software and hardware (most CP/M machines such as the Osborne, Kaypro etc. fall into this category). With a clone, you tie yourself into the IBM/Microsoft standard, and you and five million other users can rest assured that the software and hardware will continue to be available for the five years or so that you can reasonably envisage owning your machine.

The same argument is valid for compatibles (higher-priced machines such as Compaq, AT&T, Tandy, Leading Edge etc.) and one might consider them instead. Rutsch helps the reader see the full picture with compatibles through a detailed account of several of the leading models. For example, he points out that Tandy's price is not as low as it seems, because standard (IBM type) hardware components will not work or fit in many instances. Tandy charges a lot more for the Tandy version of the same thing than the independent retailers who sell clone parts. Likewise with AT&T. Leading Edge has a poor reputation for after-sale support. And is involved in lawsuits with Mitsubishi over the discontinued Model M, and "Consumer Reports" over Leading Edge's violation of that magazine's policy of not permitting vendors to use its reviews in their advertisements.

The purchaser of this book is probably already prepared to give clones a serious look, so much of the foregoing will just reinforce their confidence in the decision to buy a clone. The ►

next question is what is important about the components of a clone? The book goes through each major component of the machine in turn, starting appropriately with the BIOS. Here, although he states the importance of the BIOS for compatibility, Rutsch does not give the names of any specific brands, such as Phoenix, that have proven reputations. With other components, such as floppy disk drives, he is more informative. The section on video adapters and monitors explains each type but suggests a little too strongly that the business user requires a monochrome adaptor for acceptable text resolution. It seems to me that many business users want to be able to do color graphics and the (diminishing) extra cost of an EGA provides this functionality. More could have been said in the book about monitors. Given Rusch's willingness to talk about specific brands in other sections of the book, he could have given the names of specific monitor manufacturers since every buyer will want one and the differences in price and quality in this area are substantial. There is no mention of variable scan-rate monitors such as the NEC Multisync. This reflects the biggest problem with a book of this kind -- currency.

The currency problem looms again in the section on disk drives. There is no discussion of RLL encoding, SCSI, and other recent data coding and interface technologies. Furthermore, the trend towards 3.5 inch drives was not apparent at the time the book was written. Nonetheless, the hard disk drive section does a good job of making the case for buying a hard drive at the time of purchase of the clone and includes a brief mention of hard disk cards.

The final section of the book shows you how to assemble your own clone. This information is also valuable to people who plan to buy rather than build because it clarifies how the various parts fit together. If the technically competent reader wanted to build an XT clone, these instructions would suffice. However, the big problem building a clone is that components frequently do not work. The beginner without test equipment and/or knowhow may find the process unpleasant.

To the clone buyer, I would say the following. There are some things that a book intended for national distribution cannot tell you, and you should not rely solely on this, or any other book. Rusch's book is doubtless virtually the only thing of its kind because of the difficulty keeping such a publication current. Although it carries a 1986 copyright, much of the material is already dated. In particular, the prices of AT clones has made them more attractive than XT clones to many people.

Having purchased a clone, I have come to the following view of the world. If you purchase from IBM or Compaq, the chances are that if you have any trouble with the machine, these vendors will eventually "see you right". However, this typically entails downtime while the machine is repaired. That, to me, is the most costly thing about a component failure. It is a positive advantage of the clone that many local clone dealers offer a "swap out" policy. I.e., if a component fails within the warranty period, just pull it out and bring it back for a new one. In the event that you cannot isolate or remove the faulty component, just take the whole machine back for an "on the spot" replacement. These kinds of dealers do exist. They are usually small operations run by knowledgeable people. Forget the major computer chain stores, where the sale staff's total product knowledge can usually be written on one pixel of a high resolution screen.

With respect to specific components. Boards frequently do not carry a brand and quality cannot be accurately gauged from inspection. In this situation, look for a long warranty. Accept a minimum of one year (more is better). The component that gives more trouble than perhaps any other is the hard-disk drive. I recommend that this be the one thing where you do not buy anything but a major brand. No warranty covers your data! If you expect long and heavy use of the machine, then CORE offers a three year warranty and performance statistics that define the standard. Otherwise, Seagate and Rodime drives offer good value for money. According to one trade magazine this January (Micro Market World), Seagate has a return rate roughly half that of the industry average. ►

User groups are a tremendous resource for advice about machines and dealers. If you find someone with a clone that they are happy with, chances are that is worth trying with your software.

Overall, buying a clone can have its pitfalls, but careful planning can help you avoid them. The reward can be a system for half the cost of the IBM equivalent. Put differently, you can have twice the system that you could have bought from IBM. Edwin Rutsch has put together a book to help us avoid those pitfalls and it should be part of the clone buyer's arsenal. I hope that he revises it frequently (at least twice a year), so as to keep it current. Since AT (and shortly 386) clones are becoming more popular, it would also be advantageous to include them in the guide in future editions.

Andrew

Lotus 1-2-3

by John Keohane

How is Lotus like Kleenex? Answer, Lotus is a brand-name that also has general applicability. As a brand-name, Lotus 1-2-3 is a product of Lotus Development Corporation, and is the dominant spreadsheet product for personal computers.

Basically a spreadsheet has three elements. These are labels, numbers and formulas. I recently used Lotus to calculate the current value of a real estate loan, for which my client held a note, payable, with the remaining balance payable in full on April 1, 1988.

I used labels, such as "date", "payment amt.", "principal", "interest" and "end. bal." I put those along the tops of five columns. Since Lotus allows up to 256 columns, I had plenty of columns to use. I also put labels down the speadsheet, from 12/1/84 through 4/1/88, which gave me 41 rows for numbers. Added to a top row for "date" etc. labels, and a second row left blank, I had used 43 rows, of the 8192 rows allowed on a Lotus spreadsheet.

I put in numbers on the spreadsheet, but not very many. I put in the ending balance on 12/1/84. I put in the amounts paid each month. Many of the monthly payments were the same amount. To get those on the spreadsheet, I only needed to enter that amount once, then hit the / (slash) key and get into the worksheet copy function, paint what I wanted to copy using the arrow pointer keys, and simply copy one entered cell into a whole row of cells for amounts paid in subsequent months.

Now I had all monthly payments, and the first ending balance.I also had labels. Now I used the third function of spreadsheets, to fill in most of my cells. That is, I used formulas. The interest on the note was a straight 10% per annum, payable monthly, however my Lotus spreadsheet would have dealt with 10.1 or 9.9% just as well. In my case, each month's interest would be the previous month's ending balance times .10 (for the 10% interest) divided by 12 (since this was only 1/12 of a year). My first month's ending balance was in cell H4. So on line (or "row") 5, in cell G5 (since G was my interest column) I type +H4*.10/12 -- this was my formula, starting with a "+" sign to indicate it was a formula, and ending in the "2" from the 12. "H4" was a relative cell, one up, and one to the right of where I wrote my formula.

That was an important part of my spreadsheet planning, for I successfully wrote in that interest formula only once. I was then able to copy it down column G, with Lotus automatically adjusting for the fact that cell G6 should refer to H5, G7 to H6, etc., so that I always calculated interest due based on the ending balance from the previous month. I had two more formulas to write, and to copy down the spreadsheet. One was principal paid. This was amount paid, minus interest (note, if monthly payment was too low, principal paid could be negative, though this did not happen in this case.) My principal paid column was column F, so in F5 I wrote +E5-G5 -- only six characters for that formula. Ending balance was easy: +H4-F5

I copied all three formulas down the appropriate columns, and Lotus showed me the number results of calculations in each of the interest, principal, and ending balance cells.

In Lotus it's easy to play "what if?". What if the beginning balance was different? What if there were different monthly payments? What if the interest rate were different?

John

Special Interest Program Reports

General Special Interest Group (SIG) News

Since a SIG is a very loose association of people with a common interest, it's existence depends on there being enough participants to make the SIG worthwhile, and on a leader who is able and willing to devote enough time to keep the SIG vital.

SIGs come and go, reflecting changes in interests -- as well as changes in software and hardware.

As of March, there will be no more Assembler or DataFlex SIG's. Assembler is discontinued primarily because of the lack of a leader. DataFlex is discontinued because of a lack of attendance. Basic Applications may be descontinued after March for one or both reasons.

However, there is interest in the creation of two new SIG's -- DBASE and Desktop Publishing. If you are interested. let us know in March, and one or both may appear on the schedule in April.

A reminder that any SIG news items for this newletter must be received by noon of the 14th of the month -- regardless of the date of the next meeting.

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ASTROMETRY SIG

We had a nice attendance in the February meeting and I was reminded that some folks might be interested in the Astrometry SIG, IF you thought you knew what it is...well, basically if you have an interest in Astronomy and obviously you are interested in PC's to be associated with the clubs, then give us a try. Astrometry is the branch of Astronomy specializing in calculations of astronomy events. We DO NOT get very technical or deep into the mathematics or programming but simply try to make better use of our PC's in conjuction (pun intended) with astronomy.

George Norwood will conduct the program for March. George will give us a review of the basic trigonometry functions (SIN/COS/TAN) and how they are used in calculating elliptical orbits. George will then apply this to determining the Earth's orbit around our Sun. Arlin B. Collins, StarText 124994, 351-5137 (h)

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BEGINNERS SIG

The February meeting was the second one for this SIG, and it was well attended. March will be the 3nd of the three sessions in the series. It will cover a number of the DOS commands that are important for beginners, application software, programming languages, and recommendations of other SIGs that members might wish to attend.

The initial notes for the SIG will be ready. They will be sold for the cost of their reproduction -- probably about 50-cents.

The Disk-of-the-Month packet for Beginners IS available, containing six disks that include a spreadsheet, database, communications package, games, a tutor on the PC and DOS, and an editor. Phil Chamberlain 243-5034

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DOS SIG

No! No! No! The DOS SIG is not the source of the "terrible tock joke!" The DOS SIG is coled by Jim Hoisington, NTPCUG president, and Reagan Andrews, NTPCUG president-elect. "Tock" is owned by Dr. Neil Bennett and occurred much later in the day. If you were spared the pain of this experience, ask Neil...

Exploration of MS/PC-DOS as a generic operating system is the target of the DOS SIG. Meetings are split between tutorial presentations (usually quite short) terminated by animated, open-ended discussions of common problems encountered by novice and expert users alike in using DOS.

February's SIG meeting was devoted to discussions of directory and subdirectory limitations, and to performance limitations caused by file fragmentation. Future SIG meetings will continue exploration of ►

Special Interest Program Reports

floppy and hard disk operations under various versions of MS/PC-DOS. Reagan

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LOTUS SIG

The topic for the February meeting was "Basic Keyboard Macros". The presentation was informative and as usual many participants had very useful and informative tips on both macros and other topics.

The subject for the March meeting will be a continuation of the macro discussion, particularly the interactive macro capabilities of 1-2-3 and Symphony. Come to the March meeting and learn to create your own macros, looping macros, and branching macros. Hope to see you there. Peyton Weaver 214-462-0552 h, Mark Bruner

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TURBO PASCAL SIG

In February, there was a discussion of many of Borland's old, new, and still unannounced products, and their impact on Turbo Pascal. There was also a discussion of local bulletin boards, with suggestions as to which ones this SIG would find most helpful for the exchange of information.

Warren Ferguson conducted the first of three meetings on Turbo routines for evaluating a mathematical expression. Please bring a disk if you want a copy of routines presented. Warren Ferguson 692-2506 (w)

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Editor's Notes

If you were not at the February meeting you missed a good program. The subject was Desktop Publishers. Of course, a lot of people could care less about what it takes to publish an in-house document or newsletter. Then there are those, like myself, who spend much of our time making the published word more readable. We are the ones who will go to great lengths to simplify and improve newsletter composition and production to get things done easier and quicker. That's why I enjoyed the program so much. Either the Aldus Pagemaker or the Xerox Ventura Publisher should be a welcome addition for any newsletter publisher.

I won the door prize at the February meeting! I'm happy to win anything, but this prize is especially welcome since it's a copy of Ventura Publisher. It should make the newsletter better, and easier to prepare. We'll see in the months ahead.

One of the new members remarked to me how nice the people in our booth were when he asked for some information about our club. So nice, in fact, that that was a major factor in his decision to join. Connie, you and your crew are to be congratulated on doing such a fine job. Keep up the good work!

Some of our members did not get the February newsletter. That was our first mailing using bulk mail. If the Post office has been forwarding your copy in the past because of an address change... no more! You must notify the Membership Director when your address changes in order to receive uninterrupted service. His address is at the bottom of the inside front cover. Do it!

If you live in the more western areas of the Metroplex and know what expansion card or whatever that you need, call Gary at Omni Office Supply. His prices are close to those of Dallas' Soft Warehouse and his service is good. I've recently bought a couple of things from him and have been satisfied. On occasion, he's even been known to deliver a purchase. His number is (817)335-2931.

You still have a chance at that free trip to the FALL COMDEX to be held in Las Vegas. Deadline for receipt of articles to be included in the contest is May 1st. See details on page 19.

John

MEMBERSHIP CARD

This is your membership card in North Texas PC Users Group. You will need it for identification at Disk of the Month sales, group purchases and other activities. This card is valid only for you, the person named on label on reverse side. It is valid through expiration date shown on the label.

When trimmed, the card will fit the holders previously furnished for Infomart cards which are no longer required. Wear your membership card instead. Additional holders will be available at a nominal charge.

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Print Name:_____

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Trim card to wallet size.

Room Assignments

Saturday, 21 March 1987

Check times & room numbers in lobby at INFOMART

Special Presentation

9:00 Auditorium

A representative from the local office of MicroPro International will present the new features in Wordstar 2000 Release 4

9:00 - 9:55	Room
Science/Engineering	_____
DOS	_____
Genealogy (w/Apple)	_____
Graphics	_____
Buyers Guide	_____
Astrometry	_____
Beginners	_____
9:30 - 9:55	
Orientation	_____

MAIN MEETING: 10:00 - 11:00

Greg Lobdell, a Microsoft Product Manager will talk about the direction Microsoft is taking with language products. Upcoming versions of DOS are included.

11:30 - 11:55	Room
Orientation	_____
12:00 - 12:55	
Assembly Language	_____
APL	_____
C Language	_____
Turbo Pascal	_____
12:30 - 1:55	
Invest - N-Squared	_____

1:00 - 1:55	Room
Artificial Intelligence	_____
Business Applications	_____
Communications	_____
Databases	_____
2:00 - 2:55	
Advanced Programmers	_____
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Basic Applications	_____
Lotus	_____
Dataflex	_____

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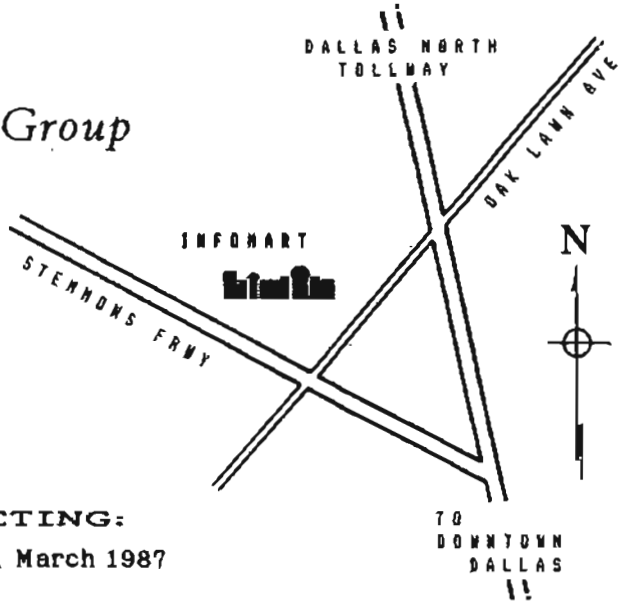

NEXT MEETING:
21 March 1987