



North Texas PC Users Group

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Deadlines:

All material for publication in North Texas PC NEWS (articles and ads) must be received by the NEWS staff no later than the fourth Friday of the month prior to publication.

Articles:

Column width of articles is not critical, but please do not right-justify the copy. 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.

Circulation:

North Texas PC NEWS circulation is 972. Member distribution is 799; remaining copies are distributed to PC user groups around the country, and to advertisers, prospective members and others with common interests.

... from the Editor's desk.

How would you like to be editor of North Texas PC NEWS? We're looking for someone to serve as backup to insure continuity in an emergency situation. Not only that, after editing and publishing 47 monthly issues I'd like to have a few months off. Anyone out there interested?

The CPT showroom at INFOMART, room 3027, will be open for the June 14 meeting. They design, build and sell things electronically automatic and computer controlled. They would be happy to have you drop by...

I was reading where AT&T engineers have developed what they are calling the "fastest practical silicon-based integrated circuits to date." The new circuits have been tested at up to three billion bits per second. Man, that's a bunch!

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DEADLINE

Deadline for articles and ads for the July issue of North Texas PC NEWS is June 27th even though the July meeting is scheduled for the fourth Saturday. (There are a couple of extra weeks in there, but the Editor will be on vacation.) Meeting time changes and other critical material will be accepted as late as 10 July.

- June Meeting - 2nd Saturday
- July Meeting - 4th Saturday
- August Meeting - 3rd Saturday

June Program _____ Charles Kroboth, Program Chairman _____

10:15 AM Byte Magazine's New Computer Conferencing System, BIX
(Byte Information Exchange)

On hand for the presentations will be George Bond, Executive Editor of BIX and Doug Webster, Director of Business and Marketing. Planning is still underway for the program, but presentations are being arranged for members of the organization's IBM, Apple, Atari and Commodore groups. Exact times will be posted as they are finalized.

BIX began commercial operations in November, 1985 and has already registered some 5,000 participants. The system is available worldwide via Tymnet and can be used by anyone interested in exchanging ideas, opinions and information about microcomputer-related subjects.

BIX users can choose from over 150 individual conference topics and can join as many or as few subject areas as they wish. Joining a specific conference brings them together with other BIX users who share their interests in that subject and related

topics. Users can leave old subjects or join new ones at any time. BIX keeps track of each individual's conference memberships and what messages he has or hasn't read. Among the system's most active conferences at present; Amiga, Atari, Macintosh, Apple and IBM, Pascal, Modula 2, C Language, Unix, Software Engineering, and a lively system debate on the Star Wars program. A growing number of commercial firms are also offering on-line technical support for their hardware and software products on BIX including Lattice, Borland, ITC, Realia and Manx.

The June presentation will demonstrate the system's conferencing software, electronic mail and software listings areas and provide members an overview of the kinds of information now available on the system. Group members will also be given information about available discounts on both BYTE subscriptions and BIX registration fees.

ATTENTION: Members Under 16 Years of Age

Some young people have been causing INFOMART management concern with their actions at our monthly meetings. Due to the actions of a few people in the atrium at the last meeting, the Dallas Computer Council is establishing ground rules for future attendance based on restrictions now being imposed by Infomart managers. These ground rules will be passed along at the June meeting. Preliminary rule from DCC, mandatory for the June meeting is as follows:

Anyone under age 16 not having a valid drivers license must be accompanied by parent or guardian at all times while in INFOMART.

We are sorry that the actions of a very few necessitate such action. For people that may be affected by the Council ruling, you may call me for the actual ruling after June 9, 1986 at 867-8012 or check the 'DCC' keyword on STARTEXT after June 10, 1986.

Stuart Yarus



Software Report

by Dick Gall

IBM Writing Assistant - Version 1.01

PC beginners, PCjr-fans, and those who prefer high program friendliness to high speed and frilly features are going to love IBM's mild-mannered Writing Assistant.

This is a basic word processing program with enough smoothly-integrated features to meet many needs in preparing, printing, storing, and producing documents. of documents. Plus - it works together with data files from the IBM Filing Assistant, Graphing Assistant, and Reporting Assistant programs.

The main program menu hints at the Assistant's simplicity:

- 1. Type/Edit
- 2. Define page
- 3. Print
- 4. Get/Save/Remove
- 5. Clear
- 9. Exit

Selecting a 1 produces a "what you see is what you get" format with left and right borders shown and a scale across the bottom giving cursor position, mode, file name, memory remaining, and line and page number. As the screen is filled, the paper scrolls up and a line representing the bottom edge of page 1 shows, followed by the top edge of page 2. If page headers and footers have been defined, they are shown on every page - exactly as they will appear on a printed page.

Selecting a 2 brings up the DEFINE PAGE menu:

```

Left margin: 10
Right margin: 70
Top margin: 6
Bottom margin: 6
Page length: 66
Heading

```

Line 1: (space for entering 1st header line)

Line 2: (space for entering 2nd header line)

Footing

Line 1: (1st footing line)

Line 2: (2nd footing line)

Document text typed with wordwrap is automatically reformatted when margin settings are changed. The headings and footings, including automatic page numbers, are specified in the DEFINE PAGE menu. Since the left and right screen characters are taken up by the symbolic edges of the page, the maximum right margin setting is 78. Horizontal scrolling is not supported.

Printing is also selected from a simple menu:

```

From page: 1
To page: 1
Print to: PRINTER
Pause between pages (Y/N): N
Number of copies: 1
Single/Double/Envelope (S/D/E): S
Indent: 0

```

The ENVELOPE printing function takes the inside address from a letter document and prints it centered on an envelope. Indent corrects to left margin problems by shifting the entire page to the right the desired number of spaces. Printing may be sent to a disk filename in ASCII format.

In addition to menu selections, features are called with the function keys, as follows:

STANDARD	SHIFTED
F1 HELP	
F2 CHECK SPELLING	
F3 ADJUST	CHANGE COLOR
F4 SET TABS	
F5 EMPHASIZE	APPEND
F6 ERASE WORD	ERASE LINE
F7 MOVE BLOCK	DELETE BLOCK
F8 COPY BLOCK	REUSE BLOCK
F9 SEARCH & REPLACE	
F10 CONTINUE	

The spelling checker uses a large dictionary file, and a customized file of special words can be created. Disk files can be inserted

► Continued on page 15.

THE ELUSIVE "PRODUCER"

by C. J. Handlogen

The dramatic plunge taken by the micro-computer market is equal only to the meteoric rise we enjoyed just a few months ago. How many products can we name that more widely caught America's imagination than the micro-computer. And how many products do we know that have so completely failed to meet the promise held out for them. We are hard pressed to think of even one parallel situation.

Certainly some computer people will disagree with the idea that the micro-computer "failed to meet its promise." But, the wide spread stories of "computer under-use" cannot be brushed aside. Publications within the computer community and other publications have been replete with stories and analyses about the conditions. And, we have abundant evidence about the performance of the market in noting the disappearance of names once prominent. Surely, it is redundant to say more.

But, why? and what's to be done?

Did we fail to reasonably estimate the number of potential users? Were we over-optimistic in thinking that every small business could and should computerize its information processing? Is the error in our original expectations? The evidence says otherwise. If we were busy installing micro-computers into every situation where they are suited to the information being handled, the market would probably be reaching the earlier projected 5-10 million units annually.

The machines will do the work, and the work is there to be done - so what's missing? What is wrong with the beautiful vision that we had conjured up? We have developed a miraculous technology which is available to the user at very low cost, but sales are now dismal.

What's missing is the transitional step to the PRODUCERS! The micro-computer is afford-

able but not suited to the circumstances of most PRODUCERS. "To whom," you may ask, "is the micro-computer suited if not PRODUCERS? "Haven't we concentrated on hardware and software designed to process business information?" "Isn't there all manner of detailed information, help devices and structured courses available?" Surely there is and therein lies the problem. The amount of information users must assimilate is enormous if anywhere near full use is made of their machines.

Before going further, we need a definition. For purposes of this discussion let us divide the micro-computer community into two classifications:

1. PLAYERS
2. PRODUCERS

To divide the community of interests into just two categories clearly, over-generalizes - or does it? If we define PLAYERS as those with the curiosity to be intrigued by the computer's complexities (and engaged in more than computer games) and PRODUCERS as those people (who have use for a computer but) whose intellectual interests lie elsewhere, perhaps there are just two classifications to consider. Using this definition, we would agree that there are many more PRODUCERS than there are PLAYERS. Everywhere we look there are potential applications where PRODUCERS are unwilling to deal with the real and imagined problems of change. Probably we could say that computer under-use is the hard evidence of PRODUCERS who are unwilling to pay the price of gaining computer competency.

According to this definition we should hasten to acknowledge that PLAYERS do produce computer output - lots of it. However, they go about their computer involvement with a certain mentality - they enjoy the challenge the machine provides! The micro-computer is a marvelous device for mental exercise. It provides an endless array of brain teasers for those who like the intellectual challenge and there is always the real or imagined bonus of presumed practical worth when a puzzle is solved. The PLAYER gets a double reward - how can you beat that? They (A) enjoy the game and (B) expect an economic benefit to flow from the effort. This combination is



enticing, which is why those with the requisite intellect find it so easy to be entrapped and engage themselves for hours in solving computer mysteries. This is not to in any way diminish the importance of the PLAYERS in the development and forward momentum of micro-computers. We need this leadership, but we also need the PRODUCERS who could employ these machines for greater productivity and profit.

What to do? The obvious challenge to all of us who are PLAYERS is to make the micro-computer "agreeable" to the PRODUCERS so that the economic promise of these machines can be realized. We can expect that more of the world's PRODUCERS will be converted to PLAYERS but probably not in great numbers in any given time span - better that we make our systems more approachable.

How can this be done? Aren't we all devoted to making the systems easier and better? No, unfortunately! Not all PLAYERS are trying to improve and simplify. Look at the software lists offered by the merchandisers. You will see numerous packages that should be retired - packages of doubtful merit when published which now are laying in ambush. We players are not tough enough on substandard software and this is one thing we can do! We can be more "upfront" where we have first hand knowledge of available software, and we can warn our PRODUCER friends more effectively. But, it is so subjective isn't it?

What else? We can recognize the de facto standard "DOS" operating system for what it is. It is a good rudimentary system, almost always faithful in its executions, but limited, too limited to fill the PRODUCER need. DOS requires that users be PLAYERS because so much interaction with the computer is necessary to successfully operate the machine. However, before creating the wrong impression, we must acknowledge the wonderful advantages that IBM provided users in the way DOS is constructed. They opened the door for others by allowing for "external" DOS commands. We could wonder if they realized what a powerful advantage this feature would be to themselves and to the computer users when this decision was made. Still, we owe them a

debt of gratitude for providing opportunity for third party contributions, not only in software, but hardware as well.

But that does not change the fact that DOS is limited. Partly through the limitations, countless numbers of potential PRODUCERS are precluded as users because a blank screen and a blinking cursor is too ambiguous. The DOS operating system could have included standardized menu procedures for both major software packages and for commands. The menu routines could be instructed on available software so that the operators could move easily and quickly into their selections where help screens can be called. Too, the commands could have associated help screens for prompting and coaching users in their use. Users would be helped by additional commands for renaming directories, for renaming disks, for moving files, for displaying directories, for expanding batch file capabilities, for accessing printer ports, for deleting files, for displaying file contents, for locating files, for undeleting files, and, . . . Also, we could use utilities as part of the operating system - the "desktop" variety, archival capabilities; and if DEBUG is a proper program for DOS we could use additional "memory" oriented programs.

Anyone who can be called a PLAYER is probably aware of the proliferation of "public domain" and "shareware" programs available through user groups and on the bulletin boards. There are thousands (and thousands) of programs being offered mostly because of the limitations of DOS. Some of these programs are excellent and you might ask, "Why expand DOS if alternatives are available?" Simple! Many of the programs offered as public domain or shareware are not suitable. Some work poorly, some "trip over" each other, and some interfere with more important installed software. It takes an enormous amount of time to tromp around the computer community to locate programs of interest, and then it's necessary to carefully test the performance in each system. PRODUCERS simply will not go through this ordeal. The operating system must come complete with many important additions if we are to reach these now chary PRODUCERS. ►

Aren't these ideas implying the use of hard drive systems? What about all the floppy drive systems in place? Remember, we are talking about the transition to the PRODUCERS. And, to answer a question with another question, "Would we advise a serious potential PRODUCER to use a floppy drive system?" At today's low cost, we would typically urge PRODUCERS to set up their business applications on hard drive systems. So the emphasis to aid the PRODUCERS assumes hard drives.

Some of the major suppliers in the industry have aimed "upscale." They are stressing "multi-user" and "networking" as a way to stimulate business. Hardware producers are striving to offer more power in various ways. No doubt all of this is good, but the trends evidence the move away from the "personal" idea of micro-computing. This new direction is dependent on PLAYERS to carry the application/installation load as systems become more complex instead of becoming more user compatible. We are turning away from an un-reached objective in addressing a market of fewer potential units.

The omissions from DOS have been widely identified. There are efforts to create "shells" and "windows" which further confirm the point, but these techniques place a software program between the operator and the operating system. This introduces a whole new series of questions about software compatibility on which PRODUCERS are not prepared to deal.

Recently there has been some fine writing on how to organize and manage a micro-computer. An excellent article on "Directory Assistance" by Alan Hoenig and Karl Koessel was published in PCWorld August 1985 (1). Also, a recent book titled, "The Fully Powered PC" published by Simon and Schuster and authored by; Burton L. Alpers, Andrew Fluegelman, and Lawrence J. Magid (2) does an outstanding job of setting forth overall system management concepts. (They include a disk of utility programs to help the user in setting up a customized program). The best ideas around on how to expand the DOS operating system are included in these writings. From personal experience it is possible to testify to their

merits, but these techniques are manageable only by PLAYERS.

It would be a boon if Microsoft came out with an expansion of DOS - an expansion package (not a revision to obsolete the present system) which would provide all users with a consistent, coordinated, reliable system to do a complete job. It would be a powerful sales advantage having a micro-computer with all structural work set up and ready for installation and operation of selected software packages. Some computer sales people would have a "field day" if their hardware was available as a ready-to-go system.

Although it is natural to think of Microsoft first, perhaps another major supplier could do as well. A niche is open for relatively small risk, and all that is needed is a vendor with sufficient strength and conviction to make an expansion package an industry standard.

Most software publishers grossly understate the time requirements relating to becoming proficient in the use of their software. In spite of the considerable learning time which must be endured in becoming competent in the use of major software packages, no single package approaches the challenge of getting "on-top" of managing the computer overall. It is no wonder that people have turned away. They have done so because the demands of computer management outweigh the benefits. Still, we have the chance to make micro-computers more desirable by improving the operating system, and we have the reason to become more attractive to THE ELUSIVE PRODUCERS. 1000+ programmer type PLAYERS are throwing the gauntlet incessantly. Let's hope a worthy contender takes it up.

C. J. Handlogen

(1) Alan Hoenig and Karl Koessel, "Directory Assistance," PCWORLD (August 1985), pp. 172-180.

(2) Burton L. Alpers, Andrew Fluegelman, and Lawrence J. Magid, THE FULLY POWERED PC (New York: Simon & Schuster, 1985)

Special Interest Program Reports

General Special Interest Group (SIG) News

- NEW! -- LOTUS, FRAMEWORK, and UNIX SIG's! DATAFLEX is also a possibility. The INTEGRATED SOFTWARE SIG discontinued. See news about all five below.

- There is a current need for SIG Leaders for the Business Applications and UNIX SIG's.

- A reminder that any SIG news items for this newsletter must be received by noon of the last Friday of the month -- regardless of the date of the next meeting.

- Phone numbers for SIG Leaders are on inside back cover of newsletter.

ADVANCED PROGRAMMERS SIG

This SIG is a forum where those members with extensive experience and expertise in the micro-computer field share their latest discoveries, knowledge, and (occasionally) rumors with the membership. As such, it may touch on subjects from any of the other SIGs. The latest hardware and software news is certain to be aired at every meeting.

Neil Bennett

APL LANGUAGE SIG

In June, Davin Church will demonstrate FIB on the new large-screen projector. FIB is a full-screen programming tool designed for easy application development. It is NOT just for APL. FIB handles, in a clean consistent manner, the myriad messy details involved in getting data into and out of your programs. The modest acronym stands for "Fill-In-the-Blanks", but that scarcely begins to convey the power and numerous options available. FIB will verify that an entry is of a particular type (e.g. numeric), display an error message, move the cursor to the error with altered attributes, line up decimal points, put the ent-

ered value into your program variable, etc., all automatically.

The philosophy behind FIB is to free the programmer from drudgery, and make programming more productive -- not to mention more fun! You won't want to miss it.

Jim Fiegenshue

ARTIFICIAL INTELLIGENCE SIG

We were fortunate to have Bob Sutherlin and John Jenson, from TI, at our May meeting to discuss the Personal Consultant expert system shell and PC Scheme.

Bob presented an overview of Personal Consultant capabilities and described the differences between Personal Consultant and Personal Consultant Plus. Personal Consultant is a backward-chaining production rule system based on EMYCIN, and allows certainty factors to be associated with rules. It is implemented in IQLISP. Personal Consultant Plus is implemented in PC Scheme and uses a frame-based representation system in conjunction with a forward-chaining inference engine.

John Jenson, an implementor of PC Scheme, talked about the history of Scheme, its characteristics, and standardization efforts. John demonstrated PC Scheme, the EMACS-like editor, Edwin, graphics, and windowing. PC Scheme is intended for use both as an educational tool and a serious development system for AI applications.

At the June meeting, a professional Lisp programmer will talk about Lisp and Lisp software development. For the July meeting, I plan to discuss frame-based knowledge representation languages (KRL). Frames are a more powerful representation than production rules, although a production rule system is easily integrated with a frame-based KRL. Hopefully, this will give newcomers to AI a new perspective on expert system design.

Jim Bender

Special Interest Program Reports

ASSEMBLER SIG

The MAIN TOPIC of the May meeting was a demo by Chris Morgan, of Morgan Computing, of Advanced Trace 86. After some initial confusion, we did get to use the large screen projector in the main auditorium for a good 30 minutes, after which we adjourned to a corner for questions & answers while people rearranged things for the next scheduled presentation. As predicted, the internal mysteries of the 8088 chip were revealed with shocking clarity -- we saw registers changed, flags set and memory locations manipulated in as much or as little detail as desired. Many of the sophisticated features which help advanced programmers debug large, complicated programs are also great for beginners -- especially the ability to see your labels and comments when disassembling code. The ability to add your own labels to a disassembly makes it feasible to disassemble major chunks of code "from the bottom up", when you want to figure out how a program performs some interesting feat that you're having difficulty duplicating. Again, Advanced Trace 86 is available to NTPCUG members at a 50% discount, direct from Morgan Computing.

NEXT MTG we'll continue with Chapter 9 in the "Waite book" ("Assembly Language Primer for the IBM PC & XT", Plume/Waite), on the ROM BIOS. This will focus mostly on the interrupts which support the screen & keyboard.

John Wolley

BUSINESS APPLICATIONS SIG

Our last two programs featured consultant Clarence Handloggen, on the use of Batch commands to improve our use of the computer. The May session got more into the actual mechanics of creating the Batch commands for specific (yet illustrative) applications. The objective is to help non-programmer business users better understand what they (and the computer) are doing, so they can move beyond

just limited use of certain application programs.

The level of interest in the general subject was high, and the subject vast. So we're going to stick with it for at least part of the next several programs. Clarence's daughter, Linda, sales rep at Sears Business Systems in Richardson, will lead the June continuation of the Batch use general topic. At least one Compaq will be on hand so we can see the results of some of the work.

NEW SIG LEADER WANTED! After a couple of enjoyable years of leading this SIG, my business demands more of my time. So, I need a replacement. A lot of time isn't required, just regular availability. You don't need to be a programmer, just computer literate, with the ability to lead attendees toward business uses of their micros! There's no rush: the new leader can begin any time during the next several months, as best suits him or her. Let me know if you would like to take over.

Ed Fries

C Language SIG

The program for May was a short presentation of data abstraction and how it may be realized in the C language. This led to a discussion of the scope of variables and how to hide data in one module from other modules.

Copies of the bibliography prepared by the SIG were distributed at the meeting. Sorry that we ran out. There will be another distribution at a future meeting.

We are looking forward to the June program which will be presented by Dennis Saunders of MIX. The MIX Compiler is widely distributed and features an excellent manual and a very low price. Neil Bennett will also participate.

Sid Nolte

Special Interest Program Reports

COMMUNICATIONS SIG

May's formal presentation was a continuation of the RS-232 specification. The presentation outlined various "standard" RS-232 cable configurations as they apply to the IBM PC product line. The information presented will be published in a future issue of the North Texas PC news for those who are interested in RS-232 but missed the meeting.

The topic for this month's meeting is RS-232, the final chapter. The formal presentation will provide a working knowledge of various "Null" modems which are used to connect serial devices to computer systems without the use of modems. We will also cover connection of as many of the more common printers and plotters as presentation time permits.

As always we will have a general question and answer session following the formal presentation. All with questions are welcome; those with answers are even more so.

Fred Williams

DATAFLEX Group

The organizational meeting for the DataFlex SIG will be held during the June DCC User Group meetings in InfoMart.

Since few people in the Dallas/Fort Worth area know what DataFlex is and even fewer use it, our first InfoMart meetings will be geared toward defining the product and its capabilities.

If you are contemplating writing a large database application using dBASE or Rbase, you should drop by the meeting to see how DataFlex can make your job easier. If multi-key, online updated indexes, local area network support, and software portability are important to you, you should not miss our meeting.

The DataFlex Users Group, (we really don't want to call it DFUG do we?), has been meeting informally on Tuesday nights following the DCC meetings. We will continue to meet on the second Tuesday of every month so that we can continue to cover technical topics in depth and to exchange DataFlex routines for our club Public Domain library. We will have a new permanent meeting place, so please come the the Saturday meeting to learn about our new site and to add your name to the club mailing list.

Robert Grabowski

DOS SIG

Previously known as Beginners, the DOS SIG concentrates on every phase of the DOS command structure. It is open to members of other groups, who may be in the process of changing to MS- or PC-DOS.

John Hall

FRAMEWORK SIG

We will continue to explore the new menus of Framework II and take a look at an application or two. Bring any examples or problems you have on a disk and we'll load it up and have a look at it.

Jim Janeway

GENEOLOGY SIG

At the May meeting, Albert Weeks, a Geneologist, presented "FIRST FAMILY", a computer geneology system that he wrote. This is a versatile, yet powerful program that runs on the IBM-PC and nearly all compatibles. The program is menu-driven and makes charts and sheets, including Ancestor Charts, Descendent Charts, Family Charts (Group Sheets), and Sorted Lists. It permits custom use of ID numbers (your own), footnotes, source references, text files, and Soundex search. It's

Special Interest Program Reports

flexibility is such that it handles 29 children, and has no unreasonable limits on field sizes, number of marriages, number of records, number of diskettes, etc. It is actually being developed for genetic research and animal breeding (which involves many more generations than humans!).

FIRST FAMILY retails for \$129.95, and may be ordered from COMPTEROLOGY, Inc., P.O. Box 30113, San Antonio, TX 78285.

At the June meeting, Joe Walker will present ROOTS for the IBM-PC.

Minnie Champ

GRAPHICS SIG

This SIG is devoted to any and all means of programming and implementing graphic displays and applications on the IBM and compatible PC's. Alan Kaye's talk last month gave us an idea of the tremendous potential in this field.

Mike Durbin

INTEGRATED SOFTWARE SIG

Due to the development of specific groups for some of the more popular integrated packages, the Integrated Software SIG will no longer meet as a separate group. We will continue to have an opportunity to view new products and such via the main meeting programs and vendor presentation times. Thanks to all of you who helped to contribute to the growth and evolution of our group.

Jim Janeway

LOTUS SIG

This month we will have a demonstration of a user application utilizing a number of the powerful features available in both 1-2-3 and Symphony. There will also be time allocated to

discuss questions or problems you may have. We are just getting started and things are still pretty loose, so come help us out by putting in your two cents worth.

Susan Reyes

N-SQUARED ANALYSIS SIG

The May meeting was attended by nineteen people, in which over 50% owned the N-Squared technical analysis software for the IBM or Apple computer.

Greg Morris discussed an application of Gerald Appel's MACD (moving average convergence divergence) and why some amount of logic should be behind the choice of the moving averages. Randomly selecting averages and testing the results against price data will result in failure, as do ALL curve-fitting systems. It was suggested that the short term average be directly related to the short term cycle of the market or whatever you are analyzing. In the case of the stock market, there is a good 14-15 day cycle. Therefore, a short term average of about 7 days would be good.

The June meeting will, hopefully, have a computer available. We will demonstrate the logic of putting an idea into the system and how to check it as you go. Please bring ideas.

Greg Morris

SCIENCE / ENGINEERING SIG

Has anyone seen the Borland ads for their new PROLOG? Well, if you have missed them, you must not read any computer magazines. It has just been released and Sam Leven already has a copy and is developing some "front-end" code with it. Sam has agreed to come talk to us in the June meeting. He will show us a little about what the PROLOG language is like, how fast the Turbo-Prolog system is, and maybe help remove some of the fears of "another language" for some of us.

Special Interest Program Reports

I mentioned last month that I had asked Thomas Madron of NTSU to come speak to us sometime. Just this evening I received a letter from him accepting the invitation. Needless to say, I have not made arrangements as to when, but I should know by the the June meeting. Dr. Madron is the author of "Statistical Correlation" that was in the April issue of PC Tech Journal. I have received a copy of the program used in the article and Dr. Madron has granted permission for me to distribute it to our SIG.

Arlin B. Collins

TURBO PASCAL SIG

In May, David McGehee presented the first of a series of sessions on "structured programming", or the methods of developing a logical plan for a system or "program" before starting

the actual coding. A portion of the June meeting will be devoted to the next phase.

Because of the wide diversity of experience in Turbo among the SIG members, we will try something new in June -- breaking down into a number of smaller groups, each of which can pursue different items of particular interest. At least one will be devoted to the beginning Turbo programmer. If this is successful, we will continue the same format in future meetings.

Phil Chamberlain

UNIX SIG

This is a new SIG, devoted to the UNIX operating system. The precise direction it will take will depend on the interest of the attendees. No leader has been selected at the time the newsletter went to press.

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Plano, Texas 75074





Disk of the Month

June 1986 DOM

This month's featured disk is the Still River Shell. Many of you have probably seen or heard of shell programs. There was a recent review in PC Magazine of a number of the popular commercial offerings. The intent of a DOS Shell is to shelter you from the standard DOS A> and make file management (especially on hard disks) easier.

The Still River Shell offers most of the features provided by the commercial packages. It gives you a fast, nice display of the files in a directory, allowing you to sort by attribute, filename, extension, date, and size. You can copy, move, or delete single files or blocks of files, list the contents of a file, find a file (or file type - wild cards are allowed) any where on your hard disk, display a directory tree - partial or complete, or write the current directory information to a file.

Since the Still River Shell allows you to execute programs from within the shell, it is possible that you will never have to leave the program once it is invoked. It also provides you with a que of DOS commands (an extension of DOS's <F3> capabilities) and allows the user to custom configure both the program and the function keys.

This is a share-ware product - the author requests \$20 but \$39 will get you the latest manual, a spot on the mailing list, and future updates at a discount. If you haven't been sure whether a DOS shell is for you, here's a great way to try one for \$2.00, and if you like it, it's still less than \$40.00.

Alternate DOM

PROCOMM version 2.2 is a shareware communications program for the IBM PC and compatibles. It is a fairly friendly program, replete with pop up windows that explain each function. It comes with a large documentation file (157k) and the standard features you would expect from such a package including things like auto redial, character translation tables, dial directory, etc. It supports a number of protocols including two versions of XMODEM (one - the "relaxed" version is designed for COMPUSERVE members), KERMIT, and ASCII. The requested registration fee is \$25.00 for those who like the package.

Pianoman Update

Along with the other DOM offerings this month, we have Version 3.0 of Pianoman, by Neil Rubenking. Pianoman is shareware with a requested contribution of \$25. Last fall, Version 2.1 was our Disk of the Month. Neil has significantly upgraded Pianoman for this release.

Pianoman allows you to play your the keyboard of your pc like a piano. Once the tune has been recorded, you can edit it with commands very similar to those of a word processor - insert, delete, change notes; adjust pitch and length; make global changes like copy, delete and move. Help screens are available at all times and a quick reference chart comes with the documentation, which is in a file on the diskette.

Pianoman requires an IBM-PC or close clone that runs PC-DOS 2.x or higher. It will NOT run under any version of MS-DOS. Also required is 128K RAM. Color or monochrome monitors work fine. Some clones/compatibles have made slight alterations in the keyboard; there is a version of Pianoman also included which handles this problem for some keyboards.

Once you have keyed a tune, you can save it to disk for later playback. Also, you can combine up to four tunes to make 4-part music and fugues. Pianoman output can put into .COM files for inclusion in your own computer programs. There is provision to add music to Turbo Pascal and BASIC programs.

The Pianoman diskette also comes with a large selection of "pre-recorded" music, some of which is awesome to hear. The last release of Pianoman was on two diskettes due to the music included. This release includes a large selection of music also (mostly the same selections as before), but which have been squeezed into about 25% of the space they would normally take. Part of Phil Katz's ARChive program has been included to enable you to expand the files back to normal (and useable) size.

All in all, the enhancements put Pianoman into the very top class of available software for PC's. I recommend this selection very highly.

Stuart Varus

DISCLAIMER: The North Texas PC Users Group copies these programs as a service to the club and the members of the club. 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 totally 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 this time we will not be handling mail orders. The one exception we will make to this is if we are out of stock on a diskette at a regular meeting. For this service we will have a MINIMUM CHARGE OF \$2.00 FOR EACH DISKETTE. When we have more club members volunteer to help with DOM we might be able to extend this

option.

PRICE: \$2.00 per diskette (if the program is on two diskettes the price is \$4.00)

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

MEDIA: 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 10 minutes before the main meeting when we will close. We will then reopen after the main meeting and remain open until around 3:00.

IBM EXCHANGE NEWS LETTER: The EXCHANGE for the current month will be available at the DOM table AFTER the main meeting at no charge to paid up members of the NTPCUG.

NEC Builds a Better 8088 Mouse Trap

by Tom Mack

The following article was reprinted from:
Capital PC Monitor
HAL-PC Newsletter
others?

As an intensive user of my PC, I have always carefully watched for "speed up" kits that would allow my PC to do more work in less time. However, those that I have seen usually required such esoteric things as swapping out the mother board or adding an add on card to my Boca build/IBM blessed PC. Suffice it to say that what has stayed my hand from rushing in (where angels fear to tread?) was an ever changing mixture of price, installation complexity, and a perceived requirement to do ongoing system integration when I acquired new software.

The good news is that NEC Electronics apparently decided that they could build a better "8088" chip than Intel. And they did!

What NEC did was to develop what they call their "V20" processor chip. It uses a newer chip technology, CMOS, that requires only 15% of the power required by the Intel 8088 chip which IBM ships in each PC or XT. The Intel 8088 chip uses the old NMOS technology.

While this is not all that important to end users (you still need a 135 watt power supply if you are going to put in an internal hard disk in your regular PC), CMOS technology allowed NEC to develop new circuit designs that would support the 8088 instruction set and yet need fewer clock cycles to do certain types of work.

What this means is that your PC, at its IBM supplied 4.77 MHZ cycle time, can complete some 8088 instructions in a lot less clock cycles if the processor you use is a NEC V20 rather than an Intel 8088.

What kind of "speed up" can you expect? If you have a regular PC with a 640K of memory, it will normally take 75 seconds to come up after you power it on. Replacing the Intel 8088 chip in the same PC will reduce this 75 seconds down to 50 seconds!

Using Norton's Speed Index utility you see a speed factor of 1.7 compared to 1.0 for the standard PC.

DON'T BELIEVE CLAIMS OF 100% SPEEDUP! My experience has been that anywhere from a 10% to a 20% speed improvement occurs.

What accounts for this speedup is essentially that:

1. the calculation of the effective address when executing instructions has been reduced from 5-12 clock cycles down to 2 clock cycles.
2. the V20 has a pre-fetch pointer while the

Intel 8088 has none. This speeds up calls, returns, and jumps.

3. it has a dedicated math section with new 16 bit temporary registers that can speed up mathematical calculations considerably.

There are a lot of other "goodies" in the NEC V20 chip which, like IBM's EGA, are only useful when software is built to utilize them. If you are like me, these are interesting, but not particularly relevant when you are considering getting the V20.

What was relevant was the price - \$15 to \$25 mail order! Steve Hachman of our Buying Group intends to have the V20's available for even less than these prices at the next Buying Group meeting.

Another thing that was relevant was software compatibility. Unlike "speed up" kits for the AT. The V20 runs at the standard PC's 4.77 MHZ cycle time. You don't need to worry about having 100 or 150ns memory chips to utilize the V20. If your current PC runs without problems at 4.77 MHZ, it should run without problems at 4.77 MHZ using the V20 chip. The only software that I know doesn't run are packages that have PC timings hard coded in them like DRI's Concurrent PC DOS, some UNIX vendors, etc. Since this is "dumb" to do in any software - mainframe or PC, the vendors of such software will hopefully either smarten up their software, or go out of business.

Installation of the chip takes about 10 minutes and requires pulling out the Intel 8088 chip (located at the rear of your PC, next to the power supply and the location for the 8087 math co-processor). You then simply press in the V20 chip in the same place you took the 8088 chip out of. All you need to do is make sure that you don't bend any of the pins and that the notched end of the V20 goes in the same location as the notched end of the Intel 8088.

For even 10% performance improvement of a \$3,000 PC, it seemed worth it to me to invest \$25 or less. I don't believe anyone can find

a better price/performance than to get \$300 more PC for only \$25.

What NEC did is not new in the computer industry. All they did was develop a hardware processor that was 100% compatible with the Intel 8088 instruction set. In 1968, RCA did the same thing. RCA developed a line of mainframe computers (called the Spectra/70) that was operation code compatible with the IBM System/360 instruction set. Even today, both Amdahl and NAS provide mainframes that are operation code compatible with IBM System 370 instruction set.

When you hear that Intel has brought suit against NEC alleging copyright infringements, don't panic! Presumably NEC did not duplicate the Intel circuit designs, but merely supported the 8088 instruction set in a different way. Intel could have protected itself by patenting the 8088 design, but that is another whole issue.

Essentially, copyrights are easier to obtain and require less information about a product to be divulged. Patents are harder to obtain and require more information about a product to be released. It is every innovator's choice how to best protect his innovation, Intel chose to copyright the 8088 chip.

It is important that the competition exist in the market to allow new and innovative uses of technology to become available to the end user. Both existing patent and copyright laws offer vendors different types of protection for their innovations. Had VisiCalc been granted a patent, Lotus 1-2-3 might never have been brought to market.

The important thing is that NEC built a better mouse trap, a chip that can better support the 8088 instruction set than Intel's 8088 chip. In the tradition of American free enterprise, presumably every user will beat a path to NEC's door. As a user, I would like to see Intel view this as an opportunity to build an even better mouse trap than NEC's. Intel has the engineering resources; they can see the market demand; they should accept the market challenge.

Tom Mack is President of Capital PC Users Group and when he isn't writing President's Notes he finds time to evaluate rodent related microtechnology.

Tom Mack

■

**Introduction To RS-232
Part II**

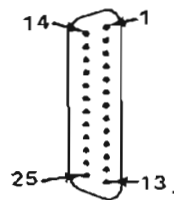
by Fred Williams

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 Part I 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. The 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
- 2 - Transmit Data - 2
- 3 - Receive Data - 3
- 4 - Request To Send - 4
- 5 - Clear To Send - 5
- 6 - Data Set Ready - 6
- 7 - Signal Ground - 7
- 8 - Carrier Detect - 8
- 20 - Data Term. Ready - 20
- 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 per-

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

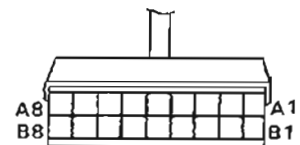
The easiest way to connect a PC or PC/XT to a modem is to use a full twenty-five conductor cable and connect all twenty-five pins to their corresponding twenty-five pins at the other end. Well, if you have priced twenty-five conductor cable you will understand why that is a bit of unnecessary overkill. 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. Figure 1 shows 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

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**

RS-232 continued

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 16-pin Berg connector. Refer to Figure 2 for both the cable pinout and connector pin configuration.

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. Refer to Figure 3 for cable pinout and connector pin configuration.

PC/AT	Modem
9-pin	25-pin
D-shell	D-shell
Connector	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

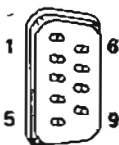


Figure 3
IBM PC/AT RS-232-C

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 information 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 A

IBM Writing Assistant

(continued from page 2)

at any point in a document by locating the cursor at the desired insertion point and pressing Shift-F6.

Writing Assistant's "combine files" function adds features and important flexibility in accepting data from other software members of the series. ASCII files and Writing Assistant files can be input for printing or standalone. Form letters can be prepared from names & addresses stored by the Filing Assistant program. Graphs from the Graphing Assistant program can be incorporated into a document and printed, even using a monochrome (non-graphics) monitor.

The program lists for about \$150. The advertised hardware requirements indicate that a PCjr or portable with 128 KB of memory will be required to run the Writing Assistant.

Dick A

G A S P !

(Great American Software Package)

Reviewed by John McGinty

You've got to admit that anything called the "Great American Software Package" (or GASP!, for short) is attention-getting. When I first heard of GASP! several months ago, the name stuck in my mind. My first impression was admiration for the ingenuous name; some clever advertiser had earned his fee for that one. Then, I got to thinking, preceding anything with the "Great American" was pretty presumptuous.

GASP! arrives in a blue hardback 6" x 9" vinyl binder surrounding a 98-page manual and including one floppy disk in a pocket inside the front cover. The manual is well written, sectioned with bold titles, and filled with illustrative examples. The manual describes GASP! as "a visual shell which takes the drudgery out of operating an IBM PC or compatible. GASP! will help you organize and manage the contents of your disks (both hard and floppy), and will make it easier to use other software." According to the manual and the diskette's label, GASP! was produced by Great American Software Producers, P.O. Box 901394, Dallas TX 75390.

I slipped the diskette into drive A of my Tandy 1000, quickly referred to Chapter 1 (Installation and Backup), and effortlessly installed GASP! into the root directory of my 20 meg hard drive.

Loading the program, I was presented with a display which listed single-entry options at the upper left, function key definitions at lower left, and a directory to the right. Armed with the manual, I began exploring. I found that by moving a highlighted bar to a selected file and then hitting a single key, I could copy, print, show, delete, rename, or execute any file. (In case of error, the Escape key will undo the previous command).

Delving further, I discovered that all of the commands that would work on single files could also be applied to multiple files. All that

is necessary is to mark the selected files (move the highlight bar to each file's name then hit the "M" key). Finally, after marking all desired files, another keystroke will perform the same operation on all of the marked files. Armed with this new weapon, I deleted outdated, duplicate, and "garbage" files in several sub-directories and liberated more than a megabyte of file space. Miscellaneous commands permit operations which are not file specific, like creating a new file or subdirectory.

GASP! supports file search by name, extension, or with wildcards (* only, not ?) to locate missing files. (I ran CHKDSK on my hard drive and found 842 files in 34 directories. No wonder I can't recall all of them). A very handy feature is the Move command. It is possible to mark a group of files then move them all to a different subdirectory with a single command. Move differs from Copy in that the original files are deleted after the transfer takes place. The Show command is useful for browsing around little used subdirectories. When the highlight is placed on a directory entry, pressing "S" will display that directory; if a file is highlighted, pressing "S" will display the file. One of my favorites is the Concatenate command. This will collapse all marked files into a single file in the order in which they were marked. (I'm on Startext almost every day and generally end up with a new file daily of downloaded messages. With concatenate, I collapsed 22 separate files received in April into one. Loading that one file into my word processor made it easy to delete extraneous stuff and save only that which was important. Just with the mail for one month, I saved 21 directory entries and almost 100K of disk space. Took about 20 minutes).

The real power of GASP! began to show in Chapter 7 of the manual. GASP! permits user-defined commands. Added commands enable GASP! to perform a variety of tasks, ranging from word processing to diskette formatting to execution of a BASIC program to customized print formats. Adding a command is as easy as responding to 13 prompts for each command you wish to include. A variety of examples (for both single file and multiple file



commands) are provided in the manual and on the diskette. User defined commands may use any "COM", "EXE", or "BAT" file.

Customization of GASPI is covered in Chapter 8 of the manual. Clear instructions are given for relocating GASPI configuration files, toggling overwrite protection, accessing hidden and system files, and changing display attributes, among others.

With all that power and flexibility, this software package truly deserves the adjective, Great: Is GASPI for you? I'll recommend it to anyone with a hard disk and especially for users not comfortable working directly with MS-DOS.

GASPI is available for \$39.95 from most local software dealers. The standard version will

run on the IBM PC, Compaq, AT&T, Corona, and Tandy 1000/1200/3000. Special versions for TI Professional, DEC Rainbow, and Tandy 2000 are available. Both color and monochrome monitors are supported.

John

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RATINGS SUMMARY

Product: Great American Software Package (GASPI)

Ratings:

- Does the job ****
- Easy to use ***
- Good docs ****
- Value for \$ ***

Producer: GASP, PO Box 901394, Dallas TX 75390

Price: \$39.95

=====

SWAP



SHOP

Four lines free each month to members; 5th through 10th lines at 15 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.

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Max 296-0349

WANTED: Copy of software to run a Hercules clone graphics card. Dick Pfann 214/783-7154.

DAC-EASY Accounting and Payroll. New and unregistered. \$50 for both packages. 214/349-2367.

Daisy wheel printer, 36 char./sec., parallel port. Cable included. Proportional spacing, bidirectional printing, 7K buffer, wide carriage. New, never used. \$600 (\$950 list). Call Stuart at 214/867-8012.

FOR SALE: IBM PC, dual half-height floppies, new 20 meg. hard disk, 640K memory (AST Six Pack Plus), 135 watt power supply, 8087 coprocessor, IBM mono. board, Amdek 310A amber monitor. Will also include an external Hayes 300 baud modem. Why settle for a compatible? All the above for only \$1795. Ron Hayes - work 368-1196, home 553-0686.

Instructors needed
PC software classes - Lotus, dBase, etc.
Part time. Call PCI, 458-8706.

Now we have a BBS for classified advertisements called "Classifads". Try it. Dial, press return a few times. Password is "Me". 1200/300 Baud, 8, 1, 1. (6 PM - 10 PM). Data line: 424-1910; voice line: 578-8471.

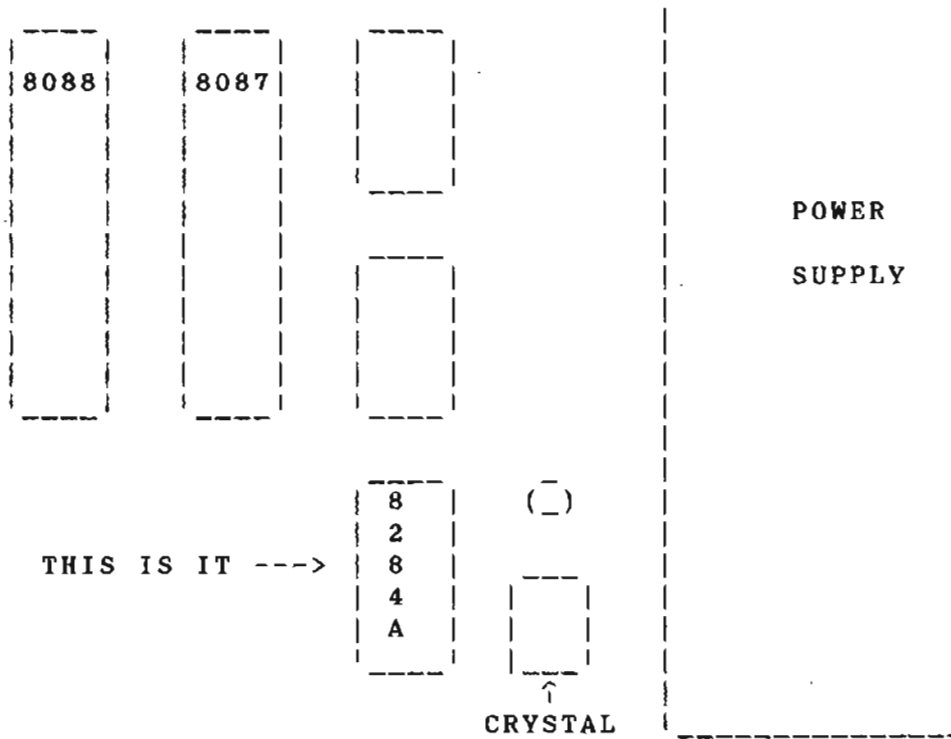
[At our May meeting someone was wondering how to add a mechanical reset to the IBM PC. We found this in GSBUG (Greater South Bay Users Group) Newsletter for February 1986. Ed.]

How to Add a True Hardware Reset Button to the IBM PC

by Bob Gentry,
Marin/Sonoma PCUG Newsletter

For about \$4.00 I added a true hardware reset button to my IBM PC. It's easy, takes about

30 minutes and works. Her's how to do it. The IBM PC 8088 processor derives it's clock signal from an Intel 8284A clock chip. This chip also outputs a reset line. to activate this reset line, an input line called power good (PWRGOOD on the logic diagrams) must be shorted to ground momentarily. This line comes into the chip on pin 11. When this pin is shorted to ground and then returned to normal, the 8284A generates the reset signal on pin 10 which is sent to the 8088 pin 21 and the boot process begins! The 8284A is located in a socket next to the power supply:



Go to Radio Shack and get:

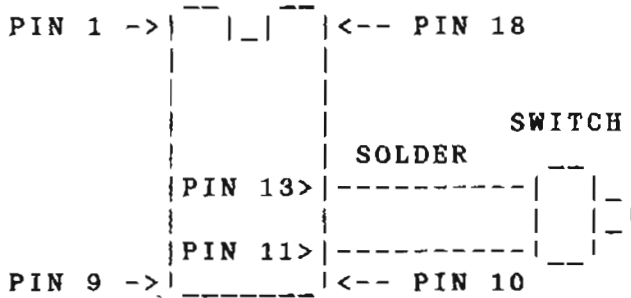
- (1) An 18-pin dip socket
- (2) An SPST momentary push button switch (Normally open. Ed.)
- (3) Light gauge wire (shielded audio 24 GA)

(I used these:)

- (CAT 276-1992)
- (CAT 275-1566)
- (CAT 278-1276)

Solder the switch across pins 11 and 13 of your new socket using the two inner wires as shown below: ▶

NOTICE THE NOTCH !!



Now remove the 8284A from the current socket and insert it in your new socket. Now insert the new socket containing the 8284A in the old socket on the motherboard. Run your switch out the back and now you have a reset button!! Note - make sure the notch in the old socket, new socket and 8284A are all aligned. Don't short any other pins and you should have no trouble. My system works O.K. and I can warm boot and still have the contents of my ram disk on my JRAM board, even if the system locks up and won't CNTL-ALT-DEL boot. It seems to be as reliable as power off.

ADVERTISING PRICES & POLICIES

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1/2 page	40.00	9" H	4 1/2" H	
full page	60.00	-	9" H	

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(approximately 8 words per line)

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or John Fribyl at 817-275-4109.

(If your PC is as old as mine, you'll find the 8284A soldered into the motherboard. "Power good" and a suitable ground for addition of the reset button are available on wires between the power supply and motherboard. These wires go to six-pin Connectors P1 and P2, both at the edge of the motherboard adjacent to the power supply. P1 is the one you want; it's toward the back of the computer. Use a "momentary ON" push button switch for your reset button. I used squeeze-on splices to connect the new reset switch to wires connected to pin 1 (power good) and pin 6 (ground) of this connector. The reset switch was installed on the blank panel above my hard disk. Ed.)

Group Purchase

The response to the initial order of PC-Write manuals for version 2.6 was overwhelming. All 60 copies were sold within the first hour. We have ordered 75 more copies which will again be available for \$17.00, including Texas sales tax, at the Disk of the Month table in the Vendor area.



Room Assignments

Saturday, 14 June 1986

Check room numbers in lobby at INFOMART



No "Special" Presentation
This Month.

9:00 - 9:55	Room
Science/Engineering	_____
DOS	_____
Genealogy (w/Apple)	_____
Graphics	_____
BASIC Applications	_____
9:45 - 10:10	
Orientation	_____

MAIN MEETING: 10:15 - 11:45

A presentation of Byte Magazine's new computer conferencing system, BIX (Byte Information Exchange).

12:00 - 12:25	Room	12:30 - 1:55	Room
Orientation	_____	Invest - N-Squared	_____
12:00 - 12:55		1:00 - 1:55	
Assembly Language	_____	Artificial Intelligence	_____
APL	_____	Business Applications	_____
C Language	_____	Communications	_____
Turbo Pascal	_____	Databases	_____
Framework	_____	2:00 - 2:55	
		Advanced Programmers	_____
		Integrated Software	_____

NEW SIGS: Framework _____, Lotus _____, UNIX _____, DATAFLEX _____

MEMBERSHIP APPLICATION



Name _____ NEW _____
 _____ RENEWAL _____
 _____ ADDR. CHANGE _____

Address _____

City _____ State _____ ZIP _____

Phone: Home _____ - _____ - _____ Metro? _____
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Send completed application with your \$24 check to:
Membership Chairman, 135 Skyline Dr., Plano, TX 75074



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

Board of Directors

Jim Graham, Chairman Jim Hoisington
Dick Barr John Pribyl
Jim Janeway

The North Texas PC Users Group is a non-profit, independent group, not associated with IBM Corporation. Membership is open to owners and others interested in exchanging ideas, information, hardware, predictions, and other items related to the 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 Graham	(214)931-8505 h
President-Elect	Jim Hoisington	(214)245-0973 h
Program Chairman	Charles Kroboth	(214)245-4763 w
Treasurer	Joe Brophy	(214)891-8187 w
Secretary	- o p e n -	() -
<u>Membership Director</u>	Bob Russell	(214)422-4269 h
<u>Disk of the Month</u>	- o p e n -	() -
<u>Public Relations</u>	Stuart Varus	(214)867-8012 h

Special Interest Groups:

SIG Coordinator	Phil Chamberlain	(214)243-5034 h
APL	Jim Fiegenshue	(214)539-9281 h
Artificial Intell.	Jim Bender	(214)423-3470 h
Assembler	John Wolley	(214)238-9443 h
Beginners	John D. Hall	(214)495-2375 h
Business Applic.	Ed Fries	(214)783-8543 w
C Language	Dr. Sid Nolte	(214)233-6178 h
Communications	Fred Williams	(214)492-1315 w
Databases	Chris Morgan	(214)245-4763 w
DOS	Herb Wilson	(214)235-3364 w
Framework	Jim Janeway	(214)349-0314 h
Genealogy	Minnie Champ	(214)341-6507 h
Graphics	Mike Durbin	(214)271-8779 h
Invest - N-Squared	Greg Morris	(214)680-1445 w
LOTUS	Susan Reyes	() -
Programmers	Dr. Neil Bennett	(214)422-5673 h
Science/Engr.	Arlin Collins	(214)890-6855 w
Turbo Pascal	Phil Chamberlain	(214)243-5034 h
UNIX	- o p e n -	() -
<u>User Group Telephone (Answerer)</u>		(214)242-4187
<u>Bulletin Board SYSOP:</u>	- o p e n -	

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

NTPCUG Membership Chairman
135 Skyline Drive
Plano, Texas 75074

Check newsletter mailing label for your membership renewal date. No separate renewal notice will be sent.

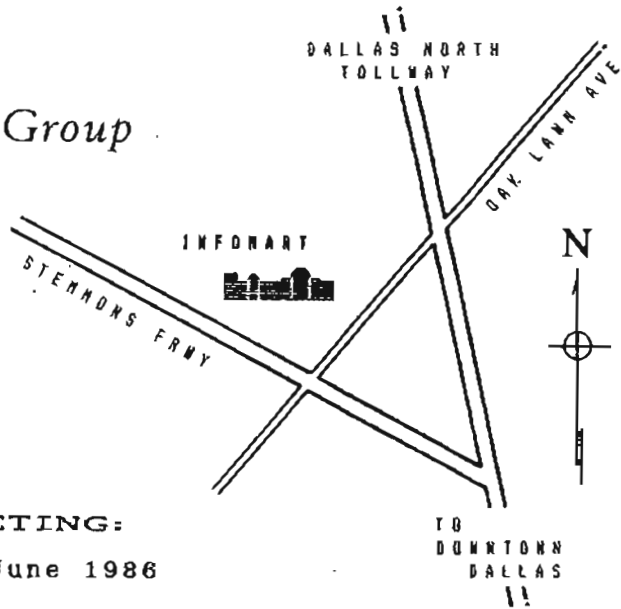


North Texas PC NEWS

2025 Rockcreek Drive, Arlington, Texas 76010



North Texas PC Users Group



NEXT MEETING:

14 June 1986