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Deadline:

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

Articles:

We would like to get more articles for publication in North Texas PC NEWS; guidelines follow.
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, Startext MC 51563, or disk in ASCII format, unjustified. 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.

Circulation:

North Texas PC NEWS circulation is 1587.
Member distribution is 1231; remaining copies are distributed to PC user groups around the country, and to advertisers, prospective members and others with common interests.

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DEADLINE
Copy deadline for May
NT PC NEWS:
Friday, April 15th.

Meeting Dates:

April Meeting - 3rd Sat. (16th)
May Meeting - 3rd Sat. (21st)
June Meeting - 2nd Sat.
(tentative)

Editor's Notes...

Ventura Publisher Utilities

Found some really neat utilities for use with Ventura Publisher. If you use Ventura Publisher and a Postscript printer - read on... this package has some features you've probably been wishing for. The first thing you'll like is the summary printout of the contents of a style sheet, including the values of all tags. Next, and maybe of even more value is VPCOPY which lets you copy chapter files and all associated text and graphics files from one disk directory to another. References to locations of the files are automatically changed in the chapter file. (I think this one alone is worth the price of admission..!)

There is also a program that lets you print standard ASCII text files to a Postscript printer without manually changing the printer setting to an emulation.

There's more. How about a memory resident program that allows easy entry of special characters and symbols; or a program that deletes a chapter file and all files referenced by it. It has these and others.

Got a copy of this program just before press time and haven't tried all the programs, but those I've tried look good. I'll be bringing you more details about these and several other desktop publishing programs in the near future. The utilities described above are in a package called COREL VENTURA UTILITIES (\$99) by COREL Systems Corporation, 1600 Carling Avenue, Ottawa, Canada K1Z 7M4. For further information call Debbie Boucher at (613) 728-8200. Tell her I sent you!



Table of Contents

| | |
|---|----|
| President's Message | 1 |
| Reagan Andrews, Ph.D. | |
| Bill Gates' Presentation | 2 |
| John Pribyl | |
| PC's With Mainframe Power by '90 Promises Gates 3 | |
| Reagan Andrews, Ph.D. | |
| Introduction to RS-232 — Part 2 | 5 |
| Fred Williams | |
| Software Report - Q&A | 7 |
| Dick Gall | |
| On Complexity - No. 14 in a Series | 8 |
| Jim Hoisington | |
| NTRPUG Disk Library Catalog | 12 |
| Kathryn Crawford | |
| Agenda | 1 |
| Membership Application | 19 |
| Officers | 20 |
| Meetings & Times | 21 |
| Features: | |
| Disk of the Month | 9 |
| SIG Reports | 18 |
| SWAP SHOP | 11 |

April 16

John Ogle & Timothy Carmichael

9:00 AM to 9:45 AM

AUDITORIUM

*** MUSIC QUEST ***

David Rowe will be speaking on MIDI (Musical Instrument Digital Interface). This interface allows PC owners to tap into the world of electronic music.

10:00 AM to 11:00 AM

AUDITORIUM

*** MICRORIM ***

Fred Gray, Senior VP of Product Development for Microrim will present the new RBase V, and new developments in the world of data bases.

Prez Sez...

Bill Gates and Special NTPCUG People Made Wonderful Things Happen - Thanks

Bill Gates' presentation March 8 was a success by any reckoning. INFOMART's Atrium was filled by a capacity audience of 1000 held rapt by Microsoft's co-founder, CEO and Chairman's views of the future of Personal Computing. Approximately 100 - 150 additional people listened from the balconies.

Everything worked as it was supposed to.

This wasn't accidental. Gates' presentation was the culmination of several months' work on the part of the NTPCUG officers, Board of Directors and a cadre of dedicated volunteers.

Groundwork for this success was initiated last year under then NTPCUG President Jim Hoisington. Carefully nurtured by Charles Kroboth, former Program Chairman, the presentation took final shape under John Ogle, Timothy Carmichael and Tom Fowlston who were responsible for the final arrangements with INFOMART, coordination with Microsoft, securing necessary visual aids, sound system and the thousands of other details attending a presentation of this magnitude.

Although not officially a volunteer for this effort, Staurt Yarus, past NTPCUG President and current President of Computer Council of Dallas (CCD) provided invaluable assistance interfacing with INFOMART personnel to achieve small miracles just before the presentation.

Special volunteers, pressed into service for the event included: Pete Testa, Fred Williams, Jim Rich, Kent Cobb, Charles Robertson and Jane Porter-Kolodner.

NTPCUG's Officers and Board of Directors doubled as crowd control, protocol and other advisors. Thanks are due: John Pribyl, NTPCUG News Editor/Publisher, David McGehee, Secretary, Jim Hoisington, President-Elect, Joe Brophy, Treasurer, Dr. Robert Kolodner, Membership Director, Dr. Sid Nolte, BOD, Phil Chamberlain, BOD, Kathryn Crawford, BOD, Connie Testa, Statistician, and Connie Andrews, Volunteer Coordinator.

Among the names above, John Ogle, Timothy Carmichael and Tom Fowlston, are special - they are the new Program Committee replacing Charles Kroboth who has served in capacity of Program Chairman for several/many years. Tom Fowlston has worked, behind the scenes, with Charles for most of that time in a "silent role," and is owner-manager of A V PRO, INC., an audio-visual consulting business. John Ogle is Regional Marketing Manager for Word Perfect and did the January Word Perfect presentation. Timothy Carmichael is currently a Bio-Medical Engineer with the Veterans Administration Medical Center (VAMC) at Dallas.

Kent Cobb is another "new" NTPCUG name. Kent is the author of GASP!, a DOS shell reviewed here last year, and is the new Advanced Programmers SIG Leader, replacing Dr. Neil Bennett who defected to Microsoft.

I stood up and made an 180-second introduction. These people made it - and everything else - possible.

Reagan Andrews

Bill Gates Presentation INFOMART, March 8, 1988

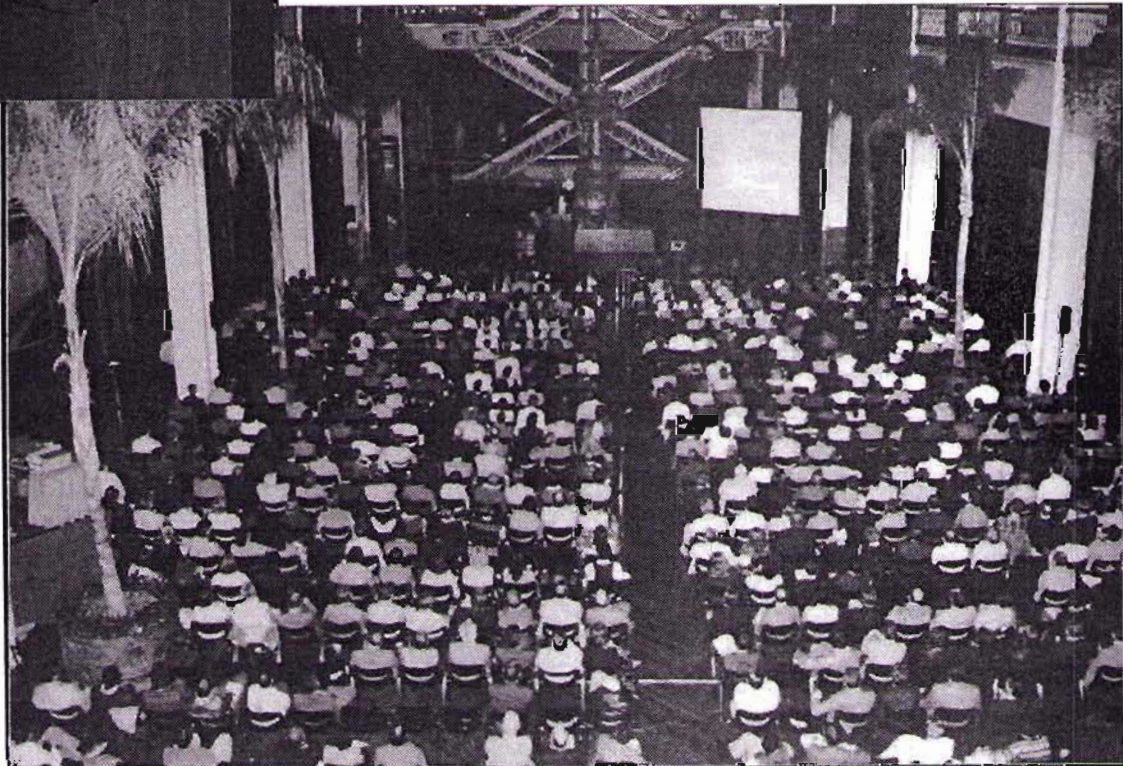
Reagan Andrews, President of NT PC Users Group, and Mike Wetnig, VP, Corporate Systems and Services, Infomart, bending Bill Gates' ear at the dinner preceding Bill's presentation.



Bill Gates, Chairman and Chief Executive Officer, Microsoft Corporation.



Part of the 1000+ crowd that attended Bill Gates presentation at the Atrium at INFOMART March 8th. The presentation was well received in spite of a small problem with the lights



Photos by John Prybyl

PC's With Mainframe Power By '90 Promises Gates

1000+ Fill INFOMART'S Atrium For NTPCUG's Sixth Anniversary

By Reagan Andrews

Predicting mainframe power for PC's in the 1990's, Microsoft's Bill Gates kept a capacity 1000+ audience spellbound at the North Texas PC Users Group's Sixth Anniversary on Tuesday, March 8, 1988.

Co-founder and CEO of Microsoft, Gates unveiled the future of Personal Computing as he saw it and held the overflow crowd in rapt silence for almost two hours in INFOMART's Atrium. Spectators lined the Atrium's balconies. An estimated 1100 to 1200 were present for Gates' address to NTPCUG members and invited guests.

Combination of poor weather forecast earlier and possibility "Super Tuesday" would dampen enthusiasm for the event had worried NTPCUG officers earlier. However, everything worked. The weather was clear and the expected audience appeared on schedule.

Gates' intensity during the presentation was surprising. Developing rapport with the Atrium audience rapidly, he moved briskly into a personal excursion revealing his visions of probable PC development. The audience responded with equal concentration and intensity.

The future Gates described revolves around graphical interfaces, multitasking operating systems such as OS/2, Microsoft's joint effort with IBM, and dramatically improved data storage and acquisition. All, he emphasized, made possible by magnitude increases in PC's power since 1981. Combined with this new level of PC power, these will foster rapid access to a variety of data types via E-Mail and other interactive communications media within the home and corporate environments.

A large part of that future, according to Gates, lies in Compact (digital-optical) Discs (CD's) and their ability to simultaneously present both graphical data and audio information to PC users. He used new, Hypertext-based retrieval techniques as an example of how such data handling capabilities could be exploited. PC users will see – and use – data differently and much more efficiently than is possible now.

Gates foresees finally realizing earlier predictions of "A PC on every desk and in every home," as a result of these hardware driven developments.

OS/2 – Operating System For The Future

Citing OS/2 as "The Operating System for the next eight years," Gates illustrated its benefits for PC users by describing the "failure" of "integrated" software such as Framework(tm), Jazz(tm) and Symphony(tm) to provide the vehicles needed by "depth" PC users. Instead of a single package trying to be all things to all people, a more efficient approach was to provide a common user interface through the operating system, he affirmed.

OS/2 will provide significant gateways to get at the power of the new generation CPU chips by "unlocking" their massive memory-addressing capabilities and providing true multitasking at a sophisticated level. He further illustrated his point later in the evening by demonstrating Microsoft's new Excel spreadsheet and transferring stock-quotation data (dummy) from a second program running simultaneously. ➤

What You See Makes All The Difference

Citing the development of high-resolution displays and graphical interfaces as critical factors, Gates told of the demand for big-screen, high-resolution displays within Microsoft's internal user community – and how these machines were driving user practice.

Originally driven by CAD/CAM and desktop publishing demands for increased resolution and screen size, current advanced graphics adapters and displays pave the way for graphical interfaces such as OS/2.

"IBM's original CGA (Color Graphics Adapter) wasn't really useful." EGA was almost a starting point for real graphical capabilities for PC's, he reported, "But the PS/2 VGA's advanced, 640 X 480 display has the resolution necessary for true WYSIWYG applications on the PC."

Gates also waxed enthusiastic over the large-screen, 19" displays with even higher, 1000+ line resolution. "Their price in the \$2000 range restricts them now." But, he added, "Their prices will drop as volume and development advance." Already, these are the most sought-after items in Microsoft offices and are changing the way the internal E-Mail system is used.

According to Gates, this demonstrated OS/2's ability to run multiple applications software at the same time, and to communicate data directly and rapidly between programs.

The graphical interface Gates favors is incorporated in planned versions of OS/2, and was shown so subtly during his Excel demonstration that many in the audience may have missed its importance. It came in the form of a WYSIWYG (What You See Is What You Get) view of the "printed" spreadsheet report. Gates reported this was "added" as a personal tool by one of Excel's programmers who became tired of running back and forth to his printer to see the results.

Microsoft is releasing this "tool" in a somewhat more sophisticated form for use with WORD files and shown at COMDEX under the name "Pageview."

Consistent user interface may be OS/2's most important feature at the "personal" PC level. A uniform graphical interface will give users consistent, and simple, command structures to control their programs. Fear of the learning curve may dissipate and training time (and costs) be greatly reduced by this feature of OS/2.

OS/2's graphical interface is the same as that found in Windows 2.0 and Windows/386 running under MS/PC-DOS. Users accustomed to these environments should find use of OS/2 easy. It looked that way during the demonstration.

OS/2 Not Possible Without Historical Development

Early PC's were quite primitive by today's standards and lacked the power to run such sophisticated systems, Gates reminded the gathering. He proceeded to describe the early history of the PC and Microsoft's role in PC developments, beginning at the original MITS "Altair" microcomputer and Microsoft's "4K" Basic interpreter.

Gates recounted that Microsoft's first 13 customers, including MITS, ImSai, SouthWest Technical, NorthStar and others, soon went out of business. Microsoft's Basic anchored the young company's future with introduction of the Tandy TRS-80, Commodore and Apple II versions before IBM developed the original PC. Gates also confirmed to the audience that his company receives a royalty from the sale of almost every PC made with the exception of the Apple Macintosh.

Gates reported Microsoft became "very interested" in the development of the Macintosh with even more personnel working on software for the machine than Apple had working on the design of the machine it-

self. This was a repetition, Gates reminded, of Microsoft's work on the original IBM PC operating system - PC-DOS - and the interpreted Basic contained in the PC's system ROMS.

Based on Xerox's PARC research development, Apple's new Macintosh was pivotal because of its graphical interface and user friendliness in spite of being hobbled by its original 128K RAM on introduction. 8088-powered PC's running 0.20 million instructions per second (MIPS) couldn't match the MAC's graphics power.

But, fast 80286 PC/AT machines released in 1985 ran at between 0.7 and 1.0 MIPS and could provide real graphics power, Gates emphasized.

8088's in MS/PC-DOS computers served to provide a uniform platform for users and software developers, however. According to Gates, there are over 10 million PC's in the world now that allow their users to walk into a store and buy software packages that will run on their computers. In the mainframe-minicomputer world before the PC, he added, there were no large software developers producing applications packages at a cost most users could easily afford.

Gates projected that the "standard" PC will be an 80286 machine through 1988, and 80386 PC's will be the "standard" for 1989-90. "New" 80386 PC's running 5.0 MIPS surpass the MAC in both graphics and computing power and are the immediate future of PC's when equipped with VGA graphics capabilities.

"The next wave - the power PC's of the early 1990's - will be 80486-based computers capable of 10 MIPS," and, Microsoft's co-founder added, "Microsoft is working with Intel on design of the new chip." After the 486, Gates felt that multi-processor PC's would compose the "power" PC's of the late 1990's, and make major encroachments on territory now occupied by minicomputers.

He projected an uncertain future for minicomputers and mainframes as a result of the increasing computing power in the PC world. The minicomputer will probably die as a major factor and be displaced by powerful PC's working in local area network (LAN) environments.

In a humorous aside, Gates did mention that the relatively small number of large multi-processor mainframes and supercomputers in the world "Really don't present the market penetration opportunities Microsoft usually likes to see before entering seriously."

Reagan

■

Introduction To RS-232 -- Part 2

by Fred Williams

Second in the series on RS-232 repeated from June, 1986, issue of the "North Texas PC News" where the author explains and diagrams more common "non-standard" RS-232 pin-outs and plug designs. Major PC products are covered along with more common modems.

Most Common Standards for RS-232 Cables

In this, the second part, I will define the most common "standard" cable design for RS-232-C. I will also cover the various RS-232-C cable specifications as used on the IBM PC products and clones. In the first part of this series we defined the various RS-232-C signals and their functions. In this segment we will learn how to physically connect the DTE and DCE devices together. And as I said in the first article, the third and final installment in this series will cover "Null" modems and connection of some of the more common serial printers and plotters.

First we will cover the most common standard RS-232-C cable design. Notice I said most common standard. This is because to some extent the standard cable design is the result of who you ask. You will better see what I mean when we cover each of the IBM-PC product's RS-232-C serial interface connectors. In my experience, this first design is the one I have most often seen when connecting two asynchronous serial devices. Please refer to Figure 1 for both the pin assignments ("pin-out") and a picture of the connector.

| DTE 25-pin D-shell Connector | DCE 25-pin D-shell Connector |
|------------------------------------|------------------------------------|
| 1 — Protective Ground — 1 | 1 — Protective Ground — 1 |
| 2 — Transmit Data — 2 | 2 — Transmit Data — 2 |
| 3 — Receive Data — 3 | 3 — Receive Data — 3 |
| 4 — Request To Send — 4 | 4 — Request To Send — 4 |
| 5 — Clear To Send — 5 | 5 — Clear To Send — 5 |
| 6 — Data Set Ready — 6 | 6 — Data Set Ready — 6 |
| 7 — Signal Ground — 7 | 7 — Signal Ground — 7 |
| 8 — Carrier Detect — 8 | 8 — Carrier Detect — 8 |
| 20 — Data Term. Ready — 20 | 20 — Data Term. Ready — 20 |
| 22 — Ring Indicate — 22 | 22 — Ring Indicate — 22 |

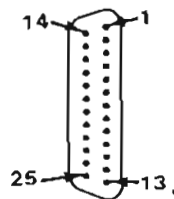


Figure 1. Common Standard RS-232-C & IBM PC PC/XT

The next cable is the PC and PC/XT cable. This is probably the most common IBM personal computer and also, believe it or not, conforms to the accepted RS-232-C cable design standard. So, the PC and PC/XT cable specifications are the same as the stand-

ard RS-232-C cable. Figure 1 may also be used for reference when designing a cable for the PC and PC/XT products.

The easiest way to connect a PC or PC/XT to a modem is to use a full twenty-five conductor cable and therefore connect all twenty-five pins at their corresponding twenty-five pins at the other end. Well, if you have priced twenty-five conductor cable you will understand why that is a bit of unnecessary overkill. So now that you have gone to all the trouble to learn all of those RS-232-C signals I presented in the first article, I'm going to ruin your day. You really can get by with a two conductor cable when you are hooking up to a Hayes or clone modem.

The only pins which require connection when connecting a Hayes modem or clone to a PC is pin 2, transmit data and pin 3, receive data. Although this is true, I do recommend that you make a few more connections to ensure ultimate performance. In Figure 1 above, I have shown the minimum recommended connections.

The next cable we will cover is for the PC/jr. The PC/jr was the first of the IBM-PC series which varied from the common standard cable. Too bad that was one of its lesser sins. The PC/jr also used the Berg-type connector in place of the more widely accepted 25-pin "D" shell connector. As I mentioned during the PC PC/XT cable discussion most of the RS-232-C signals are not really required for most serial peripheral connections. The PC/jr's RS-232-C connector reflects this in that only the most common signals are present at the PC/jr's 16-pin Berg connector. Please refer to Figure 2 for both the cable pinout and connector pin configuration.

| PC/jr Berg Connector | Modem 25-pin D-shell Connector |
|----------------------------|--------------------------------------|
| A1 — N/C | |
| A2 — Data Term. Ready — 20 | |
| A3 — Request To Send — 4 | |
| A4 — Transmit Data — 2 | |
| A5 — Carrier Detect — 8 | |
| A6 — Data Set Ready — 6 | |
| A7 — Clear To Send — 5 | |
| A8 — Receive Data — 3 | |
| B1 — Shield Ground — 1 | |
| B2 — Signal Ground — 7 | |
| B3 — B8 N/C | |

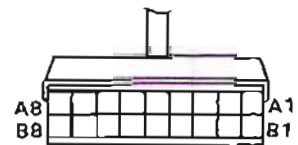


Figure 2. IBM PC/jr RS-232-C

The final cable we will cover is the cable required by the PC/AT. Once again the number of RS-232-C signals brought to the connector are only the most commonly used. The physical connector required for a PC/AT is a "D" shell connector, but it has been reduced in size to only a 9-pin. Please refer to Figure 3 for cable pinout and connector pin configuration.

| PC/AT 9-pin D-shell Connector | Modem 25-pin D-shell Connector |
|--|---|
| 1 — Carrier Detect | — 8 |
| 2 — Receive Data | — 3 |
| 3 — Transmit Data | — 2 |
| 4 — Data Term. Ready | — 20 |
| 5 — Signal Ground | — 7 |
| 6 — Data Set Ready | — 6 |
| 7 — Request To Send | — 4 |
| 8 — Clear To Send | — 5 |
| 9 — Ring Indicator | — 22 |

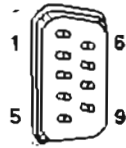


Figure 3. IBM PC/AT RS-232-C

So there you have it, the RS-232-C cable connections required for each member of IBM PC product line. These cables will connect the related PC type to the most common Personal Computer modems on the market. You might note one member missing from the IBM product line, the new IBM PC lap-top. I have not had time to learn much about the newest IBM PC, as it was only announced a week or so before I started this article. The pre-release informa-

tion I received indicates that it will have an optional internal asynchronous modem for those who need to communicate. As the lap-top is intended to be a highly portable unit, I think it would be a little unhandy to use it with a bulky external modem anyway.

Now that you know all about RS-232-C cables and how to build one, I will mention that there are any number of people in the business of selling RS-232-C cables, both standard and custom. You can save some money building your own, and even if you don't, it's always nice to know how that magic piece of wire you just paid a seemingly high price for really works.

Well, that's it for this segment. The next and last article will cover "Null" modems, XON/XOFF protocol, and some of the more common printer and plotter cable requirements.

Fred

□

Chris Bohn furnished the following article which should be of interest to all our members.

NACD COOLS HOT PC SALES

The National Association of Computer Dealers wants to stop the flow of stolen personal computers. Working with major vendors, insurance companies, and the police, NACD is putting together a central list of serial numbers of all stolen computers. This list can be checked by any company or person buying a computer.

Stored on NACD's mainframe, the serial numbers can be accessed through a toll-free number anywhere in the U.S. by computer for NACD members, and by voice for the public. The hotline will begin operating early this year, after all existing data is entered. Public access to the system will be through (800) 346-NACD.

NACD feels the only way to curb the market for stolen computers is to have every used computer sale, whether it is through a computer dealer or the local classified, checked out before money changes hands. For more details, contact NACD, 14925-A Memorial Drive, Houston, TX 77079.

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Software Report

by Dick Gall

Q&A-The Intelligent Database/word Processor Program

Smoothly blend enhanced database capabilities beyond PFS:File and PFS:Report with an award-winning word processor and add a powerful natural language interface. The result is Symantec Corporation's nearly magical genie called simply Q&A. It is designed to help you quickly and easily organize, store, recall, and print information in the most relevant of traditional forms. It also harnesses AI technology to make good on computing's long-standing promise to make you the master over information.

You give commands to the INTELLIGENT ASSISTANT in plain English terms and phrases. I imported the check register account report from Finance Manager II to generate my own Q&A database, and then asked the assistant:

"LIST ALL CHECKS WRITTEN IN FEBRUARY FOR OVER \$50."

For confirmation, it responded with:

```
"Shall I do the following?
Create a report showing
the DATE and
the DESCRIPTION and
the AMOUNT
from the forms on which
the DATE is >= 1 Feb 1988 and <= 29 Feb 1988
and
the AMOUNT is > $50.00."
```

With the task confirmed, Q&A dutifully produced the appropriate list of checks. In addition to generating reports for informal data analysis, it can create, change, and delete database information. Symantec calls this "What is?" analysis. The above task was expanded on the next run, for example, to include the number of checks, total value of all checks, and the average value.

The Intelligent Assistant comes with a built-in vocabulary of over 450 words. You can also teach the assistant new vocabulary to make the computer work the way you do.

Setting up a database is easy using Q&A FILE, which provides fast, flexible indexing, lookup tables, macros, and programmable forms. Q&A REPORT retrieves, sorts, formats, and prints database information in columns. This can include calculated columns, headers/footers, wide reports, and derived columns.

PC Magazine designated Q&A an editor's choice among "low-end" database programs in its January 27, 1987 comparison of "Top Drawer Databases". Included in the bargain, however, is the Q&A WRITE word processor program that earned a brand-new Editor's Choice in the February 29, 1988 PC issue, one of only five selected from a field of 55.

As the PC review says, Q&A Write contains virtually everything business WP packages ought to be able to handle - yet new users can become productive in an hour, wizards in a day.

WRITE's WYSIWIG writing field concentrates on the final document while the bottom four screen lines provide information for easy access to the many features. Line drawing, microjustification, column math and multi-column printing are supported. 1-2-3 graphs and spreadsheets can be printed directly in documents. Other features include full mail merge, print envelope format, spell checking, and full macro capability to reduce recurring tasks to a snap.

File, Report, Write, and the Intelligent Assistant are all integrated through the main screen and common access to databases and documents. You customize Q&A to be ready to meet your exact needs quickly with the defaults of the Utilities section, which also provides powerful and flexible database import and export capabilities.

The genie of Q&A also resides in the word processor. It's embedded in the Write program that knows, for example, that many fingers have been trained to respond most automatically with WordStar command sequences. And there's something eminently reasonable about using multiple hits of the HOME and END keys to reach farther and farther toward the extremes of your budding masterpiece.

Q&A Version 2.0 requires 512K of memory, two floppy disk drives or a hard disk, DOS 2.0 and above. It is compatible with all major local area networks that support PC-DOS 3.1 and above. The list price is \$349, discount houses generally carry it for under \$200.

Version 3.0 was announced on March 3. It offers over 100 new features, which include:

- Pop-up menus and customized main menu
- 30 percent faster operation
- Multi-user LAN support
- True record locking and 6-level password protection
- Multiple file lookup and reports
- Expanded Memory System support
- Simplified mail merge (2 keystrokes)
- Pre-designed mailing label layouts
- Font and laser printer support
- Enhanced spell checker and graph printing
- Strikeout and soft hyphenation
- Import/export of 12 word processor document types

A new Network Pack is available for multi-user networks. It allows an additional three users to concurrently run a single copy of Q&A, and allows Q&A to operate from diskless workstations. ➤

Symantec is nearly unique in providing a 30-day money back guarantee with Q&A. They can offer this with a high degree of confidence because the included on-line tutorial program should be able to make an accomplished user out of any PC user who seriously attempts it.

For further information, see the PC Magazine reviews mentioned above, or contact Symantec Corporation at 10201 Torre Avenue, Cupertino, CA 95014, telephone 408-253-9600. This review was written with Q&A Write.

Dick

ON COMPLEXITY

Number 14 in a Series

by Jim Hoisington

A lot of people are confused about the difference between Expanded and Extended memory. I'll try to explain the difference and give some advice on which you need.

Extended memory can only exist on machines with the 80286 80386 processors. The original IBM PC will never have Extended memory because the 8088 processor can't use it.

Extended memory is just more memory above the 1 megabyte limit. Since the 80286 can address up to 16 megabytes of memory in protected mode (the 80386 can address even more), programs which run in protected mode will want to use some of that space.

Until recently, most software ran the 80286 & 80386 processors in "real" mode. However, OS/2 runs in protected mode. The prophets are predicting that OS/2 users will need between 4 and 8 megabytes of memory for their software by the end of 1989. And that additional memory will be Extended memory.

Expanded memory was originally invented to help the 8088 based PC's use more memory than they were capable of addressing. This same system also works on the 80286 and 80386 processors when they are running in "real" mode.

Expanded memory creates one or more windows below the 640k limit on the PC. The software can then put some data into a window and tell the Expanded memory board to store it in a "page". When it wants the data back, it tells the Expanded memory board to fetch the page and put it back into the window where the 8088 processor can use it. The num-

ber of pages is determined by the amount of memory on the Expanded memory board.

By shuffling data in and out of these windows, the program can keep more information in the computer than will fit into 640k. It is clumsy but the alternative is to keep the information in a disk(ette) file. The memory to memory transfers between the windows and the pages are much faster than the same transfers to and from the fastest disk drives.

A problem with Expanded memory is that not everybody agreed on the size and the number of the windows. The original design was a joint effort by Lotus, Intel and Microsoft corporations. In computerese, this became the LIM specification by using the first letter of each designers corporate name. The expanded memory part got abbreviated to EMS which stands for Expanded Memory System.

AST Corporation which was not a part of the original design, improved upon it and came out with its own standard called EEMS - Enhanced Expanded Memory System.

Last year all the major memory board makers got together and improved the design one last time. This final specification is usually designated LIM 4.0. Boards made to this standard are just coming on the market. However, I am not aware of any software that makes use of it's enhancements.

Over the next three years we will probably see software that takes advantage of both Expanded and Extended memory. After all, there are all those PC's out there with 8088 processors that have no other way to get access to more memory. However, as OS/2 and other "protected" mode operating systems come into common use on the 80286 & 80386 machines, I have to believe that software developers will abandon the page swapping mode of Expanded memory for the "just more memory" mode of Extended memory.

Do you need Expanded memory? Only if you are going to be running a product like Lotus 1-2-3 which can make use of it. Do you need Extended Memory? If you have a PC or PC Clone, certainly not. If you have a computer with an 80286 or 80386 processor, you will eventually need more memory than 1 megabytes. Some of us will need it sooner than others.

I am writing this column on my AT Clone. It has 1 megabyte of memory on the mother board. I have added an AST RAMPAGE card with 2 megabytes. I have divided the memory on the card so that I have 512k of Extended memory and 1.5 megabytes of Expanded memory. Are you thoroughly confused? I know I am!

Jim



DISK-OF-THE-MONTH

by Kathryn A. Crawford

Featured Disk-of-the-Month for April 1988:

Disk 254. DISK COMMANDO – Disk & File Utilities, Shareware by Sandi and Shane Stump.

When John McGinty donated a copy of this shareware package to the DOM, my first reaction was "Oh no, not more hard disk utilities!" Well no, not just a disk full of more hard disk utilities; this is a shareware implementation of the Advanced Norton and Mace Utilities. DISK COMMANDO is an integrated package of utilities that can be run from a menu or executed independently. The commands include:

- Directory Editor: edit any directory entry's information, including file name, size, date, time, starting cluster number, and file attributes.
- Disk Map: show the amount of disk space used relative to bad sectors and unused space. Also shows relevant disk technical information.
- Disk Optimizer: rearrange file data clusters to be contiguous.
- Directory Sort: sort by file name, extension, size, date, time, attribute, in ascending or descending order.
- Disk Test: examine all or portions of the disk for bad sectors and marks those found. If one is found within a file chain, the

file can be rebuilt excluding the bad sector.

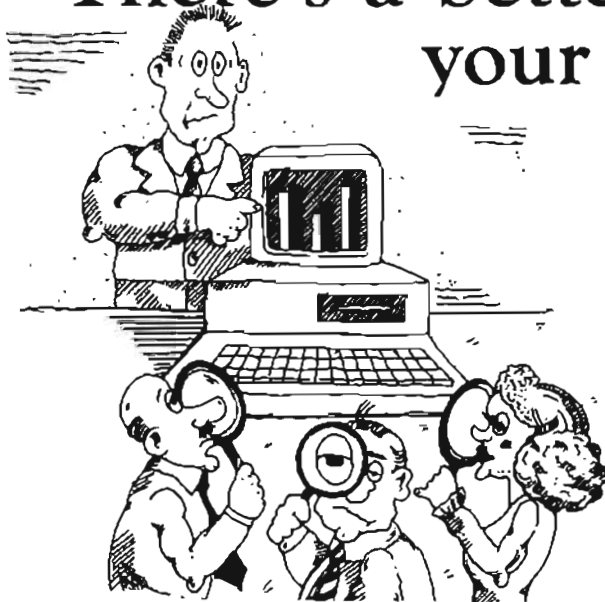
- File Locator: search the disk for a file or files that match the given wildcard pattern.
- Format Recovery: recover information from a recently formatted disk.
- Hex Edit: edit a file or sectors of the disk.
- Tree Directory: display the directory tree for use with the make, remove and change directory commands; or search the disk for the first occurrence of the directory name and logs you there.
- Time Tamer: a stopwatch to determine relative speeds of processes.
- UnDelete File: recover file information and rebuild a recently deleted file and/or subdirectory.
- View File: display a file and move (Up, Down, Left, Right) in a file.
- Volume Label: modify, add, or remove the current volume label.
- Zap Disk: overwrite the disk or unused space on the disk so that it cannot be UnDeleted or unformatted.
- Zap File: overwrite a file to obscure its contents.

FIRE SALE

The FIRE SALE is back! Superseded versions of Shareware and other rare gems are yours for A DOLLAR A DISK. These disks are available at the meeting only (that means no mail orders). At the April meeting we will be offering:

- Disk 8611 PC-Type
- Disk 0097 PC-Calc ver. 3.0
- Disk 0063 PC-File III ver. 4.0
- Disk 0168 PC-File+ ver. 1 – Program Disk
- Disk 0226 PC-File+ ver. 1.26 Computer club edition – arced manual

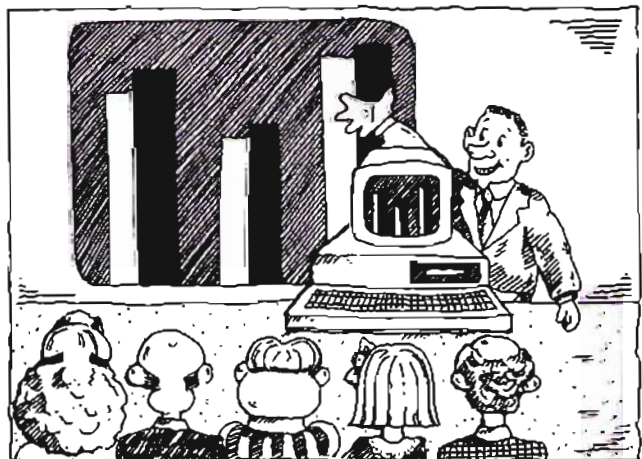
There's a better way to magnify your computer screen.



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Disk 0090 PD Prolog ver. 1.7 – public domain version of ADA PROLOG
 Disk 0160 Tax Planner ver. 1.87
 Disk 0228 1987 Federal Tax Template – Lotus 123 ver. 2.x Worksheet
 Disk 0197 Directory Scanner ver. 3.00 – DOS shell and disk manager
 Disk 0180 ZAPCIS ver. 4.01/ MsgVu ver. 1.21 – CompuServe aids
 Disk 0170 IBM Announcement (2 disk set) – PS/2 introduction

PC-WRITE USER MANUALS

PC-Write User Manuals are still available at the DOM desk.
 PC-Write User Manual = \$25.00
 PC-Write User Manual with
 PC-Write ver. 2.7/3 disks = \$29.00

MARCH RELEASES

In addition to FingerPaint (see March newsletter for description), the following disks were released in March:

Disk 246. ArcMaster ver. 2.1 – Archive File Manager

Arcmaster supports PKARC/PKXARC and ARCA/ARC-E, the two major file compression/extraction systems, as well as the file list program LIST. Arcmaster is designed to make the use of these systems fast and painless. It is fully menu driven, employs pull down menus and pop up windows, and requires a minimal amount of installation effort.

--From the review prepared by Harold Horton.

Disk 247. Directory Scanner(tm) 3.10 – DOS Operating Environment

DS is an environment for hard disk users. It is simple enough to completely replace DOS for the novice, but has ample power for an expert user. It presents a picture of your hard disk tree structure down to file name level. DS has convenient help screens to ease learning its functions.

At start-up, DS scans your directory files and displays a screen with three windows: (1) the directory tree, (2) files in a selected (sub)directory, and (3) detailed disk and file status information, a command sub-window, etc. The left third of the screen displays your directory tree structure in a compact form. By pressing <ENTER> the files in the highlighted (sub)directory are listed in three columns in the right window.

DS has a number of SINGLE keystroke commands that perform most of the normal DOS functions, and many extras, with "selected" files as objects. The normal DOS functions supported are (alphabetically) attribute, backup, copy, drive change, delete, list (type), mkdir and rmdir, print, rename, sort, and two types of execute (normal, and with I/O redirection). Files affected by these commands can be the single file "selected" using the arrow keys (or mouse), or multiple files "selected" by the tag command. DS also has unique commands. You can tag or untag files with one keystroke as objects of other commands. Edit

starts your editor and opens the "selected" file. List calls your favorite list utility. DS can move tagged files, that is, the combination of copy followed by delete. Find-file searches the entire drive for a lost file (* and ? accepted). If there is some function not supported by DS you can drop to the DOS prompt and execute it. DS has "directory links" (change to 18 predefined directories with one key-stroke), macros (execute 27 predefined DOS commands with parameter substitution), and mouse support.

--From the review prepared by Jim Green

Disk 248. TheDraw ver. 2.21 – ANSI screen drawing program

TheDraw is designed to create, store, and retrieve screens of ASCII text, ANSI compatible color images, ANSI compatible ANIMATION sequences, BINARY files, and Basic BSAVE files. In addition, it can produce source code compatible files for ASSEMBLER, PASCAL, and now C languages. This program is used by many BBS systems for fancy color menus and screens. The ANSI and ASCII images can be used in batch files or with the RBBS Bulletin Board System. If one screen of text is insufficient (the program can only handle a single screen image) then multiple screens can be linked together with the DOS copy append function. TheDraw provides 28 command functions.

--From the review prepared by Harold Horton.

Disk 249. InstaCalc 2.0 – RAM-Resident spreadsheet

This program was recently awarded an Editor's Choice award by PC Magazine. InstaCalc is a RAM-Resident spreadsheet program that contains 256 rows and 256 columns. It can be "popped up" in the middle of another application program, do your work, save it, exit, and then bring the new spreadsheet into your application.

InstaCalc uses an overlay structure, which means that some parts of the program are in other files. InstaCalc provides many standard functions and includes some basic macro capabilities. String arithmetic is also supported. InstaCalc ver. 2 can directly import 1-2-3 files and import/export to DIF files, dBase II, and dBase III. Linking multiple spreadsheets is also supported.

--From the review prepared by Richard Dunn and Mark Gruner.

Disk 250 (3 disk set) PC-CALC+ ver. 1.0 – Spreadsheet from ButtonWare

PC-CALC+ ver. 1.0 is the most recent version of the popular spreadsheet program from ButtonWare. PC-CALC+ includes macro capabilities (including a learn mode to record macro keystrokes) and a Convert program that can convert a PC-CALC+ file to and

from Lotus 1-2-3 1A/2.0, PC-FILE, or DIF format. Over 200 pages of documentation is also included.

PC-CALC+ comes with many built-in functions including time/date functions, trigonometric functions, financial functions, statistical functions, logical functions, lookup functions. Graphs are also supported and the graphs can be printed from within the PC-CALC program.

An important feature is the ability to customize the number of columns in a spreadsheet. Limiting the number of columns to the number required, saves RAM and allows for more rows in the spreadsheet. Performance of the spreadsheet is also enhanced with the smaller number of columns.

--From the review prepared by Mark Gruver.

Disk 251 (3 disk set) PC-File+ ver. 2.0 -- Database from ButtonWare

PC-FILE+ has been completely re-written and compiled in C. This latest version of PC-File+ has been greatly enhanced over all previous versions. Users familiar with version 1.0 of the Plus series, will notice a few changes in the menu screens. One of the most significant improvements in version 2 is increased speed in all menu items such as Find, Sort, etc.

Version 2 adds the following capabilities: graphing (bar, bar, line, scatter, pie, averages, least squares regression analysis), window fields, field sizes are increased from 65 to 200, maximum record size increased from 1665 to 3000, smart keys increased from 12 to 22, a calculator "hot key" to calculate at

any time, date arithmetic, random number arithmetic; math co-processor support.

The following capabilities have been enhanced: duplicate record finder can now display the records side by side and allow deletion of either, the SEARCH command is remembered while browsing and positioning in the database, deleted records now sort to the end of the database instead of the front, fast initialize after first one, two new Report Options - "Pause after each page" and "Start printing at page number", and many more including network support.

PC-FILE+ is distributed as a three disk set and includes over 300 pages of documentation. PC-FILE+ will run all IBM personal computers including PS/2 and most IBM compatible computers.

--From the review prepared by Roy Bales.

Disk 252. 1987 Federal Tax Template 2.22 -- Lotus 123 worksheet This is a Lotus 123 worksheet to calculate and print 1987 Federal tax forms 1040, 2119, 2441, 3903, 4562, 8598, 8606 and 8615, and Schedules A, B, C, D, E and F. Some of these forms have been added since the last version (Disk 228), and the author claims to have fixed all known bugs in prior versions. Documentation is minimal, consisting primarily of a 4k file named READ_ME.TXT. Menus take you to the selected form. The template assumes you know how to move around Lotus spreadsheets and make text and numerical entries. It is also assumed that you know enough about the federal tax laws to select the proper forms and put the correct amounts on the right lines. Some forms which you
continued on page 17 ►

SWAP SHOP

Four lines free each month to members; 5th through 10th lines at 30 cents per word. Larger ads at commercial space rates. Send check to the Editor for words exceeding the four-line limit. Free ads are on a space-available basis. Mail ads to the Editor.

FOR SALE - Original Equipment... IBM PC XT with two 360K floppy dr., one 20M HD, AST 6-Pack Plus, with or without EGA card, EGA monitor and printer. Good software titles available. Steve Lanier 596-4413. Negotiable.

WHY NOT RELAX THIS TAX SEASON? Have your business or personal tax return prepared by a CPA with over 10 years exper. BRUCE C. SCHUBERT at 348-5700.

Have you got a spare Serial card? We need one for the Multitech ACER 1100 we use in preparation of the newsletter. Call John Pribyl (817)275-4109.

North Texas PC Users Group and CCD Apparently Unique Among Users Groups

Microsoft co-founder and CEO Bill Gates was invited to join NTPCUG officers, members of the Board of Directors and volunteers assisting in the event in dinner before his Atrium talk.

Throughout the meal, Gates gave the impression of being somewhat amazed at the concept of a major PC user group with 1300 members able to hold all its main activities on the same day in just one facility. (The North Texas PC Users Group is one of the 10 largest in the US, probably ranking about #5.)

Gates was enthusiastic about the INFOMART facilities and concept, and was even more surprised when informed that the NTPCUG met along with a number of other users groups under the umbrella of the Computer Council of Dallas (CCD) in INFOMART simultaneously.

North Texas PC Users Group Disk Library

Use order blank at end of catalog. If order blank has been used, list disk numbers and description on plain paper and mail with check or money order to:

NTPCUG, DOM Mail Order
P.O. Box 780066
Dallas, Texas 75378-0066

Each 5 1/4 disk \$2.00 to members, \$3.00 to non members. Add \$1.00 per each five disks for postage. See order blank at end of catalog for 3.5 disk prices.

NOTE: All programs that have a common number are on the same 5 1/4 disk.

SUBJECT INDEX

FEBRUARY 1988 K.A. Crawford, Indexer

A

| | |
|--|------|
| Accounting (See: Financial applications—Accounting) | |
| Assembly language (See: Programming—Assembly language) | |
| Artificial Intelligence & Expert Systems | |
| Disk No. | |
| ESIE ver. 2.0 | 0085 |
| ELZA, canned shrink, short version | 8307 |
| EXPERT SYSTEM TOOLKIT (demo) | 0189 |
| PD Prolog ver. 1.85D | 0244 |
| XLISP ver. 1.6 | 0089 |
| Astrology | |
| Disk Number | |
| ASTROL6 | 0088 |
| Astronomy | |
| (See: Science & Technology—Astronomy) | |

B

| | |
|--|--------------|
| BASIC | |
| (See: Programming—BASIC) | |
| Batch files | |
| (See: Utilities—DOS Utilities) | |
| Bible | |
| Disk Number | |
| GodSpeed | 0234 |
| Bulletin Boards: programs, utilities, etc. | |
| (See: Communications—Bulletin Boards) | |
| Business applications | |
| (See also Financial applications) | |
| Disk Number | |
| Advanced Pro-Path 6 DEMO | 0194 |
| Business letters (100) | 0107 |
| CPM (Critical Path Method) | 0042 |
| DDCAL ver. 1.00 | 0233 |
| EZ-FORMS Revision A | 0045 |
| GANIT | 0087 |
| Harvard Total Project Manager II v.2.0 | 0235 2 disks |
| LetterWriter ver. 3.0 | 0151 |
| MAIL, mailing list utility | 0008 |
| MakeMyDayI ver. 2.0 | 0200 |
| ManageX I ver. 3.3 | 0220 |
| ManageX III ver. 2.5 | 0199 2 disks |
| MARKS PRESENTATION (DEMO) | 0168 |
| PC-DESKTEAM ver. 1.04 | 0201 |
| PC-TICKLE ver. 1.0 | 8609 |
| PC-WINDOW (similar to SideKick) | 0027 |
| PC Yearbook ver. 2.00 | 0237 |
| SmartForecasts II Trainer/Demo | 0188 |
| SWIFT-LOG, demo ver. | 0034 |
| Totalex ver. 3.3 | 0240 |
| TIMELOG, log time and use of PC | 0030 |
| TIMESAVER | 0108 |

C

| | |
|-------------------------------|--|
| C language | |
| (See: Programming—C language) | |
| CAD/CAM | |
| (See: Graphics) | |
| Calendars, Printed | |
| (See: Graphics) | |
| Calendars, Ram resident | |
| (See: Business applications) | |

| | |
|---|--------------|
| Communications: Programs, utilities, etc. | |
| Disk Number | |
| AUTOSIG ver. 6.13 | 0160 |
| BOYAN Communications Software, v.D2 | 0206 |
| EMAIL (for CompuServe) | 0048 |
| Generic Terminal | 0125 2 disks |
| GT Power ver. 13.00 | 0230 2 disks |
| HOST-III | 0048 |
| HOSTCALL | 0048 |
| MsgVu ver. 1.21 | 0180 |
| PC-DIAL ver. 2.0 | 8810 |
| PC-TALK III ver. 6.00 | 0021 |
| PC-VT ver. 7.8 | 0031 |
| PROCOMM ver. 2.4 | 0076 |
| Q-MODEM SST ver. 3.1 | 0211 |
| S/370 VM operat. console simulation | 0007 |
| SIMTERM, terminal simulator HP/UNIX | 0035 |
| TALKSORT, PC-TALK, III dir sort | 0004 |
| TAPCS ver. 6.1b | 0239 |
| Telex ver. 2.12 | 0185 |

| | |
|---|--------------|
| Communications—Bulletin Boards: Programs, utilities, etc. | |
| Disk Number | |
| Fido | 0131 2 disks |
| Fido News | 0129 |
| Fido utilities | 0130 |
| Phoenix ver. 1.00 | 0227 2 disks |
| RBBS-PC CPC15.1B | 0198 4 disks |

D

| | |
|--|--------------|
| Data Base (For dBase II/III/III+ templates see: dBase) | |
| Disk Number | |
| 3BY5 ver. 1.0 | 0050 |
| CHURCH MEMBERSHIP | 0122 |
| CONCENTRIC INFORMATION PROCESSOR | 0024 2 disks |
| EDIT-DTA ver. 1.3+ (PC-FILE II) | 0160 |
| File Express | 0124 2 disks |
| FORMGEN ver. 1.2 | 0163 |
| Instant Recall ver. 1.64F | 0163 |
| PC-FILE III ver. 4.0 | 0063 |
| PC-FILE+ | 0168 2 disks |
| PC-FILE+ (with Documentation) | 0226 1 disk |
| PC-Graph ver. 1.0 | 0147 |
| PLABEL | 0153 |
| Sidelfe ver. 2.23 | 0209 |
| WAMPUM ver. 3.1B | 0217 |
| WAMPUM Tutorial | 0142 |

| | |
|--|------|
| dBase II, dBase III, dBase III+: Templates, tips, etc. | |
| Disk Number | |
| Accounts Receivable System 1.1a | 0142 |
| Client Lawyer dBase III Program | 0141 |
| dBASE II programs | 0017 |
| dBase programs Disk #1 | 0141 |
| dBase programs Disk #2 | 0142 |
| Desktop Utility for dBase III | 0141 |
| dGENERATE ver. 1.0 | 0143 |
| Electrono Checkbook (dBase III) | 0141 |
| Genealogy Program (dBase III) | 0142 |
| INVENTORY (dBase III) | 0142 |
| MAILMEN PROGRAMS (dBase III) | 0141 |
| MAILMEN, dBASE II mailing list | 0008 |
| MENUMAS, dBase II menu program | 0001 |

| | |
|--|------|
| Demos | |
| (Demos are classed under subject: Spreadsheet, Database, Wordprocessing, etc.) | |
| Desktop management | |
| (See: Business applications) | |
| Desktop publishing | |
| Disk Number | |
| CityDesk ver. 3.0 | 0232 |
| Disks, Organizing collections of | |
| (See: Utilities—Disk Management) | |
| DOS Shells/Menus | |
| (See: Utilities—DOS Shells/Menus) | |
| DOS Utilities | |
| (See: Utilities—DOS Utilities) | |

E

| | |
|---|------|
| Editors | |
| Disk Number | |
| FULL SCREEN EDITOR | 0038 |
| STOP GAP EDITOR | 8308 |
| Education Applications | |
| (Tutorials for software are classed with the software.) | |
| Disk Number | |
| GRADE GUIDE ver. 1.2 | 0164 |
| LADYBUG | 0003 |
| Nutrient | 0145 |
| TEACHKID (alphabet tutor) | 8411 |

| | |
|---|------|
| TELLTIME | 8411 |
| TUTOR ver. 4.2..... | 0079 |
| Word Processing for Kids ver. 2.1 | 0183 |

Educational Applications—Games

| | |
|-------------------------------------|-------------|
| | Disk Number |
| BLACKBOX (logic game)..... | 8411 |
| FUNNELS (educational game)..... | 0144 |
| KOBUILD (educational game)..... | 0007 |
| MAP (educational game)..... | 8311 |
| MATH (educational game)..... | 0007 |
| MATH (educational game)..... | 0144 |
| ORIGAMI | 0080 |
| READING (educational game)..... | 0007 |
| TEACHTOT | 0144 |
| TOT BUCKETS (educational game)..... | 0144 |
| Tot buckets and math school | 0144 |
| WORDSARCH..... | 0243 |

Encryption

| | |
|-----------------------------------|-------------|
| | Disk Number |
| CRYPT, an ASCII file encoder..... | 8307 |
| SCRAMBLE | 0038 |

Engineering

(See: Science & Engineering)

F

File Management

(See: Utilities—File Management)

Financial applications, general

(For Business finance see: Business applications)

| | |
|--|-------------|
| | Disk Number |
| FINANCE MANAGER II ver. 1.1 | 0208 |
| FINANCE, financial formulas (20) | 0008 |
| MORTGAGE PLUS ver.2.0 | 0151 |

Financial applications—Accounting

| | |
|--|-------------|
| | Disk Number |
| CASHFLOW LEDGER ver. 1.0 | 0058 |
| MCBS General Ledger DEMO ver. 4.1..... | 0238 |
| MICRO ACCOUNTING ver. 1.0 | 0008 |
| PC-DEAL ver. 2.0+ | 0223 |
| PC-General Ledger | 0177 |

Financial applications—Investment

| | |
|---------------------------------------|-------------|
| | Disk Number |
| Stock Tracking System (in BASIC)..... | 0019 |
| Translok 0178 | |

Financial applications—Personal finance

| | |
|---|-------------|
| | Disk Number |
| CHECKBOOK (balance checkbook)..... | 8307 |
| CheckMate | 0128 |
| FINANCE1, Home finance programs (5) | 0008 |
| Master Checkbook (DEMO ver.) | 0184 |
| PERSFIN (check/expense accounting)..... | 8308 |
| TIME AND MONEY | 0033 |

Financial applications—Taxes

| | |
|---|-------------|
| | Disk Number |
| 1988 Est. Federal Tax (Texas ver.)..... | 0107 |
| 1988 Estimated Federal Tax | 0114 |
| Acctax, 1985 Income Tax | 8802 |
| AM TAX 1987 | 0223 |
| Federal Tax Template, 1987 | 0228 |
| PC-TAX | 0001 |
| PC-TAX84 | 8503 |
| Share-TAX/1040 87.1 | 0241 |
| Tax-Planner ver. 1.87 | 0150 |

G

Games

(See also Educational Applications—Games)

| | |
|-------------------------------------|-------------|
| | Disk Number |
| GA 21 (game)..... | 0106 |
| GA 747, flight simulator..... | 8311 |
| GA ADVEN (game)..... | 8403 |
| GA ADVEN2 (game)..... | 8403 |
| GA AIRTRAX (game)..... | 0043 |
| GA ALIEN (text adventure game)..... | 0028 |
| GA ARCHIEII (game)..... | 8411 |
| GA ARTILLERY (game)..... | 8301 |
| GA BACKGAMN (game)..... | 8403 |
| GA BARIK (game)..... | 8411 |
| GA BASEBALL (game)..... | 8305 |
| GA BBOX (game)..... | 8307 |
| GA BLACKJCK (game)..... | 8305 |
| GA BOHMER (game)..... | 8301 |
| GA BOUNCE (game)..... | 8305 |
| GA BUGFEAST (game)..... | 0108 |
| GA CANNON (game)..... | 8200 |
| GA CASTAWAYS (game)..... | 0091 |
| GA CASTLE (game)..... | 0043 |
| GA CATCH88 (game)..... | 8305 |
| GA Cavequest (Game)..... | 0174 |
| GA CHESS (game)..... | 8301 |

| | |
|--|------|
| GA CHESS (game), compiled..... | 8307 |
| GA CIA (text adventure game)..... | 0028 |
| GA CIRCLES (game)..... | 8305 |
| GA CIVILWAR (game)..... | 8305 |
| GA CORE WAR (game)..... | 8409 |
| GA CRAPS (game)..... | 0106 |
| GA DATNOIDS (game)..... | 0108 |
| GA DEMON (game)..... | 8305 |
| GA DIGGER (game)..... | 0028 |
| GA DNO (Text adventure game)..... | 0181 |
| GA DOMINOES (game)..... | 0106 |
| GA DOMINOES (game)..... | 8411 |
| GA DOTS (game)..... | 8305 |
| GA DRAFTSMAN | 0054 |
| GA DRAW (game)..... | 8301 |
| GA DRAW POKER ver. 1.0 & BASIC games | 8702 |
| GA DRIVER (game)..... | 8411 |
| GA DROIDS (game)..... | 8301 |
| GA FALKEN (war game simulation)..... | 8411 |
| GA FENCE (game)..... | 8200 |
| GA FIREFIRE (game)..... | 8411 |
| GA FLY (game)..... | 8411 |
| GA FOOTBALL (game)..... | 0108 |
| GA FOOTBALL (game)..... | 8411 |
| GA FOUR (game)..... | 8305 |
| GA FRANK (game)..... | 0007 |
| GA GALAXY TREK ver. 2.1 (game)..... | 8400 |
| GA GOBBLE (game)..... | 0007 |
| GA GOLF (game)..... | 0108 |
| GA GOLF (game)..... | 8411 |
| GA GOMOKU (game)..... | 8304 |
| GA GOMOKU (game), compiled version..... | 8304 |
| GA HACKER GAMES | 0108 |
| GA HANGMAN (game)..... | 0108 |
| GA HOBBIT (text adventure game)..... | 8402 |
| GA HOPPER (game)..... | 8403 |
| GA HUNT THE WUMPUS (game)..... | 0007 |
| GA HUSTLE (game)..... | 8411 |
| GA INTGAME (game)..... | 8307 |
| GA JAMMMER (game)..... | 0007 |
| GA JUMPJOE2 (game)..... | 0012 |
| GA KALEID (game)..... | 8305 |
| GA KANGAROO (game)..... | 8411 |
| GA KILLER-P (game)..... | 8403 |
| GA LANDER (game)..... | 8301 |
| GA LANDERCL (game)..... | 8305 |
| GA LANDERMN (game)..... | 8305 |
| GA LEM2 (game)..... | 8403 |
| GA LOGO (game)..... | 0108 |
| GA LUNAR LANDER (game)..... | 8200 |
| GA MAGCSQ (game)..... | 8307 |
| GA MANOR (text adventure game)..... | 0028 |
| GA MASTER (game)..... | 0007 |
| GA MASTERMD (game)..... | 8305 |
| GA MASTERMIND (game)..... | 0007 |
| GA MATCH (game)..... | 0108 |
| GA MAXIT (game)..... | 8305 |
| GA MAZE (game)..... | 0108 |
| GA MAZE (game)..... | 8302 |
| GA MAZE (game)..... | 8305 |
| GA METEOR (game)..... | 8301 |
| GA MISSLE (game)..... | 8301 |
| GA MONOPOLY (game)..... | 8403 |
| GA MOON (game)..... | 0007 |
| GA MOUNTAIN (game)..... | 0007 |
| GA NEWTREK (game)..... | 0007 |
| GA NIM (game)..... | 8200 |
| GA NIM (game)..... | 0007 |
| GA OPERATOR (game)..... | 0007 |
| GA OTHELLO (game)..... | 0108 |
| GA OTHELLO (game)..... | 8305 |
| GA PAC-GAL (game)..... | 8302 |
| GA PACGIRLA (game)..... | 0007 |
| GA PACKMAN (game)..... | 0007 |
| GA PACMAN (game)..... | 8304 |
| GA PACMAN2 (game)..... | 8305 |
| GA PANGO (game)..... | 0128 |
| GA PATTERNS (game)..... | 8305 |
| GA PEASHOOT (game)..... | 8305 |
| GA PEGLEAP (game)..... | 0108 |
| GA Phrase Craze ver. 1.0 | 0214 |
| GA PONG (game)..... | 8301 |
| GA PONGPONG (game)..... | 8305 |
| GA PYRAMID (game)..... | 0108 |
| GA DBERT (game)..... | 0028 |
| GA Quantoids of Nebulus IV | 0188 |
| GA RACECAR (game)..... | 8411 |
| GA ROULETTE (game)..... | 0043 |
| GA RUBIK'S CUBE SIMULATION (game)..... | 0007 |
| GA SEAWOLF (game)..... | 8411 |
| GA SLOTMACH (game)..... | 8305 |
| GA SMASHOUT (game)..... | 8411 |
| GA SNAKE (game)..... | 0108 |
| GA Solitaire ver. 1.10 | 0205 |
| GA SOUTH AMERICAN TREK (game)..... | 0091 |
| GA SPACE PROTECTOR (game)..... | 8403 |
| GA STAR TREK (game)..... | 8200 |
| GA STAR TREK, new version (GAME)..... | 0007 |
| GA Star Wars S-Wing Fighter (game)..... | 8411 |

| | |
|-----------------------------------|------|
| GA STARGATE (game) | 0043 |
| GA STARLANE (game) | 8403 |
| GA STARTREK | 8308 |
| GA STARTREK (game) | 8308 |
| GA STARTREK (game), fixed version | 8311 |
| GA STARWARS (game) | 0007 |
| GA STRINGS (game) | 8305 |
| GA SUB (game) | 0108 |
| GA SUBMARIN (game) | 8403 |
| GA SURVIVAL (game) | 8411 |
| GA SURVIVAL ON THE MOON (game) | 0007 |
| GA SWARMS (game) | 8305 |
| GA TICTAC (game) | 0108 |
| GA TICTACTO (game) | 8301 |
| GA TOWERS (game) | 0108 |
| GA TOWERS (game) | 0007 |
| GA TRADER (text adventure game) | 0028 |
| GA TRON (game) | 8403 |
| GA WILDCAT (game) | 0108 |
| GA WOMBATS (game) | 8305 |
| GA WORD-PZL (game) | 8305 |
| GA WORDWARS (game) | 0012 |
| GA WORDDUEL (game) | 8403 |
| GA WUMPIUS (game) | 0007 |
| GA XWING (game) | 8411 |
| GA YAHTZEE (game) | 8305 |
| GA ZAPEM (game) | 8301 |
| GA ZYLGIS (game) | 8403 |

Genealogy

| | |
|-------------------------------------|-------------|
| | Disk Number |
| FAMILY HISTORY | 0072 |
| Family History update ver. | 0126 |
| FAMILY TREE, ETC. ver. 1.25 | 0073 |
| Genealogy on Display ver. 4 | 0127 |
| Notes and Sources ON DISPLAY v. 1.1 | 0158 |

Graphics

| | |
|-------------------------------------|--------------|
| | Disk Number |
| DANCAO 3D ver. 1.30 | 0192 2 disks |
| DIGIDRAW | 8501 |
| EQA graphics for Turbo Pascal/MSC+ | 0176 2 disks |
| GRAF2 | 8308 |
| HGC [Hercules Graphics Card prog.] | 0012 |
| Iconmaker | 0176 |
| Nostradamus software DEMO | 0225 |
| PC Demonstration System | 0224 |
| PC-KEY DRAW, with library (2 disks) | 0082 2 disks |
| PC PERSONAL GRAPHICS | 8408 |
| PROGENITOR ver. 2.50 | 0157 |
| SLIDE ver. 1.0 | 0121 |
| SUPERDRAW ver.2.0 | 0154 |

H

Hardware utilities

(See: Utilities)

I

IBM

| | |
|------------------|--------------|
| | Disk Number |
| IBM Announcement | 0170 2 disks |

Income tax

(See: Financial applications-Taxes)

Indexes to computer magazines

(See: Periodicals on disk)

Investment

(See: Financial applications-Investment)

K

Keyboard utilities, buffers, etc.

(See: Utilities-Keyboard/Screen Utilities)

L

Languages, Programming

(See: Programming)

LISP

(See: Artificial Intelligence)

Lotus 123: Demos, templates, utilities.

(Also disks containing both Lotus 123 and Symphony templates, utilities, etc.)

| | |
|-------------------------------------|-------------|
| | Disk Number |
| 123 Business Tools #1 | 0110 |
| 123 Business Tools #2 | 0111 |
| 123 SCIENCE & ENGINEERING TEMPLATES | 0112 |
| 123 STATISTICS TEMPLATES | 0113 |
| 123 UTILITY MACROS | 0116 |
| 123PREP, ASCII files to Lotus 123 | 0012 |
| COSTTL (Lotus 123 worksheet) | 0001 |
| DEPTMT.WKS (Lotus 123 template) | 0081 |

| | |
|----------------------------------|--------------|
| Desktop (LOTUS 123 template) | 0025 |
| Federal Tax Template, 1987 | 0228 |
| FTT 85 | 0084 2 disks |
| LOTUS 123 Investor Templates | 0133 |
| LOTUS 123 Macros | 0134 |
| LOTUS 123/Symphony tech notes | 0135 |
| LOTUS Add-In Manager ver. 1.1 | 0215 |
| LOTUS Learn ver. 1.0 | 0216 |
| LOTUS Speedup ver. 1.0 | 0216 |
| McGee's Advanced 123 Class Disk | 0060 |
| McGee's Beginning 123 Class Disk | 0117 |
| PAD (Lotus 123 template) | 0001 |
| POWER WORKSHEETS (LOTUS 123) | 0022 |
| PROFORMA (Lotus 123 template) | 0001 |
| RIPAMORT (Lotus 123 template) | 0001 |
| TREND123 (123/SYM template) | 0123 |
| UTILITY 1-2-3 (Lotus 123 macros) | 0020 |
| Whiterock #1 | 0136 |

Lotus-Symphony templates, demos, utilities.

| | |
|-------------------------------------|--------------|
| | Disk Number |
| Residential real estate analysis | 0119 |
| SYMPHONY #1, templates/macros | 0040 |
| Symphony #2, templates/macros | 0041 |
| Symphony Command Language Instruct. | 0138 |
| Symphony Insurance Industry Demos | 0139 |
| Symphony Medical Industry Demos | 0140 |
| Symphony Personal Finance System | 0137 3 disks |

M

Magazines

(See: Periodicals on disk)

Math/Statistics

| | |
|---------------------------|-------------|
| | Disk Number |
| EPISTAT | 0013 |
| FREETK | 0193 |
| SPC PROFESSIONAL ver. 1.1 | 0155 |

Memory resident utilities

(See: Utilities-DOS Utilities)

Monitor utilities

(See: Utilities-Keyboard/Screen Utilities)

Music

| | |
|----------------------|-------------|
| | Disk Number |
| BACHMUSC (music) | 8405 |
| BAGPIPES (music) | 0028 |
| JUKEBOX (music) | 0026 |
| JUNIOR MUSIC MACHINE | 0081 |
| PIANOMAN | 8509 |
| PIANOMAN TUNES | 0049 |
| SIREN (sound effect) | 8200 |
| WILLELL (Music) | 8306 |

P

Pascal/Turbo Pascal

(See: Programming-Pascal/Turbo Pascal)

Periodicals on disk

(Magazines, newsletters, etc. published on disk. Also, indexes to computer magazines.)

| | |
|------------------------------------|-------------|
| | Disk Number |
| PC-NEWS article database (PC-FILE) | 004 |

Personal Finance

(See: Financial applications-Personal Finance)

Presentation software (See: Graphics)

Printer utilities, spoolers, etc.

(See: Utilities-Printer)

Programming

| | |
|----------------------------------|-------------|
| | Disk Number |
| APL*PLUS/PC | 0082 |
| BAT, extended batch language | 0002 |
| BAT201B | 8408 |
| D86 Forth ver. 2.1.0 | 0152 |
| Flowcharter ver. 1.45 | 0185 |
| MONITOR, application development | 0008 |

Programming-Assembly language

| | |
|------------------------------------|-------------|
| | Disk Number |
| A86 3.00 | 0171 |
| ALINT | 0123 |
| ASM tutor | 0123 |
| ASSEMBLER BLUEBOOK | 0105 |
| ASSEMBLER COMMUNICATIONS UTILITIES | 0101 |
| ASSEMBLER DEVICE DRIVERS, GENERAL | 0099 |
| ASSEMBLER DEVICE DRIVERS, PRINTERS | 0102 |
| ASSEMBLER DOS INTERFACE | 0103 |
| Assembly language class examples | 0015 |
| CHASM ver. 4.07S | 0077 |
| D86 2.22 | 0171 |
| MASM 1.25 | 0023 |

Programming-BASIC

| | |
|---------------------------------|-------------|
| | Disk Number |
| B-SIMPLE, BASIC program utility | 0008 |

| | |
|------------------------------------|------|
| BASIC PROF. (tutor for BASIC) | 8501 |
| BASIC prog. from Electronic Design | 8302 |
| BASICAD | 0169 |
| BrentBASIC | 0169 |
| COM2DATA | 8310 |
| CROSSREF | 0008 |
| CROSSREF | 8307 |
| FC ver. 1.3 | 0160 |
| KEYS2, BASIC function key setup | 8308 |
| MENU, sample menu file for BASIC | 0008 |
| QBX ver. 2.06 | 0160 |
| RATBAS (a BASIC preprocessor) | 8304 |
| RB ver. 1.68 | 0180 |
| SQUISH, BASIC programmers utility | 0002 |
| Tiny Basic | 0159 |
| WIZZARD, ASMBASIC, BASPRINT | 8412 |

Programming—C language

| | |
|-------------------------------------|-------------|
| | Disk Number |
| ASSEMBLER SUBROUTINES FOR C | 0095 |
| C - ASM: TUTOR | 0100 |
| C CHECKER (C language) | 0028 |
| C XREF (C language) | 0028 |
| C-WINDOWS | 0093 |
| CROBOTS (C language) | 0104 |
| CWINDOW: COMPLETE WINDOWING PACKAGE | 0098 |
| DESMET C ROUTINES AND FUNCTIONS | 0094 |
| DESMET C VERSION OF SCREEN EDITOR | 0097 |
| ED: E.K. REAMS SCREEN EDITOR | 0097 |
| ISAM (C language) | 0098 |
| LATTICE C | 0093 |
| LATTICE C ROUTINES AND FUNCTIONS | 0096 |
| PATCHES for Turbo C ver. 1.0 | 0181 |
| SCREENCODE | 0070 |
| SMALL C COMPILER | 0092 |
| SMALL-CP | 0036 |
| TCodebug ver. 0.00 | 0212 |
| TINY-C (C language) | 0104 |
| Window Boss | 0168 |

Programming—Pascal/Turbo Pascal

| | |
|-------------------------------------|-------------|
| | Disk Number |
| ASSEMBLER SUBROUTINES FOR PASCAL | 0098 |
| EBMENU (Turbo Pascal) | 0052 |
| INDEX for a book | 0058 |
| PASCAL programs | 8401 |
| PRINTER, Pascal utility | 8401 |
| PTOOL (Turbo Pascal) | 0052 |
| TURBO HELP (Turbo Pascal) | 0052 |
| Turbo Pascal programs | 0047 |
| Turbo Pascal utilities | 0051 |
| TURBO-UT, Pascal utilities | 0058 |
| TURBORUN (Turbo Pascal) | 0052 |
| XREF, cross-ref. generator (Pascal) | 8401 |

PROLOG

(See: Artificial Intelligence)

Project management

(See: Business applications)

R

RAM resident calendars, desktop managers, etc.
(See: Business applications)

S

Science & Engineering

| | |
|-------------------------------------|-------------|
| | Disk Number |
| 123 SCIENCE & ENGINEERING TEMPLATES | 0112 |

Science & Engineering—Astronomy

| | |
|-----------------------------|-------------|
| | Disk Number |
| ASTRONOMY COLLECTION #1 | 0109 |
| MOONBEAM | 0109 |
| OPTICS | 0109 |
| SATELITE, display elevation | 8411 |
| SOLAR | 0109 |
| STARFINDER | 0030 |
| STORM | 0109 |
| SUNSET | 0109 |

Shareware

(Shareware packages are classed under subject;
i.e., Spreadsheet, Data Base, Word Processing.)

Spreadsheet programs

(Templates for Lotus/Symphony, see: Lotus)

| | |
|----------------------------------|-------------|
| | Disk Number |
| FREECALC ver. 1.0 | 0008 |
| PC-CALC ver. 2.0 | 0037 |
| QuoCalc ver. 3.0 | 0231 |
| Spreadsheet Programming Language | 0148 |
| TurboCALC ver. 8.01 | 0149 |

Statistics

(See: Math/Statistics)

Style checkers

(See: Word Processing)

Symphony templates, utilities, etc.
(See: Lotus—Symphony)

T

Taxes

(See: Financial applications—Taxes)

Templates

(See under:
Lotus
Lotus—Symphony
dBase II/III/IV+)

Terminal emulators

(See: Communications)

Terminate and stay resident

(See: Utilities—DOS, Disk, & Drive utilities;
see also the type of application.)

Text editors

(See: Word Processing; also: Editors)

TBR utilities

(See: Utilities—DOS Utilities)

U

Utilities

| | |
|------------------------------------|-------------|
| | Disk Number |
| Archive Programs Disk | 0173 |
| Baker's Dozen | 0218 |
| Burg Utilities | 0180 |
| DISK DRIVE UTILITIES | 0071 |
| Master Key Utilities ver. 1.7C | 0221 |
| Open 256 Files Simultaneously! 2.0 | 0202 |
| PC Magazine's Benchmark Tests | 0213 |
| PC Magazine Utility Disk | 0172 |
| PICnix ver. 1.00 | 0238 |
| ULTRA-UTILITIES ver. 4.00 | 0018 |
| Utilities for Mavericks | 0120 |

Utilities—Disk Management

| | |
|---------------------------------|--------------|
| | Disk Number |
| DISKCAT ver. 4.3f | 0039 |
| WWSIndex ver. 3.22 | 0242 2 disks |
| XDIR33, diskette library system | 0002 |

Utilities—DOS Information

| | |
|-----------------------|-------------|
| | Disk Number |
| DOS TIPS 0084 2 disks | |
| HELP11 ver. 1.13 | 0203 |
| POP-HELP ver. 1.13 | 0203 |

Utilities—DOS Shell/Menu

| | |
|-----------------------------|-------------|
| | Disk Number |
| AutoMenu ver. 3.01 | 8612 |
| Browser | 0120 |
| DIRECTORY SCANNER ver. 3.00 | 0197 |
| DOSamatic ver. 2.0 | 0181 |
| PC-SWEEP ver. 2.10 | 8803 |
| SHORTCUT ver. 1.12 | 8801 |
| STILL RIVER SHELL ver. 2.38 | 0219 |

Utilities—DOS Utilities

| | |
|------------------------------------|-------------|
| | Disk Number |
| AUTODATE ver. 1.0 | 0180 |
| CLOCK, display time on screen | 0030 |
| CLOCK2, a large alarm clock | 8308 |
| DISKMODE | 8308 |
| DOSCALL | 0059 |
| Extended Batch Language ver. 3.06a | 0207 |
| FREECOPY, disk utility | 0023 |
| Kopy ver. 1.1 | 0218 |
| Mark/Release for TSR Control v.2.1 | 0180 |
| MEMDUMP | 8308 |
| RECALL, DOS commands | 0027 |
| Release ver. 2.1 (TSR Control) | 0190 |
| Resident DOS Utilities | 0210 |
| SD (sort and display directory) | 8305 |
| SDIR22 (new LD for PC-DOS 2.0) | 8311 |
| SORTDEMO, compares diff. sorts | 8311 |
| SPEED411, speedup for DOS 2.x | 0004 |
| SPEEDUP | 8200 |
| SYSTAT (Hardware configuration) | 8308 |
| UTIL ver. 1.63 | 8409 |
| VDEL, deletes files | 8308 |
| VDISK180, RAM disk | 0012 |
| VDISK380, RAM disk | 0012 |
| WAIT, DOS time delay | 8308 |
| XD (Extended DOS) | 0179 |

Utilities—File Management

| | |
|------------------------------|-------------|
| | Disk Number |
| ARCA ver. 1.22 (ARC utility) | 0160 |
| ARCE ver. 3.0A (ARC utility) | 0160 |
| ARCV ver. 1.17 (ARC utility) | 0160 |
| CISMSG ver. 2.2 | 0180 |
| CWEEP214 | 0120 |
| DISK Command | 0120 |
| DOS PATCH UTILITY ver. 1.20 | 0053 |
| ORLIST | 0160 |
| FBR ver. 1.64 | 0160 |

| | |
|-------------------------------------|------|
| File Friend | 0182 |
| JETS Little Helper ver. 1.07 | 0160 |
| LBR utilities | 0027 |
| LD (list directory) | 8301 |
| LD (list directory), documentation | 8302 |
| LDH ver. 3.0 | 0160 |
| LIST ver. 8.1a | 0160 |
| LUD ver. 1.06 | 0160 |
| LUE ver. 2.20 | 0160 |
| LUT ver. 1.83 | 0160 |
| LUU ver. 2.13 | 0160 |
| LUX ver. 1.2 | 0160 |
| QDR ver. 2.8 | 0160 |
| SORTF ver. 2.17 | 0160 |
| SQPC ver. 1.31 | 0160 |
| SQUISH ver. 3.3 | 0160 |
| SWAPNAME ver. 1.2 | 0160 |
| TABS ver. 2.1 | 0160 |
| TOUCH, change file time/date stamp | 0059 |
| TRANSFER, display msg for disk swap | 0008 |

Utilities—Keyboard/Screen Utilities :

| | |
|------------------------------------|--------------|
| | Disk Number |
| CAPSLOCK | 8308 |
| CAPSLOCK, turn on | 0012 |
| Clear screen | 8308 |
| Fans/Console 2.00G | 0187 2 disks |
| NEWKEY, a keyboard enhancer | 8405 |
| SIGNAL, "Beep", then press any key | 0000 |
| UPNUM, Caps Lock or Num Lock on | 0004 |

Utilities—Printer Utilities

| | |
|-----------------------|-------------|
| | Disk Number |
| BANNER | 0030 |
| BPRINT | 8308 |
| COVER & TINY | 8803 |
| EPSON, set up printer | 8307 |

| | |
|--------------------------------------|------|
| FPRINT, print spooler | 0059 |
| Label Maker ver. 6.03 | 0132 |
| LP ver. 1.4 (OKI ML92) | 0160 |
| LP ver. 1.8 (HP LaserJet) | 0160 |
| LO ver. 2.11 | 0184 |
| MPM-PRINT (Epson print IBM graphics) | 8601 |
| MX, printer setup program | 8308 |
| OKI ver. 1.1 | 0160 |
| OKI-KEY | 0027 |
| OKI-SET | 0027 |
| OKISET ver. 1.0 | 0160 |
| SPOOLER | 8311 |
| SWPTR, swap defined printer | 0004 |
| STRIP WordStar | 0030 |
| EasyWriter BACKUP | 8302 |
| VisiCalc BACKUP | 8302 |
| WordStar file printing utility | 8303 |

W

Word Processing

| | |
|-----------------------------------|--------------|
| | Disk Number |
| ChiWriter Scholar's Edition | 0198 |
| FASTYPE | 0055 |
| INDEX, for a document | 0059 |
| New York Word ver. 2.2 | 0222 |
| Outline ver. 3.15 | 0187 |
| PC-STYLE | 8608 |
| PC-TOUCH, typing tutor | 8408 |
| PC-Type | 0148 3 disks |
| PC-WRITE ver. 2.7/3 | 0088 2 disks |
| TEXTPROC | 8308 |
| Word Processing for Kids ver. 2.1 | 0183 |
| WordStar customizing | 8302 |
| WORDEDIT, remove control char. | 0059 |

North Texas PC Users Group Disk Order Form

| QUANTITY | DISK NUMBER (and Description) | # OF DISKS IN SET | PRICE EACH | AMOUNT |
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5 1/4 Disks

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| Total number of disks and total amount | | XXXXXXXX | |
| Shipping and Handling — \$2 for each 5 disks | | XXXXXXXX | |
| TOTAL if ordering 5.25 disks = | | | |

3.5 Disks

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|---|----|
| Total number of 5.25 disks chosen | |
| For total number of 3.5 disks in order, divide by 2 = | |
| Times \$3.00 for each 3.5 disk = | \$ |
| Shipping and Handling — \$2.00 for each 5 disks = | \$ |
| TOTAL if ordering 3.5 disks = | \$ |

Send completed order with payment to: NTPCUG DOM Mail Order, P.O. Box 780066, Dallas, TX 75378-0066

may need are not included; for example, most persons filing Schedule C will also need to file Schedule SE. If you have deductible home mortgage interest, you must complete Part I of Form 8598, even though you are not required to file the form, since the template gets figures for Schedule A off of this form. A display window continuously shows taxable income, total tax, payments made, and refund or tax due.

--From the review prepared by Preston Brashear.

Disk 253. PC-TAX87 87.15 This is a compiled Basic program to calculate and print 1987 Federal tax forms 1040, 2106, 2441, 3903, 4562, 6251 and 8615, and Schedules A, B, C, D, E, F and SE. Documentation is fairly extensive, consisting of a 22 page DOC file plus appendix, and files explaining the modifications made in the latest version of the program. Menus take you to the selected form or desired action, but this is not a program that you can run without thoroughly studying the documentation first. Some required actions are not intuitive. It is necessary to "print" all schedules to the screen or printer in a certain sequence in order to process all figures properly through the "transfer file". It is also assumed that you know enough about the federal tax laws to select the proper forms and put the correct amounts on the right lines. Some forms which you may need may not be included. Schedules and forms (except for form 1040) may be directly printed in a form which is acceptable for filing with the IRS, so you won't have to transfer the figures to pre-printed tax forms.

--From the review prepared by Preston Brashear.

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 disk 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 disk of software contributed, you may select any disk 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 orders to: NORTH TEXAS PC USERS GROUP, DOM-Mail Order, P.O. Box 780066, Dallas, TX 75378-0066.

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

CATALOG DISKS: Currently the catalog is on one disk and costs \$2.00. The catalog disk has all of the readme files from each disk in the collection.

MEDIA: DSDD 5 1/4" Formatted as 9 sector data disks. Public domain software only, standard full disclaimers

AVAILABILITY: Disks sold out or not available at the monthly meeting can be obtained through the DOM Mail Order.

DOM VOLUNTEERS: If you would like to work the DOM Counter for an hour during the monthly meeting, contact Dwight Neal (214)985-7929 (home)

□

PROGRAMMER WANTED

Full-Time or Program-at-Home

SOFTDISK, Inc. is looking for very talented programmers for BIG BLUE DISK, our monthly diskmagazine for the IBM-PC, along with our other successful diskmagazines—SOFTDISK for the Apple II and LOADSTAR for the Commodore 64. A thorough knowledge of MS-DOS programming and software, as well as creativity and imagination are required.

We also seek contributing editors for BIG BLUE DISK as well as our other products. Contributing editors program at home and receive payment for programs published on our monthly disks.

This is a good opportunity—please write if you are qualified.



Al Vekovius, President
SOFTDISK, Inc.
P. O. Box 30008
Shreveport, LA 71130-0008



Selected SIG Happenings

News and Meeting Notes on Special Interest Groups

(Material for this column should be sent to Phil Chamberlain, SIG Coordinator before the 15th of the month.)

LOTUS SIG

The subject for the March meeting was a general discussion of the built-in @ functions available in Lotus 1-2-3. In future meetings, we plan to discuss some of the categories of @ functions in more detail. In the March meeting we also discussed some comparisons between Lotus 1-2-3 and Borland's Quattro.

The April meeting will be a presentation by Roberta Robinson of the Dallas office of Lotus Development Corporation. Roberta will be giving a presentation of Symphony Release 2 which is the latest version of the product.

In case Roberta's schedule has to change at the last moment, we will be discussing the logical @ functions of 1-2-3 and Symphony.

At each LOTUS SIG meeting we always take time to answer questions

that users have with Lotus 1-2-3 and/or Symphony. If you have a question concerning either 1-2-3 or Symphony, come by and see us in April.

Peyton Weaver
and Mark Gruner

Graphics/CAD Sig

We are still exploring options for the graphics topics which we want to pursue in depth. So far, our members have expressed interest in discussing CAD software/hardware available for PC's, graphics programming, and general graphics utility software. We passed out some copies of a simple graphics program (written for Turbo C/EGA/ECD) to begin some dialog on programming, and may try to put this on the BBS. For the April meeting I will attempt to get a vendor to give us a demo of some CAD software.

Don Crockett

PERSONAL USERS SIG

April will signal the beginning of the second 16-class schedule for Beginners and Personal Users. Here is the

complete schedule for the next 8 months:

(Decimals in class numbers indicate the revision number)

- | | |
|----------|--|
| Apr, Aug | 1.1 Start Up |
| | 2.1 Diskette Sizes and their Formatting |
| | 3.1 Copying and Backing Up files |
| | 4.1 Hardware |
| May, Sep | 5.0 Fixed Disk Directories, batch files, Paths |
| | 6.0 DOS Menu systems on Fixed Disks |
| | 7.0 Instal. and Setup of LOTUS 1-2-3 |
| | 8.0 Running BASIC Programs |
| Jun, Oct | 9.0 Writing your own BASIC Programs |
| | 10.0 NTPCUG Disk of the Month Library |
| | 11.0 PC Graphics Modes |
| | 12.0 Bulletin Boards and Archive Pgms |
| Jul, Nov | 13.0 Printer Setup |
| | 14.0 Writing LOTUS Macros |
| | 15.0 Major Categories of Software Applications |
| | 16.0 PC's to the end of the Century and Beyond |

Four classes are given at each monthly meeting. Across four months all 16 of the classes are completed, and the cycle starts all over again. Each class is independent of the others, thereby allowing people to begin attending classes anytime their schedules allow. The classes are free and are open to all beginners, novices, new PC owners, soon-to-be PC owners, and personal (vs. professional) users. Come join us as we cover the fundamentals!

Bob Presley
and Richard Terreo



NTPCUG Officers and Board of Directors

Standing, L to R: Sid Nolte (Board Member, "C" SIG Leader), Joe Brophy (Treasurer), Reagan Andrews (President), David McGehee (Secretary), Phil Chamberlain (Board Member, SIG Coordinator), Rob Kolodner (Membership Director), John Pribyl (Newsletter Editor/Publisher). Seated: Kathryn Crawford (Board Member, DOM Chair), Jim Hoisington (President-Elect).

Correction

Prices for PC-MOS/386 were incorrect as stated in the March issue of North Texas PC NEWS. Correct prices are: Single-user — \$195, 5-user — \$595, 25-user — \$995. We regret if this has caused an inconvenience to our readers.



MEMBERSHIP APPLICATION
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
>>>> _____ RENEWAL
>>>> _____ CHANGE OF ADDRESS

NAME: (Last) _____ (First) _____ (MI) _____
OR Company/Organization: _____
ADDRESS: _____ (Suite/Apt) _____
CITY: _____ STATE: _____ ZIP: _____
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 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/Bookeeping
[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)

- [A] Spreadsheet software - Lotus 1-2-3, Supercalc4, etc. (Please specify) _____
[B] Data Base software -- dBase, RBase, Reflex, etc. (Please specify) _____
[C] Word Processing software - Word Perfect, Wordstar, etc. (Please specify) _____
[D] Integrated software - Framework, Symphony, etc. (Please specify) _____
[E] Programming Languages - APL, Assembly, BASIC, "C", Fortran, Forth, Pascal, (other) _____

Do not write in this area - for use by NTPCUG.

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

Applications should be mailed to: North Texas PC Users Group, Inc.
(Make checks payable to NTPCUG.) P.O. Box 780066
Dallas, TX 75378-0066

Received: \$ _____ Check No. _____ Date: ___/___/___ by: _____



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

Reagan Andrews, Ph.D., Chairman
Phil Chamberlain
Kathryn Crawford

Jim Holsington
Sid Nolte, Ph.D.

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.

Officials

President -

Reagan Andrews, Ph.D. (214)828-0699 h

President-Elect - Jim Holsington (214)416-3101 h

Program Chair. - John Ogle (214)470-9267 w

- Timothy Carmichael (214) 376-5451 x5916 w

Treasurer - Joe Brophy (214)891-8187 w

Secretary - David McGehee (214)681-0202 h

Membership Dir. - Robert Kolodner (214)821-6015

Disk of the Month - Kathryn Crawford (214)596-2539

Group Statistician - Connie Testa

Special Interest Groups

SIG Coordinator

- Phil Chamberlain (214)243-5034 h

Artificial Intel. Arnie Strand (214)824-7894 h

Astrometry - Arlin Collins (214)351-5137 h

Assembler - Andrew Chalk, Ph.D. (214)226-3461 h

Business Applic. Bruce Schubert (214)991-5967 w

Enable - Jack Lundberg (214)596-8160 h

- Susan Watts (214)416-0077 h

C Language - Sid Nolte, Ph.D. (214)233-6178 h

Communications - Pete Testa (214)495-7506

DAC Software - Mike Macaulay (214)956-7750

Databases - Chris Morgan (214)746-5335 w

- Bob Monaghan (214)429-3245 w

DBase - David Hayden (214)380-8172 h

DOS - Jim Holsington (214)416-3101 h

- Reagan Andrews, Ph.D. (214)828-0699 h

Graphics - Don Crockett (214)255-6704 h

Hdw Solutions - David McGehee (214)681-0202 h

LOTUS - Peyton Weaver (214)462-0552 h

- Mark Gruner (214)373-3147 h

Personal Users - Bob Presley (214)867-1679 h

Richard Terreo (214)307-1259

Programmers - Jim Holsington (214)416-3101 h

Science/Engr. - Sam Leven (214)991-7642

- David Lamb (214)931-3068 h

Stock Market - Cliff Murphy (214)279-7973

Turbo Pascal - Don Chick (214)276-2524 h

Windows - David Hayden (214)380-8172

NOTE: To access the BBS by long distance,
use area code 817

BULLETIN BOARD SYSTEM -461-0425 (Metro)
461-0506 (Metro)

SYSOP: - Tom Prickett (voice) (214)690-9087

Asst. SYSOP. - Maggie Moomey

Technical Advisors: Fred Williams
Pete Testa

Address Changes, etc..

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

NTPCUG Membership Director

P.O. Box 780066

Dallas, Texas 75378-0066

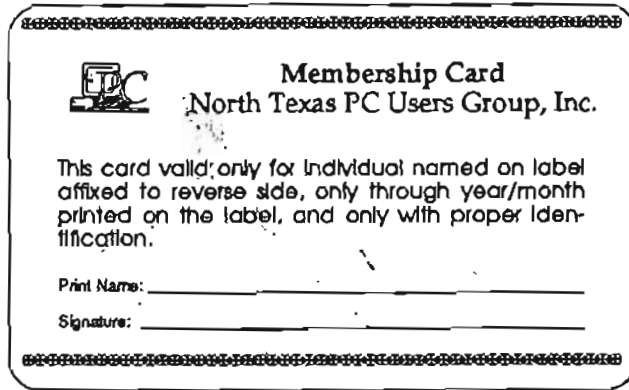
(Check newsletter mailing label for your renewal date..)

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 the label on reverse side. It is valid through

When trimmed, the card will fit transparent badge holders available at your stationers.

Wear your membership card while attending meetings and other functions of the Users Group.



Trim card to wallet size.

Meetings & Times

16 April 1988

Saturday, ~~16 April 1988~~



9:00 AM to 9:45 AM

AUDITORIUM

* MUSIC QUEST *

David Rowe will be speaking on MIDI (Musical Instrument Digital Interface). This interface allows PC owners to tap into the world of electronic music.

10:00 AM to 11:00 AM

AUDITORIUM

* MICRORIM *

Fred Gray, Senior VP of Product Development for Microrim will present the new RBase V, and new developments in the world of data bases.

Special Interest Group Meetings...

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
Graphics
Hardware Solutions
Personal Users
Science/Engineering

9:30 - 9:55

Orientation

10:00 - 10:55

Astrometry
ENABLE
Personal Users

11:30 - 11:55

Orientation

12:00 - 12:55

C Language
Personal Users
Stock Mkt Investing

1:00 - 1:55

Artificial Intelligence
Business Applications
Communications
LOTUS
Personal Users
Turbo Pascal


2:00 - 2:55

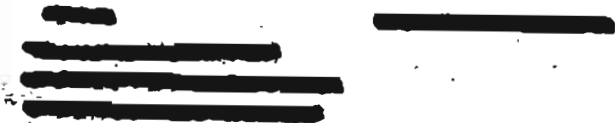
Advanced Programmers
dBase Programmers
DAC Easy Accounting

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

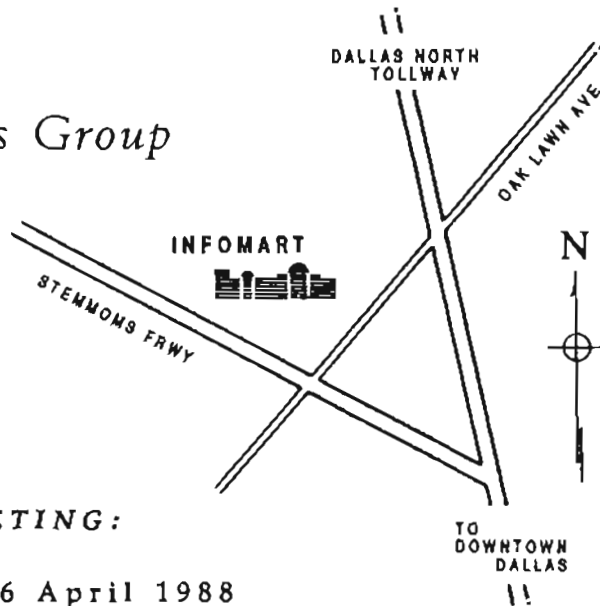
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North Texas PC Users Group



NEXT MEETING:

16 April 1988