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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 10th of the month. See copy deadline below.

Circulation:

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Member distribution is 1290; 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:
Monday, April 10th.

Meeting Dates:

April Meeting - 2nd Sat (8th)
May Meeting - 3rd Sat (20th)
June Meeting - 2nd Sat (10th)

A note about the June issue...

Again we have only three weeks between meetings. The June newsletter will have to be at the printer before the May meeting takes place! Please plan your material accordingly. Thanks for your cooperation.

Submitting Articles - Summarized (See page 22 for expanded version.)

PC News articles are submitted to the newsletter exchange computer, or "Exchange" for short. (Note—This is not the NTPCUG BBS.) To anyone submitting an article, the Exchange looks much like a multi-user DOS machine.

1. Article Style. Type all copy flush left without justification. This includes headings, bylines, and the first line of each paragraph. Place a credit byline (your name) between the title and first paragraph. For ASCII text files, leave one blank line between paragraphs. For WORD .DOC files do not insert this blank line. Don't use tabs in the text; Ventura ignores imbedded tabs in the format we use for the newsletter. The < and > symbols must be doubled (i.e., << & >>) if they appear in your text.

2. Filenames & Extensions. When assigning a name to your file, be sure to use the filename extension for your wordprocessor. Use .TXT extension for ASCII files. The newsletter staff has standardized on Microsoft WORD as our word processor. If your article has formatting (i.e. bold, italics, underline, etc.) we prefer that you submit it as a WORD formatted (*.DOC) file. If it has no formatting, please send straight ASCII text (*.TXT).

3. Login Procedure. Call the Exchange at 214-830-6360 or 830-6361. Set your modem hardware and terminal emulator software to N-8-1. When you connect to the computer a Greek-looking prompt will appear. Transmit a break (Alt-B on Procomm Plus or Alt-F7 on Procomm). login: should then appear. Type ntpcug (all lower case). Immediately you will see password: Type news (all lower case). You will get a welcome message. The NTPCUG> prompt will appear. You are logged in and running.

4. Commands. CAUTION - All commands must be lower case only.

Familiar commands: dir, del, rename, copy, and type all work similar to the way they work in DOS. Other commands: mail, u modem, kermi, names, and submit are detailed elsewhere in this article. For help, type hints.

5. Submitting Articles. Log in to the Exchange and upload the file into the directory. Then move the file to the Editor's home directory simply by typing submit filename. After "submitting" the file, it will no longer appear in NTPCUG> directory.

UPLOADING AND DOWNLOADING: Either the XMODEM (called u modem on Unix) or KERMIT protocols are available. For details type xhelp for u modem (XMODEM) help and khelp for KERMIT help. Examples of use are in each help file.

6. Mail. To send mail to assistant editors, you must know their login-name. Type names to see login-names of current staff members. To send mail type mail login-name. (Example: mail jgreen.) The cursor will be positioned on the next line. Type your mail message with <Enter> at the end of each line. When finished, type <Ctrl-d> to send the message. The NTPCUG> prompt will reappear.

7. Logoff. To log off the computer, type <Ctrl-d>. Do not disconnect from the computer without logging off, you will hang the modem. After typing <Ctrl-d> you will receive a logoff statement on the screen followed by the Greek-looking prompt. This is your signal logoff is complete and for you to hang up your modem. Note: Your telephone line will remain connected to the BBS number until you give the modem a command to hang up.

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April 8

Timothy Carmichael & Charles Kroboth

9:00 AM - 11:00 AM

askSam Systems Inc.**askSam - A Powerful Personal Information Manager**

Speaker: Tom Shae

AskSam is a text database which allows typed or imported data (structured or unstructured) to be sorted and reported in many useful ways. Context searches and hypertext are supported. Tom will demonstrate askSam and answer your questions about it, and will give away three copies to attending NTPCUG members.

10:00 AM - 11:00 AM

Micrografx Inc.**Graphics in Windows Using Designer and Graph Plus**

Speaker: Trol Heinrich

A professional Windows-based graphics system can be implemented with the technical drawing capabilities of Designer combined with the business presentation power of Graph Plus. This software will be demonstrated with a VGA projector for your viewing pleasure.

Prez Sez...**Microsoft Update**

I checked with Microsoft last Thursday and Bill Gates visit to INFOMART as a guest of Apple Corps is still on for May 20. Current plans are for him to speak twice during the day in the auditorium. This probably means that our main meeting will be in one of the two large rooms on the seventh floor. Check the overhead projectors for the exact schedule when you arrive in May.

When I called, I was lucky to find the user group coordinator in the office. It seems that a late winter snowstorm had stranded her and a few other unlucky workers at the office for two days. I thought that was real funny until yesterday. I am writing this column on the weekend of March 5th. That same snowstorm has made it from Seattle to Dallas. Luckily, I'm stranded at home.

Membership Chairman

Robert Kolodner, our membership chairman has turned over his duties to John Mackoy. Rob, who became a father in September, wanted to spend more time with his new son, William. The membership chairman is one of those jobs that requires a lot of work and so does being a father. William even attended a couple of officers meetings with his dad. Thank you Rob.

Vendor Presentations.

For the past year, John Ogle has been helping Timothy Carmichael and Tom Folston by recruiting companies to make presentations at our meetings. As John's responsibilities and travel out of town have increased, it has been increasingly difficult for to con-

fact speakers. So we've found a replacement for John.

Charles Kroboth who did the job for so many years has agreed to help Timothy with the recruiting for our presentations. If any of you have any suggestions, you can pass them on to Timothy or to Charles.

Thanks John. Welcome back Charles.

BBS

Kent Cobb reports that now that we have the 386 computer up and running the BBS, usage has increased. The BBS committee is looking at a whole series of proposals to expand the system.

Distinguished Service Awards

In case you missed the March meeting, we presented four of our members with plaques for their contribution to the North Texas PC Users Group. Those four members are: Phil Chamberlain Robert Kolodner David McGehee Bob Presley

Membership Application Form

We reworked our membership application form in March. The new form lists some of the SIG's that have started since we created the old form. A special thanks is due to Ken Conner, our treasurer, for the great job his people did in laying the out the form on their Linotype machine.

Soft Wear?

Every time I have bought some computer "stuff" lately, it has included a piece of clothing. I now have a Microsoft sweatshirt, a SuperCalc 5 hat and Paradise VGA and ADIC tape drive tee shirts. I'm not sure what the logic in all this is but it sure saves me time shopping for clothes.

Jim

□

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Introduction To SQL

Fred Williams

In this series of articles I will be demonstrating some of the simple powers of SQL. There are things that I will not show you that you would learn if you were being taught or were studying SQL. In other words, this is not an instruction in SQL, only a "test ride". If in the end, you are still unimpressed with the potential of SQL and relational databases, then I must question my power of presentation. If you leave here wishing to learn more, then I have done what I set out to do.

In the past few years we have seen phenomenal advances in the design and performance of database products. The database design that has evolved from all of this rapid change is the "relational" database. The relational database model has passed the emerging technology stage and is entering the maturing product category. The most visible indicator of this maturing process is the evolution of "standards" which relate to relational databases and their environment.

For the average computer user, one of the most visible results of this standardization process is the evolution of the Structured Query Language, or SQL, or a lesser used term Sequel (pronounced "See, Quill"). SQL has evolved along with the relational database design and is now quickly becoming the defacto method of accessing and manipulating data resident in a relational database. SQL has been "standardized" by an American National Standards Institute (ANSI) subcommittee. For a database access method to carry the title of SQL, it should meet the minimum standards as set forth in the published ANSI standards for the SQL Language.

As the name implies, SQL is a computer language designed to inquire data from a database. But, the SQL name is also misleading in the fact that SQL can do much more than inquire data. SQL may be used to create and alter database tables, update database table data, and provide data security in addition to providing a data query service. SQL is considered to be a "layered" language product. What is meant by this is that the language has the ability to supply very simple data inquiry services, but has the depth and strength to also provide for highly complex and sophisticated data manipulation.

Having read this far, you are probably either anxious for more or are asking "What has all this got to do

with me and my personal computer?" Well, for those who are questioning the relevance of all this, the examples generated for this article were done using a version of the relational database product ORACLE which runs on 80286 and 80386 based personal computers. Additionally, almost all personal computer database product suppliers have either announced SQL for their products or are in the process of developing SQL servers.

Speaking of database products, I guess I should give a thumbnail description of what a relational database is. Relational databases are very simple in concept and are therefore very easy for the user to understand. Yes, I am afraid we are talking "user friendly" database here! Relational databases appear to the outside world as a set of two dimensional "tables". The data elements in any table (should) in some way relate to each other, and based on the level of design ability of the database designer(s), the set of tables in a database should in some way relate to the overall design and purpose of the database.

The data we will be using in this article is stored in two database tables. The main table contains data related to each employee of our imagined business organization and is named quite simply "EMP". The other table we will be using is made up of data related to the departments of our organization and is named "DEPT". We will be able to demonstrate the first level of SQL functionality using just these two tables and their simple contents.

In this article I will demonstrate only the basic inquiry capabilities of SQL. Should there be enough interest from the readers, and if I have the time, I will do a series of articles on the subject of SQL. I'm also refraining from supplying any data manipulation information in the first articles in order to give the organizations who may be affected time to secure their data before I turn a bunch of database destroyers loose on the world! My Flame Suit is in the shop getting another layer of protection added in preparation for the first "Update" episode.

Well, let's take an initial look at the complete content of the tables we will be using. To do this we will use our first SQL statements. These are about as simple an SQL statement as can be generated. You should immediately notice that the SQL language is very "English" like. I will not go so far as to say that it is not a programming language and that you will never again have to ask that surly, ill-tempered, bad mannered programming staff for help ever again, but knowing SQL should allow you to get some of your questions answered without suffering the degrading humiliation of having to ask Information Systems Services for support and getting in the notorious and endless "BACKLOG" queue.

►

Also, you will notice that SQL is a non-procedural language. This means that when writing an SQL statement you are not concerned with how the information is physically stored and what steps must be taken to retrieve the desired information. With SQL your only concern is with defining and qualifying the data you wish to deal with. In the simplest SQL statement, you must define the data you wish to SELECT and the database table FROM which you wish to select the data. To select all of the data elements ("columns") in a database table row ("record"), you should use the special symbol "*".

Therefore, in order to see everything stored in our employee "EMP" table, we would use the following SQL statement:

```
select * from emp;
```

The result of this statement would be a display that looks like this:

EmpNo	Ename	Job	Mgr	HireDate	Sal	Comm	DeptNo
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7654	MARTIN	SALESMAN	7698	28-SEP-81	250	1400	30
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7788	SCOTT	ANALYST	7566	09-DEC-82	3000		20
7839	KING	PRESIDENT		17-NOV-81	5000		10
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7878	ADAMS	CLERK	7788	12-JAN-83	1100		20
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7934	MILLER	CLERK	7782	23-JAN-82	1300		10

Please study the visual layout of our answer "table". This is an accurate visualization of a relational database table. It is composed of, vertical columns of data, where each column possesses a unique column heading, and horizontal rows, with each row containing the data elements that are related to that row's subject. In this example, the data columns are data elements that are related to each row's individual employee.

To see our department table we would enter the following SQL statement:

```
select * from dept;
```

and we would see the following display:

DeptNo	Dname	Loc
10	ACCOUNTING	NEWYORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON

You might be saying, "Oh that looks too easy, there must be some way that I can mess it up and feel like a fool." Well the bad news is, yes you can mess it up; but, the good news is, you are allowed a lot more freedom for "creative" writing that in most computer languages. And, as for the "fool" part, the only computer fool I know is the guy who stands there and

says he has never made a mistake, and really believes you're going to believe him.

SQL is pretty much a "free form" language. SQL does expect you to present your requests in a "logical" context. (Don't worry, we are not talking Mr. Spock level of logic, just reasonable.) You may format the request in whatever manner you like. You will see while reading this article that I have taken some liberties with the SQL statement format just to show you some of the possibilities. Although you cannot completely ignore case, upper and lower case is in most contexts irrelevant.

There are many ways to reduce the amount of data returned in answer to an inquiry. This is done by specifying data "qualifiers" in our SELECT statement. One of the simplest and most straightforward methods is to use the WHERE SQL verb. The WHERE verb allows us to provide data qualification criteria which will be used to reduce the volume of data returned. This allows us to ask more specific questions of our database and receive more specific answers to those questions.

For example, to see all of our employees who are assigned to department number thirty (30), (notice I didn't say work in) we would use the following SQL statement:

```
select *
from emp
where deptno = 30;
```

The result of this inquiry would display only those employees who are assigned to department 30:

EmpNo	Ename	Job	Mgr	HireDate	Sal	Comm	DeptNo
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7900	JAMES	CLERK	7698	03-DEC-81	950		30

Notice that in the previous SQL WHERE clause we used "DEPTNO" to name the data column we wished to apply the qualification to. The column headings shown at the top of each display are the names by which the table elements are known to the database system. Therefore, you should use the related column heading name to specify a particular data item in an SQL statement.

So far we have seen the display of all of the data items for each employee when we have done our inquiries. In the next example we will see how to control the number and position of the data elements returned in our answer. The next example will also show how to further qualify the data that will be returned.

To have only a selected set of data items returned, in the order we specify, we will enter the data item names in a list in the SELECT clause rather than

using the "**and**". The next inquiry's WHERE clause is also a little more complex to further qualify the employee rows that will be returned in our answer. This next inquiry will show us only those employees whose job title is "MANAGER" and whose salary is greater than (>) \$2800.00:

```
select ename, job, sal
from emp
where job = 'MANAGER'
and sal > 2800;
```

As you can see by our answer, we don't have many overpaid managers in our organization. And to think, I lead you to believe this was a real world example!

ENAME	JOB	SAL
JONES	MANAGER	2975
BLAKE	MANAGER	2850

Yes, I am afraid to say, as you can tell from the previous example, that SQL does require that you use a certain number of mathematical and other special symbols when describing relationships. Remember the key words are "English like" not "unlike programming language". If you have spent any time at all using any personal computer software packages that require mathematical symbols, such as a spreadsheet, you should adapt quickly to this SQL requirement.

I guess you could call the next inquiry the "Big Shot" or "High Roller" inquiry, because this time we will ask to see every employee who is either a "MANAGER" OR is paid more than \$2800.00. Notice the context of our next WHERE clause.

```
select ename, job, sal
from emp
where job = 'MANAGER'
or sal > 2800;
```

And the list of "High Rollers" is:

ENAME	JOB	SAL
JONES	MANAGER	2975
BLAKE	MANAGER	2850
CLARK	MANAGER	2450
SCOTT	ANALYST	3000
KING	PRESIDENT	5000
FORD	ANALYST	3000

So far our requests have been "inclusive". We have asked for employees that are members of (are included in) a group. We can also request to see things which are not in a selected group, or "exclusive". In the next SQL WHERE clause, we will combine both inclusive and exclusive qualifiers to get the answer we want. We wish to see all the employees who are "MANAGERS" (inclusive) but who are not assigned to department number 30 (exclusive). Please do not pass out! The special symbol (**!=**) used for "not equal" is not required; I'm afraid I used some SQL specific shorthand while you were watching. You could use "<>" just as well:

```
select ename, job, deptno
from emp
where job = 'MANAGER'
and deptno != 30;
```

And the answer is:

ENAME	JOB	DEPTNO
JONES	MANAGER	20
CLARK	MANAGER	10

SQL also allows you to ask questions that include ranges of values. To define a range, we use the special SQL operator **BETWEEN** in our WHERE clause. In our next inquiry, we will ask to see the employee names and salaries of only those employees whose salary is between \$1200 and \$1400:

```
select ename, sal
from emp
where sal between 1200 and 1400;
```

And our answer is:

ENAME	SAL
WARD	1250
MARTIN	1250
MILLER	1300

In the next example we will ask for data from our department table arranged as department name, location, and department number. We will also specify that we only wish to see those departments whose numbers are **IN** a particular list. The opening and closing parentheses are required, and the item values in the list must be separated by a valid separator character. I did say "free form", not "wild and crazy"!

```
select dname, loc, deptno
from dept
where deptno in(10,30);
```

And our answer contains only the department numbers 10 and 30:

DNAME	LOC	DEPTNO
ACCOUNTING	NEW YORK	10
SALES	CHICAGO	30

There is a handy SQL operator available for when you kinda' know what you want. You can find something like what you want by using the special SQL operator **LIKE**. For example to find all of the employee names that start with an "A" you would use the following SQL statement:

```
select ename
from emp
where ename like 'A%';
```

The special percent character (%) is used to say, "I don't care about anything after here". Or more technically, any string of zero or more characters. In this example the answer contains all of those employees whose names begin with an "A" no matter how long the name is or what follows the leading "A":

```

ENAME
-----
ALLEN
ADAMS
    
```

```

PRESIDENT 5000      KING
SALESMAN  1600      ALLEN
SALESMAN  1500      TURNER
SALESMAN  1250      WARD
SALESMAN  1250      MARTIN
    
```

Well, simple examples give simple results. Like the Wang salesman who was bad to say, "Imagine if you will..." two names that are not the same length but begin with an "A", like "Adams" and "Atascadero". Oh well, on to the next example.

So far we have controlled the order in which the vertical data columns are displayed, but we have settled for whatever order that SQL has presented the horizontal rows in our answers. Fear not! There is a way to bring order to chaos. The most logical thing to do if you want order, is to simply ask for order. This is done in SQL by using the ORDER BY clause. In our next example, we will ask for the salary, job classification, and employee name for all of the employees that are assigned to department 30. By using the ORDER BY clause, we will ask that they be presented in ascending salary sequence:

```

select  sal, job, ename
from    emp
where   deptno = 30
order  by sal;
    
```

Please note that the default order of the ORDER BY clause is ascending sequence:

Sal	Job	Ename
950	CLERK	JAMES
1250	SALESMAN	WARD
1250	SALESMAN	MARTIN
1500	SALESMAN	TURNER
1600	SALESMAN	ALLEN
2850	MANAGER	BLAKE

In our next example, we will ask that our inquiry result be ordered (sorted) based on two data items, "JOB" and "SAL", and that the salaries will be in descending order. The ordering will occur with the first data column (field) specified in the ORDER BY clause being the highest order with any following specified fields ordered within the previous field, within, ... ad nauseam:

```

select  job, sal, ename
from    emp
order  by job, sal desc
    
```

In our resulting display, please note that the answer rows are displayed in ascending "JOB" order, with "SAL" salary in descending order within job. Please note the DESC in our ORDER BY clause following the "SAL" data name:

Job	Sal	Ename
ANALYST	3000	SCOTT
ANALYST	3000	FORD
CLERK	1300	MILLER
CLERK	1100	ADAMS
CLERK	950	JAMES
CLERK	800	SMITH
MANAGER	2975	JONES
MANAGER	2850	BLAKE
MANAGER	2450	CLARK

SQL provides a means for further reducing data returned in an answer by using a special operator in the SELECT clause. This special operator is DISTINCT. The DISTINCT operator is used when you wish to have only a single occurrence of a data value returned in the answer to a query.

For this next example we will ask for a list of the distinct job classifications in our employee table. There are a total of fourteen employees in the employee table and each is assigned a job classification:

What we would like to see in our next query answer is a list of job classifications only, so we use the DISTINCT operator in our SELECT clause. We do not use a WHERE clause for this request, as we wish for SQL to examine every employee's job classification:

```

select distinct job
from emp;
    
```

From the fourteen employee jobs listed in the employee table we find there are only five unique job classifications:

Job
ANALYST
CLERK
MANAGER
PRESIDENT
SALESMAN

To this point we have been using only a single table to query information. Inquiring a single table in the real world will most likely not answer every question you ever needed to ask. Fact is, I'm getting a little bored with single table examples myself. Anyway, I would like to know where our employee named "ALLEN" is located.

Using our single table approach. We must first ask what department "ALLEN" is assigned to: (Notice the run-on format of our statement.)

```

select ename,deptno from emp where
ename='ALLEN';
    
```

This gives us the department number to which "ALLEN" is assigned:

Ename	DeptNo
ALLEN	30

Now to find out where department 30 is located, using the department table, we have to ask:

```

select loc
from dept
where deptno = 30;
    
```


Cipher Lore

No. 2 in a Series

John K. Taber

Once you get hooked on computer cryptography, sooner or later you will stumble over the export laws. The legal fact is that you cannot export encryption software (or devices) of any sort without a license from the State Department. A typical reaction on hearing of this restriction is that it is silly, especially for public domain ciphers like the DES. Another reaction is incredulity. I've been told for example that Philippe Kahn learned purely by accident that an export license was required for Borland's Superkey, and was astounded because the DES is no secret. Fortunately, he was advised in time before the law was violated, and the law carries serious criminal and administrative penalties.

To many of us, the law seems absurd. Published algorithms can be exported freely without license. Books contain not only the NBS algorithm for the Data Encryption Standard, but complete printed code in Pascal or C. Yet, a computer program that implements the DES

SQL continued

And we finally find out that "ALLEN", who is assigned to department 30, is located in Chicago, or does some serious commuting:

```

LOC
-----
CHICAGO

```

I have attempted to present only ANSI standard SQL. I will continue this in any future articles on the subject of SQL. I may, on occasion, slip as I do not currently own a copy of the ANSI standard for SQL. As I stated earlier, I am using a copy of ORACLE's relational database product to develop the examples for this series. If I question the "standardness" of a SQL feature or context, I have cross-checked it with what IBM DB2 (Data Base II is IBM's mainframe relational database product) literature I have available.

In the next article I'll show you how to use a single inquiry to determine the city in which our employee Allen works, and demonstrate some even more complex inquiry examples. After that, who knows, I may be ready to demonstrate how to modify the contents of a database table.

Fred a

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must have an export license. Even more absurd, a Little Orphan Annie Decoder Ring, worthless for serious cryptography, must have an export license before it can be taken out of the country in any manner. You can't legally take the Decoder Ring with you on a vacation to Paris without the license. Furthermore, you probably can't get the license.

So, what is this law that governs American cryptography? What is its purpose? Is it really, as many programmers imagine, intended to keep cryptography out of Pango Pango (the Pango Pango theory)? Is it really to keep cryptography out of the hands of the little guy (the Populist theory)? Is it really to cut down on encrypted transmissions just to make electronic eavesdropping easier for the National Security Agency (the CIA theory)?

Should we care? Well, the Dept of Justice has begun prosecuting and convicting people for exporting encryption. A couple in Miami who had just started a small business dealing in TV satellite antenna equipment have been tried and convicted for attempting to export five video decoders to Mexico. The decoders use a DES chip, and legally, a license is needed to export them. This trial was the very first in our history under this law for cryptographic devices. And we very soon will be able to enjoy a similar trial right here in Dallas of a much larger dealer for the same offense. I hope you all come watch the trial with me.

Since cryptography is becoming more prevalent in our society, even becoming an end consumer item, it seems prudent to understand its legal liabilities. Needless to say, the Miami couple didn't know about this law, and probably the dealer to be tried here didn't either.

The law itself is the Arms Export and Import Control Act, which was enacted in 1969, and replaced an earlier statute. As best as I can gather, the law goes back to the 50s in original form, but has been replaced and amended several times over the decades. The one in force now is the 1969 version, amended in the 70s. It does not support the Pango Pango theory, the Populist theory or the CIA theory.

The purpose of the Act is to give the President an instrument of foreign policy. The idea is easy enough to understand - if our Government likes the behavior of a foreign country, it will permit our citizens and companies to sell them weapons. If the foreign country displeases us, it won't. Since our weapons are in demand, it is hoped that foreign countries will try to please us.

A second, important purpose is security. If the Government thinks a particular foreign country will use these weapons to our harm, it can forbid the sale.

The purpose is clearly stated in the first sentence of the Act. There is nothing in the Act that forbids the export of the non-secret DES, or of the strongest and most secret military cryptography to Pango Pango. But what it does do is make such sales and exports depend on our current policy! ▶

I don't think that any fair minded programmer who reads the Act would have objections to it. Most of the items covered in the Munitions List of the International Traffic in Arms Regulations (ITAR -- this is the rules and regulations part of the Act to be found in the Codified Federal Regulations separate from the Act itself for those of you not familiar with law) are clearly military hardware, data, and services. It covers items like firearms, artillery, ammunition, missiles bombs and mines, explosives, vessels of war, military training equipment, military electronics, poison gases, nukes, submarines, and secret items that can't be listed by name for security reasons.

The Act appears to be firmly grounded in the Constitution which gives the Government the authority to conduct foreign policy and to regulate foreign commerce.

It also covers "technical data" and services connected with these items. We'll have more to say about "technical data" later because it affects crypto.

One category is Category XIII, Auxiliary Military Equipment. It is this category that lists "cryptographic devices and software (encoding and decoding)", along with other equipment like space cameras, military armor plating, military chemiluminescent compounds, and metal embrittling agents.

The law requires manufacturers or exporters of the hardware, the data, and the services to REGISTER with the State Department whether or not they intend to export. In other words if you manufacture Little Orphan Annie Decoder Rings, perhaps to give away with children's cereal, you must register as an Arms Manufacturer. It is a criminal offense not to.

Once you are registered, then you can apply for an export license. You cannot apply for an export license unless you are registered. Of course that doesn't mean you will get the license, since that depends on current policy, and where you want to export the rings. Generally, NATO countries are ok for licenses, Soviet bloc countries are not. No surprises there.

Anyhow, that is the formal control mechanism that allows the Government to say who does and who doesn't get our arms. It is a carefully written law. I'm convinced that every word was weighed six ways from Sunday. It means to control all aspects of arms export (and import too), including specialized knowledge, materials and means of arms making. "Export" is deliberately defined very broadly. Just about anything you can think of is an export. Merely giving a Little Orphan Annie Decoder Ring to a foreigner in Dallas is an export requiring a license. Going overseas to help a foreign company make Little Orphan Annie Decoder Rings is an export requiring a license.

The law in toto reads sensibly enough, and I believe is firmly grounded constitutionally. Then why does it seem so absurd applied to cryptography? Stay tuned for the answer.

John 

ON COMPLEXITY

No. 26 in a Series.

Jim Holsington

*"A professional takes short cuts
but never cuts corners."*

This is one of Will Baden's programming proverbs and I had to re-learn it last month.

December and January are usually my busiest months. December brings year end processing and January is the month that companies want to start new systems. So it is the time of year when I am always trying to work smarter and faster. Sometimes I only do it faster.

Short cuts are ways that you can do more with less. The best examples of short cuts are Macros. In the early days of computing, Macros saved time and work by generating segments of assembler code. Today, we use Macros to generate key strokes or series of instructions to the programs we are running on our computers.

Cutting corners is one of those things that we do when time is precious and we run out of short cuts. Cutting corners is:

- not backing up your data.
- not testing your program against sample data before using the program on live data.
- not labelling the diskettes that contain the results of your day-long project.
- not saving your work at intermediate points while working on a long project.
- assuming that the bulletin board will be up the night of John Pribyl's publication deadline.
- (assuming that the bulletin board will be up the morning after John Pribyl's publication deadline.)
- assuming that those strange file names that just appeared on the hard disk are the result of a glitch in the video card.
- assuming that there is enough paper in the box under the printer to print the ten page report that has to be on the boss's desk in five minutes.
- assuming that because a 360k diskette formatted out to a 1.2m, that you can reliably store data on it for more than ten minutes.
- using version 1 of any software package for meaningful work.

The list of ways to cut corners is endless. The result is usually the same.

Jim 



Disk of the Month

Howard B. Hamllton, Jr., Ph.D.

February Disk of the Month

The Disk of the Month for February was Disk 343, Cuning Football, CFB version 1.2, 2/88, by Cass Cunningham. This is a dynamic, interactive, menu driven football game for one or two players. It tests both skill and strategy, requiring a user to guide players as well as call plays. The program requires an IBM compatible computer with an EGA or VGA adapter. Cuning Football runs best on systems with 256K or more available RAM, but it may work with less. CFB 1.2 allows the user to select either the keypad, a mouse, or a joystick as the controlling input device.

This is a nice game which moves fast or slow, long or short depending on the options you choose. This is a menu driven game with many options. It takes several plays to get familiar with the program's operation. The success of your plays is dependent upon how you call the plays, timing of your throws, and your abilities to smash the defensive line and squash quarterbacks, just like in real life!?!? The graphics are not as great as some commercial products but they are adequate to play this game. This game is for the Tom Landry in all of us, a good pulse raiser, for the person who wants to do more than just watch a football game on the tube. Playing this game is a good way for kids in junior leagues to learn the terminology of the game. They can develop their mental grasp of the game while improving their computer skills in a fun way.

CFB was reviewed by Vincent Gaines.

Other Disks Published In February.

Disk 344, DataPerfect Demonstration from WordPerfect Corporation, 3/88.

Another Database program, just what you don't need right? Maybe. But this one can be operated with an interface based on the familiar WordPerfect structure. It is also fully integrated with the other WordPerfect products. Ready for use with a network, perhaps you should give this demo a look. For those who are seeking further information on the product, PC magazine's Gene Smilgiewicz has reviewed DataPerfect. This demonstration version of DataPerfect is a slideshow style presentation. The demo leads you through the process of creating the database, and in using the query and report generating capacities of a database. If you have never used a database package before, this is a nice tutorial on the subject.

DataPerfect Demo was reviewed by Vincent Gaines.

Disk 345, Directory Utilities #1. This disk is a collection of several programs that do special things with directories. Some are simple, double columns, sorts and such. Others are complex and do many wonderful things. This collection contains the following:

ARCV117	Vernon Berg's ARC file lister, lists contents of ARC files
ARFF	Archive File Finder, lists files from archives in DIR format
DDIA	double column directory
DIRNOTES	maintain a 40 character description of the files in any directory
DIRW	fast six column wide directory display
DR	multi-function directory utility, move, sorting, del, view, etc.
DX	Directory Extended, version 1.8
EDIR	extended directory, shows file attributes
SD and SDE	sort directory programs written or modified by Bob Stephan
XDEL	directory scan-and-delete utility
XDIR	pop-up directory lister (TSR)
XYCOUNT	The main program in Bob Stephan's collection: counts the number of words in XyWrite files.

DX.COM is a command line driven file management program. It has 59 command line switches and a 56 page user manual. DX with no command switches will give you a directory listing with double columns, file attributes, times, and disk statistics. It offers the usual niceties of a double column directory listing, sorting, different display formats, colors, and full path support. It will match and/or search with time, date, attribute or size specifications, and extensions of the wildcard (* ?) features of DOS. Advanced features include move, delete, change attributes with or without verification. DX can process a directory, creating input for batch file execution. If used in a batch file, execution can be controlled by the ERRORLEVEL set by DX. Don't let the 59 command line switches scare you, it is possible to put your favorite ones in an environment variable which DX will read each time it executes. Using this method will give you a fully customized replacement for the DOS DIR command.

DR.COM provides an set of file management facilities for sorting, viewing, renaming, deleting, and moving files to another directory. The default filename display (21 per page, to a maximum of 721) is sorted alphabetically. Various switches may be added to the command to sort by other criteria. When a DR listing is on screen, a menu is displayed showing further options. XDIR.COM is memory-resident, and allows you to display the filenames in any drive/directory even when running another applications. Once loaded (normally as an entry in your AUTOEXEC.BAT file), pressing the <Alt-> (the Alt and the period key combination) causes a blank window to pop up on the screen. Pressing Enter then displays the first 40 filenames of your current directory in the window. Pressing Esc once clears the display, and pressing it a second time returns you to your previous application. To view other directories, simply enter their appropriate path designation (including drive, if different) before pressing Enter, when the window is blank.

These programs were reviewed by Lonny Cordell and Charles Carter.

Disk 346, DoList 2.5, 8/21/88, is a multi-function command line utility by Marc Perkel, Computer Time. It is shareware and the cost to register is \$39.95. Commercial and Site Licenses are available.

This program can be used as a resident shell program, or it may be used just to perform certain multiple task functions independently. DoList records your command key strokes and these can be replayed using the up and down arrow keys. Directories visited are also recorded and can be revisited by pressing the TAB key. It can do tasks such as using the directory information on drive A:, generate a list of names and delete the same files from an hard drive such as C:. It can also scan the entire directory structure on a hard drive and remove selected files such as all *.BAK files. This is handy for people that use programs that generate *.BAK files. It also appears to be handy for people that use ARC and PKARC programs to selectively pick new files to archive.

The disk contains several enhanced DOS commands and useful standalone utilities. One of these is PD. PD allows you to move around drives and sub-directories by simply using single letter keystrokes. PD also has the ability to create a map of the hard drive's directory structure, and using this information, you can move to nested sub-directories by simply typing the last subdirectory name as a parameter to PD. Overall the programs on the disk make up a powerful toolkit whether you use the DoList program as a resident shell or simply a program to run.

DOLIST.CFG is DoList's configuration file. The example configuration file references programs that are not included on this disk. You can easily edit this file to invoke your text editor, ARC program, directory utility and other frequently used programs. CFG entries include Alt, Shift and Ctrl with function keys and Alt-Character combinations and can optionally include an ENTER at the end if needed.

The disk contains the following files:

DOHELP	EXE	Help file for programs
DOLIST	CFG	Configuration for above program
DOLIST	DOC	Documentation for usage and parameters
DOLIST	EXE	Main program to use
FIND	EXE	Enhanced DOS find program
FORK	EXE	Program that allows both screen and file output
MORE	EXE	Enhanced DOS more program
PD	EXE	Directory switch program simplified version of CD
PIPEDIR	EXE	Used to pipe filenames into other programs
SORT	EXE	Enhanced DOS sort program
WHEREIS	EXE	Pipedir with certain parameters pre-selected

DoList was reviewed by Roy Minut.

Disk Cache Programs.

To complement Jim Green's article on the performance of disk caching programs in the December issue of this newsletter ("A Little Knowledge...", pp. 25-26), Charles Carter has gathered a collection of five such programs, Disk 347, Disk Cache Utilities #1. This collection includes caches that reside in conventional, expanded and extended memory. One even includes its assembly language source code. You can try each of these programs to determine which gives the best performance on your system. Judgments of which is best will likely be somewhat subjective. The file CACHE.ART is an excellent overview of caching in general and each program's doc file also has useful general information.

Disk caches are based on the idea that you are likely to want to access a file that you accessed recently. This is not only true for obvious data files like a database which you might search several times in a row, but also for program overlays and for the files that DOS often consults to locate other files: the FAT and the various directories, especially the root directory.

Once loaded, cache programs act in the background and require no action or input from the user. But some of these programs have option switches which you'll need to study carefully to load the program to operate in an optimal manner. For many, the defaults will be correct, but you'll at least want to adjust the cache size.

On the basis of time tests alone, it is difficult to pick one among these programs. Your choice will have to depend on factors like the amount of conventional memory they use, the particular characteristics of your system and compatibility with other software you happen to use.

The files on this disk are:

CACHE	ARC	Conventional memory cache, includes write cache (CAUTION).
CACHE2	ARC	Conventional memory cache, ASM source included.
EMCACHE	ARC	EMC110.COM Expanded memory cache.
PCCACHE	ARC	PC-CACHE.SYS Device driver form of cache. (640k,ems,ext)
SHAREPCK	ARC	Conventional memory cache.
CACHE	ART	Everything you wanted to know about caches, but didn't know who to ask.

Because of the nature of cache software, it should be used cautiously. Although these programs were tested on an IBM PC and XT and AT clones, and worked fine, they may be incompatible with certain software. You should back up your disks before trying this software. It is not generally advisable to cache disk writes, although one of these programs does have that option. If you wish to experiment with write caches, be sure to have reliable back-up disks.

PC-CACHE Software donated by the author, Jim Green. Other cache software was downloaded from The Flying Dutchman BBS by C. Carter.

This review was prepared by Charles Carter.

Income Tax Preparation Software

We have two more income tax preparation software disks published in February. The first, Disk 348, FEDTAX8A Abbrev. V 0.2, 12/31/88, is a 1988 Tax Template for Lotus 1-2-3 by Leslie A. Wheeler. The shareware version includes only Form 1040, Schedules A and B. Shareware registration is \$20.00. Commercial version is available for \$35.00.

WHAT IT DOES: This is a Lotus 123 worksheet to calculate and print 1988 Federal tax form 1040 and Schedules A and B. The commercial version also has Schedules D, E, F, SE, and Forms 2106, 2119, 2441, 3903, 4562, 6251, 8606, and 8615. The 1987 shareware template from this author included these extra schedules as well as schedule C. There is no documentation with the shareware version. 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 may need are not included; you must obtain such forms and fill them out on your own. A display window continuously shows taxable income, total tax, payments and refund or tax due. In a trial run FEDTAX8A used the total of the itemized deductions, even though the standard deduction was larger; it is not known whether this is a flaw in the program, or we neglected to make a proper entry into some required cell. Be sure to check to see if the standard deduction (which has been increased for 1988) exceeds your itemized deductions, and make adjustments as required.

REQUIREMENTS: IBM PC or compatible, Printer, Lotus 123 release 2.0 or newer. RAM requirements not stated, but last years template ran in 448K and this years template is smaller.

The other income tax preparation program is Disk 354, Share-TAX/1040 12/27/88, Bammel Software, 1307 Westridge Dr., Duncanville, TX 75116, BBS: 709-6567. Shareware registration is \$5.00. Enhanced version (USA-Tax/1040) is \$24.00.

WHAT IT DOES: Using the data you enter, Share-TAX/1040 does all computations and prints out your complete tax return (Form 1040 and Schedules A, B, and C). For all schedules and forms other than Form 1040, it prints substitute forms approved by the IRS. Share-TAX/1040 will not make a tax expert out of you. It only performs the mechanics of tax return preparation using the numbers you supply. Therefore, you must know as much about taxes as you would if you were filling out your forms with pencil and eraser. You need only enter the correct numbers, and Share-TAX/1040 will do all computations for you, forwarding amounts from one form to another as necessary. The order in which you enter your data is arbitrary, and you can at any time suspend your data entry to work on a different tax return or exit the program. Then later you can resume where you left off. When tax season arrives, you might want to have an idea of what your tax bite is going to be before you have all necessary information. With Share-TAX/1040, you can enter the data you have, estimate the significant items you don't have, and in a few seconds have your estimate. When you get the missing numbers, you simply enter them, and in just a few moments have your complete tax return ready to submit to the IRS.

REQUIREMENTS: IBM PC or compatible, one or two diskettes or hard disk, and printer. You need at least 200K of free memory plus that required by DOS and any resident utilities.

*** WARNING ***

This and other tax preparation programs should be thought of as fast and semi-smart adding machines only. The program cannot contain all the logic necessary to connect all the provisions of the tax laws with the particular situations of all taxpayers. The IRS will hold you responsible for all errors in your return, whether

mathematical or substantive. Reliance on a tax program will probably not save you from penalties (including fraud) or interest charges, if you claim some tax benefit you are not entitled to. Use this and other tax programs for preliminary calculations and "what if" scenarios to check the tax effects of making or not making IRA contributions, etc. Thoroughly check the instructions that the IRS furnishes with each form to be sure that you are entitled to use the form, and that the data is properly entered and that all adjustments and limitations have been applied. Be sure that you are not required to fill out additional forms or schedules not included in this package. And manually check all calculations, and table lookups to be sure that the figures are correct. There could always be obscure errors that do not show up in trial runs with sample data.

Both of these income tax preparation programs were reviewed by Preston Brashear.

More Disks for February 1989.

Disk 349, Finance Manager II 1.2d, 12/87, HooperInternational, P.O. Box 62219, Colorado Springs, CO 80962.

Finance Manager II is a complete general ledger system. The program is the complete GL module but the program only allows for the entering of 11 months of data which is more than enough time to adequately evaluate the software. Finance Manager II is distributed as shareware and each module must be registered. The GL module requires a fee of \$40, \$15 for the account reconciliation module, \$20 for the financial utilities module, \$30 for accounts receivable module, \$30 for the accounts payable module, and \$35 for the payroll module. The total system could cost \$180 depending on your needs. Each module comes with on-disk manuals. Printed manuals for each module can be ordered and cost from \$6 to 10 each.

Finance Manager will work on any IBM PC with at least 256K of memory. Both monochrome and color monitors are supported. Hard disk is not required but is recommended.

The program is well-designed and smooth in operation. This program will handle home or small business accounting with as many as 1997 accounts. Sample Charts of Accounts are included for each of the Home and Work GLs. Budgeting capability is included. Posting is double-entry and easy, since the Chart of Accounts at the bottom of the screen for instant reference. Finding or changing entries is easy. The system is menu-driven. ESC returns the user from any module to the Main Menu. The system capacity of 20,000 transactions allows multiple years' duty for most users without reloading.

GL reports generated include the General Journal, Account History, Income Statement, Balance Sheet, Sources & Uses of Funds, Budget Variance, the Chart of Accounts, Budget Listing, and Trial Balance. The Accounts Reconciliation module prints all uncleared transactions, including credit and debit card activity. Accounts Payable prints checks, vendor lists and address labels, and schedule of payables. Accounts Receivable prints invoices, customer account lists and address labels, aging reports, Balance Forward statements and schedule of receivables. Payroll prints employee registers and address labels, vacation & sick report, W-2 statements, and payroll recap. Each module prints its own journal, its non-posted transaction journal and general ledger distribution.

This program was reviewed by Pat Henley.

Disk 350, PC Dashboard 1.07, 9/88, PC Dashboard, by John Franck, No Sweat Software, Inc., 10 East Church Street, Martinsville, VA 24112.

PC Dashboard is a menu system for IBMs and compatibles with hard disks only. It supports both color and monochrome systems.

PC dashboard is distributed as shareware and requires a registration fee of \$39.95. It provides a means for performing repetitive tasks easily and quickly by placing the individual commands for each task in a menu format and then letting the menu program do all of the work.

There are twelve menu items on each menu. Submenus are also supported thereby creating an almost unlimited multi-tiered menu system. Each menu item can execute up to 10 command lines (DOS commands) to perform each menu task. The registered version allows 24 items on the master menu. To edit a menu item, simply hold down the "Alt" key and press the letter of the item. Then a screen will appear that you can input the menu prompt, password, directory path, and the 10 command lines.

Other features include colorful on-screen user notes customized in either regular text or "Bignotes", parameter passing (prompting for user input), a DOS gateway, optional time/date display, optional clock display with a "chime" on the hour, a screen saver, and RAM resident capability. Limited help is available by pressing F1 key at anytime.

Installation includes setting up a PCDASH directory on your hard drive, copying the PCDASH files to that directory, and modifying your AUTOEXEC.BAT file. Detailed instructions are included in the 12-page manual. The program may not function properly until it has been installed. The PC Dashboard files on this disk include the following:

MENU	BAT	Use this file to access PCDashboard
PCD	BAT	Called by MENU.BAT to bring up PC Dashboard
PCDASH	DOC	The user's manual
PCDASH	EXE	The main program
READ	ME	Additional information not included in the user's manual

PC Dashboard was reviewed by Dean Duncan.

Disk 351AB, PC-KEY-DRAW 3.51, 06/88, Edward H. Kidera IV, OEDWARE, P.O. Box 595, Columbia, MD 21045-0595, (301) 997-9333.

PC-KEY-DRAW is a graphics package that can be used by anyone and everyone. It includes many features designed specifically for a mechanical engineer, such as calculate and measure. It also includes features designed specifically for artists, such as pattern fill and area smear. Its ability to create symbol libraries is ideal for the electrical engineer or the architect. Those into needlepoint will find that the drawing capabilities combined with the zoom printer feature allow interesting patterns to be designed on the computer and easily transferred to a form suitable for stitching. Graphic game designers can use the drawing abilities along with the ability to save an image as a BASICA subroutine to create graphics ideal for animation. Teachers will find the geometry aspects of the program useful in the math and science classroom. Business people can create eye catching slides for presentations using such features as slide and text fonts.

PC-KEY-DRAW requires 2 disk drives, 256K of memory, and DOS 2.1 or higher.

This program was reviewed by Kenneth Loafman.

Disk 352AB, PiCnix 3.00, 05/88, by Peter Stephen Heitman.

This package emulates 30 of the most common UNIX System V file utilities in an MS-DOS or PC-DOS environment. The utilities require a PC running a version of DOS 2.10 or greater. The UNIX System V commands emulated are:

cat	- file listing utility
chlabel	- set the volume label
chmod	- update attribute bits of files
cp	- copy files
cpdir	- copy a directory
df	- print disk free space information

diff - find differences between two text files
 du - disk usage utility
 fgrep - fast text search through files
 grep - regular expression search through files
 head - beginning of file listing utility
 ls - directory listing utility
 more - file listing utility
 mv - move files
 mkdir - move a directory
 ncd - change to directory
 ndata - set and display current date and time
 necho - echo arguments
 nset - set and display the command processor's environment
 unset - delete a string from the command processor's environment
 ntime - time a command
 pwd - print the working directory
 rm - remove files
 show - find a file along a path
 strings - print ASCII strings embedded in binary files
 switchar - set or display the current system switch character
 tail - end of file listing utility
 tee - create multiple outputs from the input
 touch - update last-write times of files
 wc - count words in a file

- * PiCnix is a trademark of Peter Stephen Heltman
- * UNIX SYSTEM V is a trademark of Bell Laboratories.
- * MS-DOS is a registered trademark of Microsoft Incorporated.
- * PC-DOS is a trademark of International Business Machines.

PiCnix was reviewed by Tim Davis.

Disk 353, PlanPerfect Demonstration Disk From WordPerfect Corporation, 3/88.

PlanPerfect is a spreadsheet program from WordPerfect Corporation. This demo is a slideshow style presentation. Plan to spend a half hour for a thorough review of this package. You can move forward and backward with the PgUp and PgDn keys for a faster or slower presentation. The demo has minimal requirements: simply MS-DOS on any microcomputer.

The perfect spreadsheet development tool? Maybe. After seeing this demo you will be anxious to see the program - you really need to be an experienced spreadsheet user to appreciate all that it offers in its demo. The demo or slide show assumes that you are a Lotus 1-2-3 version 2.01 user who aches for more power and easier use and that you can recognize a good thing when you see it.

The demo presents two basic components. First, a brief overview of the program and some of its features; second, a comparison of PlanPerfect's performance against Lotus 1-2-3. This is a well executed display of an integrated product which helps to round out and compliment the word processing and database software currently offered by Wordperfect Corporation.

This demo was reviewed by Vincent Gaines.

Disk 355. WordPerfect 5.0 Demonstration from WordPerfect Corporation, 6/88.

WordPerfect 5.0 is a product you gotta see to believe, and this semi-automatic demo is just what you need to see it live and on your PC today. If you want to look at version 5.0 and to see all the latest bells and whistles it offers, then this is the most hassle free way to do so.

WordPerfect 5.0 Demo is a slideshow style presentation. If you are familiar with word processors and just want to look at Wordperfect, then this disk will give an opportunity to look and slightly feel the way Wordperfect works. If you want to actually use the software, then you will need to acquire a copy.

SYSTEM REQUIREMENTS - Runs under MS-DOS or PC-DOS on any microcomputer having either a color or monochrome monitor. Does not require graphics.

This demo was reviewed by Vincent Gaines.

Disk 356. WordPerfect Library and Office Demonstration from WordPerfect Corporation, 7/88.

WordPerfect Library and Office Demonstration is a slideshow style presentation. Plan to spend a half hour for a thorough review of this package. You can move forward and backward with the [pg up] and [pg dn] keys for a faster or slower presentation.

WordPerfect Library has:

Work Log	Track the time spent on a project.
File Manager	File maintenance done with the WordPerfect interface.
Calculator	Scientific, programmer, financial, statistical functions.
Calendar	View 8 weeks of appointments, set alarms for appointments, lists of things to do.
Notebook	Phone numbers and addresses.
Program Editor	Full screen editing with WP-like commands.
Macro Editor	For building keystroke savers.

Wordperfect Office is the LAN version of WordPerfect Library, additional features are electronic mail and scheduling. Mail is set up in the familiar in box over out box. You are taken through the process of sending and receiving mail tutorial style, which alone is worth the price of admission. When you receive mail the program notifies you, even in the middle of your spreadsheeting, so you don't miss an important call you are waiting for. Phone message is setup in the same format as the pink slips we are used to.

With the scheduling system, a secretary could notify a predetermined list of people when the next staff or project meeting is to occur. Should a conflict occur, the program displays a conflicts schedule where every participant's scheduled appointment time can be compared for conflicts. Once a date/time is selected all the participants are notified.

The Front Office uses Expanded memory. With it you can create menus which network users can use to access applications programs with a touch of the enter button. And it comes with unlimited toll-free customer support.

This is a nicely executed display of an integrated product which rounds out and compliments the word processing and spreadsheet software offered by the Wordperfect Corporation.

SYSTEM REQUIREMENTS - Runs under MS-DOS or PC-DOS on any microcomputer having either a color or monochrome monitor. Does not require graphics.

This demo was reviewed by Vincent Gaines.

The Disks of March, 1989.

Disk 357. Ample Notice 1.22, 7/88. Mark Harris, Granny's Old-Fashioned Software. Shareware registration is \$30.00.

Ample Notice is an Appointments Calendar and Pop-Up Alarm Clock package that can help organize your life. You enter appointments (single or recurring) and notes into a standard text file in a variety of formats, and each day you view a calendar of commitments taken from this file.

You can also print out listings to carry with you. Included with Ample Notice is a program named Outside, which addresses envelopes sideways, so you can print them with a standard 80 column dot matrix printer. Addresses can be captured from the screen or printed from a file.

Ample Notice was reviewed by John Mackoy.

Disk 358. DL.EXE & DB.EXE version 2.01 (9/88). Helpware, 100 Bayo Vista Way #6, San Rafael, CA 94901. Shareware registration is \$25.00.

DL AND DB are two utility programs that help you navigate around your hard disk without having to remember the appropriate DOS commands.

DL.EXE gives a graphic display of the layout of a hard disk "tree" of directories and all levels of subdirectories. Using DL one can make, remove, rename, or change directories. You can also view files within a chosen directory—all without using DOS commands. Files are viewed by loading DB as a subtask.

DB.EXE gives a sorted list of files for the current directory (or whatever directory/drive you specify). You can view binary and text files and print both the file list and the file itself. Files can also be moved, copied or deleted.

Both programs make extensive use of the function keys. The screen menu layouts are easy to follow even without the users manual printed from the program disk. These programs require about 100K of free memory to run. They will work on color or monochrome monitors. If a mouse driver is present, the mouse menu is displayed.

The author requests your registration and payment of \$25.00 to get the latest version (\$30.00 with printed manual). He is also available on COMPUSERVE for direct consultation.

This software was reviewed by Dean Duncan.

Disk 359. TSR Utilities Version 2.5, 6/2/87.
TurboPower Software, 3109 Scotts Valley Drive
#122, Scotts Valley, CA 95066 (408) 438-8608,
Compuserve: 72457,2131.

The TSR Utilities include programs useful in managing DOS memory, in particular managing memory-resident utilities. TSR stands for "Terminate & Stay Resident". These programs should work on any system running PC-DOS or MS-DOS 2.0 or later. TSR Utilities are Copyright (c) 1986,1987 by Kim Kokkonen. All Rights Reserved. These programs may be freely distributed for personal, non-commercial use.

Version 2.5 of the TSR Utilities includes 8 programs:

MARK	marks a position above which TSRs can be released.
RELEASE	removes TSRs from memory.
FMARK	performs the same function as MARK but uses less memory.
MAPMEM	shows what memory resident programs are loaded.
WATCH	a TSR itself, it keeps detailed records of other TSRs.
DISABLE	disables or reactivates TSRs kept in memory.
RAMFREE	shows how much RAM memory is available.
EATMEM	uses up memory for controlled program testing.

MARK.COM and RELEASE.COM are used to remove resident programs from memory, without requiring a system reboot, and without the usual problems of creating holes or leaving interrupts dangling. The two programs are used as follows:

1) Run the program MARK.COM before installing any memory resident program that you may wish to deinstall later. This marks the current position in memory and stores the DOS interrupt vector table (all interrupts from 0 to FFH).

2) Install whatever TSRs that you want to use, in the normal way. When you want to deinstall all TSRs above the last MARK, run RELEASE.COM. This will release all of the memory above (and including) the last MARK, and restore all interrupt vectors taken over by the resident programs.

MARK can be called with a command line parameter: MARK MarkName. Then calling RELEASE with the same name will release all memory above the mark of that name.

Version 2.2 of RELEASE adds new features activated by command line switches. Version 2.3 adds DISABLE and WATCH. RELEASE updates the WATCH data area whenever invoked. Then DISABLE and disable/reenable specified programs without removing them from memory, allowing conflicting TSRs to coexist. Version 2.4 of RELEASE changes the way that EMS expanded memory is managed. A new command line switch, /N, causes RELEASE to avoid touching EMS memory at all, allowing RELEASE to be used even if a conflict with the EMS driver occurs. Version 2.5 fixed minor bugs and added version checking between MARK and RELEASE. COM files in version 2.5 are significantly smaller than before. The file TSR.DOC provides excellent documentation.

The TSR Utilities were downloaded from CompuServe, (Go Bor-100) by Gary Hunt. The programs were reviewed by Ken Shores and Howard Hamilton.

Disk 360. My Money 1.0 - DEMO. J. E. Smith,
P.O. Box 102, Bethania, NC 27010.

My Money is a personal finance manager featuring a checkbook manager, a portfolio manager, an asset manager, a budgeting section, and an analysis section. My Money requires MS DOS 2.1 or later, and an IBM or compatible system with at least 196K of RAM. The screens are quick, neat, with sensible colors and data entry areas highlighted. Helpful menus and hints appear at every step to guide the new user. This entire review was done without consulting the manual - no help screens were available while in the program.

My Money is strictly a functional DEMO of the software's capabilities. It is not shareware. None of the data you enter will be saved. You can get a printout, however, which will give you a good idea of the type of reports that the program produces. The reports are quite good and meet the needs of most users. The entire product is quite good. There is documentation on the disk.

This demo was reviewed by Vincent Gaines.



Disk 361. Captain Comic (5/88) = Arcade
Adventure Game for EGA Systems by Michael A.
Denio, 11675 W. Bellfort #102, Houston, TX 77099

GAME OBJECTIVE (from file comic.doc):

"You are Captain Comic, galactic hero. Your mission is to recover three treasures from the planet Omsoc, which have been stolen away and hidden somewhere on the remote planet of Tambl.

Your task will not be easy, you will need to gather tools to increase your fighting and defensive capability, navigate dangerous terrain, and avoid or destroy a hoard of deadly creatures. It will take all of the Captain's skill and wit to see the treasures returned to Omsoc."

The COMIC game is an adventure style game with graphics that are quite good. I personally have tried to run it on several different computers, with and without turbo, and different keyboards. On my AT compatible at home, it works well with the enhanced keyboard, and on the XT compatibles the same is true of the "standard" keyboard. However, if you try it on a keyboard

with buffering, it is fairly unpredictable when the key will be "sensed" in a game that is highly timing dependent.

All in all, the game is a lot of fun, and it is "win-able". As the directions say, the teleportation is not random, and in at least one location, it is necessary to be in one fairly narrow spot, facing the proper direction to continue the game and win. It does take a while to get through the game, even with hints from the more experienced players.

This file was prepared by Mike Behrensmeier.

Disk 362. The Gags Disk II (3/89) - More Non-Serious Software! Collected by Shawn Dunn.

Good movies always have sequels, why not good disks? This disk was put together for those that enjoy a little fun or who like to pull a prank on others. None of these programs will cause damage to any files but may put a little laughter in your life.

There have been several little speech programs but SAY.EXE will allow you to select any the files with an extension of SAY. To run, type SAY and one of the *.SAY files. For example, type SAY BEAM.SAY and a little voice comes on and says "BEAM ME UP SCOTTY". The file SAY-DOC.COM provides a brief explanation of SAY.EXE works.

MAXIHEAD2.COM combines graphics with speech. It generates a computer character Max Headroom giving his opinion of Pepsi drinkers & an ad for Coke.

Have you been so mad at your PC that you want to demolish it? Mr. Duck in HIT.EXE does just that. He demolishes his computer over and over and over again until you "hit any key to continue".

FACE.COM will drive most PC users crazy. Not only to you have these smiley little faces invading your screen, but they sound like popcorn popping. To run FACE.COM type FACE and the number of faces you would like to appear; for example, type FACE 25 and 25 faces will appear all over the screen, popping away. The INS key and the Capslock together will turn off the noise; the Left Shift key will make them circle left; the Right Shift key make them turn right; Alt will make them huddle; the INS key will add more faces and the Caps Lock will delete them. To get help, type FACE ? and a help screen will appear. To get rid of them fast, type FACE 0 and they will disappear.

Do you feel your boss or big brother is watching you, try EYE.EXE and a gigantic eye will appear along with enlarging pupils. Have a sense of adventure then load STAR3D.EXE and you will be beamed aboard a starship and view the stars passing you. If you need to relax, AQUARIUM.COM will turn your screen into a giant fishbowl.

PYTHON.COM plays a very loud rendition of the Monty Python theme song. TVTUNES.EXE will play one of several selections of theme songs from such favorites as the Addams Family, Flintstones, Leave It to Beaver, or the Beverly Hillbillies. It even has the theme of the Final Jeopardy question.

BACKTALK.COM will have your PC turning against you. After loading it the prompt will appear and anytime a command is type in, it will be asked to be left alone till finally it shuts itself off. SUMBLMNL.COM is for subliminal messages until the computer is turned off. Just type SUBLMNL <message> at the DOS prompt.

MAXIHEAD2, HIT, FACE, EYE, STAR3D, and AQUARIUM require graphics and all can be exited by pressing Escape. Enjoy. Have some fun on friends. April 1st is right around the corner.

*Gags Disk II was collected and donated by Shawn Dunn.
The review was edited by Mark Gruner.*

Disk 363AB: Family History System, September 1988 version. Phillip E. Brown, 834 Bahama Drive, Tallahassee, Fla. 32301. Shareware fee is \$35.00

This program was originally written to maintain information about members of the author's own family. The program uses a set of linked random access data sets for storing information about individuals, including all family relationships. No limits are placed on the number of relationships that may exist for each individual, or for the number of generations of ancestors or descendants that may be recorded. Information for up to 3500 individuals may be stored on a single DS/DD diskette (up to 9999 on a hard disk).

The basic system produces Ancestor, Descendant, Relative and Family Group reports and Ancestor (tree) Charts. Blank worksheets and charts may be produced for recording information for entry into the system.

This review was prepared by Kathryn Crawford.

Disk 364. PROCOMM Version 2.4.3, 12/88, by Bruce Barkelew & Tom Smith, Datastorm Technologies, Inc., P.O. Box 1471, Columbia, MO 65205. BBS: (314) 449-9401. Shareware fee is \$50.

Procomm 2.4.3 is the latest release of the general purpose communications program that has received rave reviews in previous versions.

NOTE: Procomm 2.4.3 is the SHAREWARE product offered by Datastorm. It is not exactly the same as Procomm Plus, which is Datastorm's commercial program. For a shareware "test drive" of Procomm Plus, see Disk 262.

Procomm has many features, including the ability to emulate a wide variety of terminals, a dialing directory with one hundred entries, automatic redial facilities for reaching hard to reach numbers, several popular file transfer protocols including XMODEM, YMODEM, Kermit, Telink and more, command files to control automatic logon and unattended operation, a DOS gateway which allows you to execute DOS commands or other programs while you are still on line, a host mode of operation, a macro command language, and much more.

This release of Procomm represents a fairly minor upgrade. The primary differences between versions 2.4.2 and 2.4.3 is that the YMODEM-G protocol has been added and phone numbers in the directory have been updated. Other than these two upgrades, users will note very few changes if any.

This file was prepared by Mark Gruner.

More Disks from March next month...



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Selected SIG Happenings

LOTUS SIG

The subject for the March meeting was using graphs in 1-2-3 and Symphony. Mark Gruner gave the presentation. The presentation was very informative and, most of those who attended learned how to better use graphs in 1-2-3 and Symphony. Well at least that's what we think happened at the meeting. About the only thing we are sure of is that Mark did present graphs for 1-2-3. But the reception the presentation received is unknown since the deadline for the April newsletter was March 10th which was before the March meeting. Such are the difficulties encountered by the SIGS by mandated deadlines. Incidentally, the deadline has been permanently moved back to the 10th instead of the 15th.

The subject for the April meeting as decided at the February meeting of the SIG will be a discussion of the interactive macro commands available in 1-2-3 and Symphony. Interactive macro commands require that the user make an input before the macro continue processing. Menus are one type of interactive command where users can define their own menu. Macros are always a hot topic in the Lotus SIG and this meeting should not be an exception. Come on by.

The Lotus SIG always takes time to answer questions and problems that users are having with Lotus products. If you are having a problem, a question or want to know more about interactive macro commands, come by and see us in April.

Mark Gruner
and Pat Henley

CRYPTANALYSIS SIG

We are still plugging away, solving the problem of simple substitution ciphers without word divisions. But soon, we will start our study of the Playfair. My tutorial on the Playfair will be uploaded to the CRYPTAN SIG soon. I could, instead, introduce the Vigenere and the family of polyalphabetic ciphers. However, the Playfair, an elegant and chastely simple cipher that is relatively strong and requires nothing more than paper and pencil, is I think more in tune with modern cryptography than the Renaissance polyalphabetic. It will serve as our introduction to block ciphers - ciphers that encrypt in larger units than the character or the byte.

The Playfair is the first cipher we are dealing with that has been in serious use even as late as World War II. When we get to the Playfair, we begin some serious cryptanalysis. Until then, I would like everybody in the SIG to continue building their skills in solving the simple substitution without word divisions. It is the mother sauce you need for fancier dishes.

John K. Taber

C SIG

We will be having the Mix C people visiting us for the April C Sig meeting. At this writing we do not have an agenda or program topic but assume that it will include a demonstration of Power C and Power C trace. The latter was written by our own Dr. Neil Bennett.

Sid Nolte

LAN SIG

Mr. Don Jindra, the developer of IMODES, a serial port based \$25.00 Network software product, presented an overview of IMODES and fielded questions from those attending during the March meeting. (Actually this is what I hope happened, as I'm writing this prior to the March meeting!)

In keeping with my understanding of what those who have attended the two initial meetings wish, I have scheduled a presentation for the April meeting titled "LANs, What Are They?". This will be a basic introduction to LANs presentation. Some of the topics which will be addressed are; Their value, popular configurations, and common terminology.

The April presentation will be given by one of our own NTPCUG members Mr. Paul Williams. This should prove to be a interesting and informative meeting, so plan to attend.

The May meeting presentation is as yet unscheduled, but is tentatively planned as another introductory level presentation. I'm hoping for an ARCnet / Token Ring / Ethernet specific overview. More on that next month.

Fred Williams

Graphics SIG

The March Graphics SIG featured a discussion of the

various formats used for saving graphic pictures. We took a look at over 20 formats. We also discussed programs that can convert an image saved in one format to another format.

The topic for the April 1989 meeting of the Graphics SIG will be image scanners. We will look at the various products available to capture images, manipulate and print them, and include them in documents. We will look at some sample scanned images and documents that include images.

Each month we include time to answer PC Graphics related questions and for members to discuss what is new in PC Graphics. If you have questions or would like to share your PC Graphics knowledge with other NTPCUG members, plan to attend.

The Graphics SIG will NOT meet during May 1989. This will allow all members to check out the Microsoft Presentation at the Main Meeting.

DOS SIG

Search for "Commitments" occupies day-time television talk shows and, apparently, software publishers' thoughts these days. April DOS SIG Meeting will focus on the voluntary and involuntary commitments PC users make when adopting various new software packages.

Many current software programs lock users into operational configurations the users might otherwise avoid -- if asked or informed prior to purchase. Jim Hoisington and Reagan Andrews will address conflicts created by popular software packages. We'll try to show ways of getting around the more stupid blunders publishers attempt to force on PC users, and when to say "NO" to publishers' mistakes by returning the packages for refund.

As usual, latter portion of April Meeting will be devoted to Q & A interactions between SIG participants and the leaders.

Reagan Andrews

WORD SIG

April's WORD SIG Meeting will feature a continuation of Style Sheet and MACRO explorations. Since MS WORD 5.0 isn't expected by the time of the meeting, we'll focus on versions 3.0 and 4.0 in the discussions with examples of various style approaches and their impact on document appearance.

Major goals of "style" -- aesthetics of typography, utilization of white space, type sizing and font selection as critical components of good layout practice will be emphasized. Although considered "art," all the above significantly influence readers' interest, comprehension and utilization of information presented in printed form from simple business letters and memos to printed brochures, newsletters and magazines.

Reagan Andrews

R:Base SIG

The March R:BASE SIG meeting was highlighted by a programming discussion by Rick Hauslein, Past President of the North Central Texas R:BASE Users Group. The open forum answered many database design questions.

An announcement will be made at the North Central Texas R:BASE Users Group on April 13th (the group meets the 2nd Thursday at the Addison Fire Training Center) about how the R:Base Compiler handles command code a little differently than R:Base does. We will discuss these differences at the April SIG meeting. According to Microrim, there is a tremendous amount of orders for the new 'TRUE' Compiler.

For the April meeting, I hope to give a demonstration of the new compiler and I will be showing it's first cousin, R:Turbo. The product is very similar to the R:Turbo compiler with the same Codeview like debugger and blaz-

ing speed. Bring your R:Base programs to the April meeting and we will compile them on the spot into a fully executable EXE. The R:Base Compiler uses R:Base System V and R:Base for DOS commands, so bring your APP files and RBF files if you want to see the difference in execution speed.

Alan Alberts

Database SIG (Formerly DBASE SIG)

The March meeting was devoted to organization and future plans for the DATABASE SIG. Two handouts were given out in order to better plan future meetings, one a survey and the other a list of some good database bulletin board in the area. If you did not fill out a survey sheet at the meeting please check the database conference on the club BBS for a copy and bring it to the next meeting, or leave a copy in my mailbox. The results of the survey will be discussed at the April meeting.

The April meeting will cover add on utilities and libraries for database products, including several shareware products. Please bring any interesting shareware utilities to this meeting, and we will discuss them. Please check the database conference on the club bbs for a list of shareware utilities we will be going over in the April meeting.

Also in the April meeting we will have a short programmers forum please bring any interesting function and procedures to share with other database programmers.

NOTE: We will now be covering a broad spectrum of dbms products so please feel free to come to our meetings, regardless of what dbms you are presently using.

Rodney Haas

What's Happening on the BBS

David Nail

From the ALL SIG Conference

Message # 7 From: J.T. Walker Sent on: 01/15/89 10:21 pm
Subject: Odds & Ends

May a TV screen be used as a display for computer output? How do I find out more about doing so if it is possible? The computer answering machines function by converting the voice message to a digital signal, or so I understand. Can tapes of speeches be read into the machines in order that they may be stored on diskettes rather than audio cassettes? Does anyone know who sells legal size monitors?

Message # 12 From: Sid Nolte Sent on: 01/17/89 10:07 pm
Subject: Reply: Odds & Ends

Yes, there are devices called video modulators which can indeed convert computer output to broadcast frequencies for the TV to demodulate down to scan rates. Unfortunately in these two processes, some fidelity is lost. You probably could not get readable 80 column text. These devices were widely used for early Atari, TI, Commodore video game type computers.

Second question. Can audio be stored digitally? Yes indeed the now popular compact disks are digital data. There are devices called A/D converters which sample analog data on a periodic basis.

Sid

From the ASSEMBLER SIG Conference

Message # 32 From: Kent Cobb Sent on: 01/29/89 2:37 pm
Subject: Switching stacks

I seem to remember reading somewhere that the 80x86 is smart enough to realize that whenever you change the value of SS, you will want to immediately change the value of SP. As a result, it was claimed (or so I recall) that if you changed SS, interrupts would be disabled while the following instruction was executed, even if the two statements were not surrounded by a CLI-STI pair. This was true if you changed SS first, but not if you changed SP first.

I'm reciting these details from memory, so they may not be entirely accurate. Can anybody confirm or refute this? Has anyone else seen the same article that I think I read?

Rgds,
Kent

Message # 38 From: Andrew Chalk Sent on: 02/04/89 2:23 am
Subject: Reply: Switching stacks

That is correct Kent. However, there is one exception and one interesting addition. First, some earlier 8088's were buggy, and did not clear interrupts after SS was changed. For this reason you might want to always use CLI, STI in this situation. Second, did you know that in instructions prefixed by REP, in which a segment override is used, interrupts are NOT disabled. Apparently, Intel describes this as a feature!

From the C SIG Conference

Message # 23 From: Andrew Chalk Sent on: 02/04/89 2:08 am
Subject: MILAM'S DILEMMA

I am integrating some assembler modules with MSC. Can anyone tell me a simple, reliable way to reference C structure members? At the moment I am DEFINING absolute hard-coded offsets from the structures (declared as EXTRN) but that's crazy. There must be a better way!

Message # 28 From: James Dunn Sent on: 02/04/89 8:50 pm
Subject: Reply: MILAM'S DILEMMA

Andrew, I assume that your problem relates to the "packing" of the structure. MSC aligns data boundaries which creates dead bytes in the structure. You can specify a "pack structures" option which removes the bytes and ensures the data is just where you think it will be. Otherwise reverse the problem and define the structure in ASM and pass it to C.

Message # 30 From: Stan Milam Sent on: 02/04/89 10:36 pm
Subject: Reply: MILAM'S DILEMMA

Yes, it is true, some C compilers ensure that every member in the structure is aligned on a word boundary. This means insertion of some "dead bytes" into the structure to make alignment possible. There is no way for your assembler code to know this. Turbo C has it as an option which I turn off. MSC can be forced to turn word alignment off with the /Zp option (packed structures). Your best bet would be to let the C code handle the manipulation of the structure and let the assembler do its thing on individual members of the structure. This would ensure maximum portability.

Rgds
Stan -
(The guy with the dilemma)

From the COMM SIG Conference

Message # 27 From: Preston Brashear Sent on: 01/26/89 11:34 pm
Subject: Cheap network solution

I asked this conference a while back for suggestions on how I could connect my clone with my secretary's clone in order to be able to transfer files between the two machines while she continues to use the word processor. Well I picked up "The \$25 Network" by imodes at the December Infomart bash, and now have it running, using a simple serial port on each machine. I had initial problems with a serial card that went off in the weeds when it got warm, but after replacing the bad card, all is working as advertised. A full-blown LAN would have been financial overkill for my application. I would certainly recommend this solution to anyone seeking an affordable way to connect two computers.

Preston

From the HARDWARE SIG Conference

Message # 22 From: Steve Fleming Sent on: 02/08/89 7:39 am
Subject: 8088 Upgrade

My PC is an ITT Xtra running an 8088D at 4.77 Mhz. I have heard that this can be swapped out for an NEC V20. The machine is used for games and word processing and is adequate but a little more speed would be nice and the chip costs only about \$10.00. Does anyone know anything about this? Like - what is the difference between the V20 and V30? Can I use the 10 Mhz version of the V20 or will my 4.77 clock

make it no better than the 5 Mhz version. Can I use the 10 Mhz and replace the clock chip also? (Yes, I can solder/desolder.) Or should I sell my car and buy a 386 - 25 Mhz ?!!!! Any info would be appreciated.

Thanks.
Steve.

Message # 26 From: David McGehee Sent on: 02/13/89 10:47 am Subject: Reply: 8088 Upgrade

The V20 is a functional replacement for the Intel chip. The machine's speed is a function of the clock so buying a 10Mhz chip (of any kind) will not give you 10Mhz speed. The NEC V20 is marginally faster, clock for clock, than the Intel 8088, however, it is only about 5% - 9% faster at best. Replacing the clock crystal etc. etc. is not a viable job - the complete chip set is rated for 4-5 Mhz and you would be wasting your money. Unless you really need speed, there are quite a number of 286 clones out there for relatively little money. Of course, there are getting to be more and more relatively cheap 386s out there, too. Sooooooo, unless you've got a really old (non-vintage) car, it is more like a very good stereo than a car.

David...

From the PASCAL SIG Conference

Message # 20 From: Stan Milam Sent on: 01/24/89 7:51 pm Subject: Quick Pascal vs. Turbo!

I read today in Infoworld that Microsoft recently demoed a new version of Pascal, dubbed Quick Pascal. It was shown compiling the Micro Calc spread sheet program that is distributed with every copy of Turbo Pascal, & C. This means their compiler will be somewhat compatible with Turbo Pascal. Also, they announced a whole new line of "Quick" compilers and a Quick Assembler.

Just reporting the news (Reserving Comments until Later)

Stan....

Message # 21 From: Andrew Chalk Sent on: 02/04/89 2:39 am Subject: Reply: Quick Pascal vs. Turbo!

Does Microsoft seriously expect to sell any copies of Quick Pascal?

Message # 22 From: Dan Marmion Sent on: 02/04/89 12:21 pm Subject: Reply: Quick Pascal vs. Turbo!

Only to users of QuickBasic who will think Quick Pascal is a good way to move up!

Message # 24 From: Pehl, Lee Sent on: 02/04/89 8:26 pm Subject: Reply: Quick Pascal vs. Turbo!

What's wrong with QuickBasic anyway? I used it and I LOVE IT!

Pehl, Lee

Message # 25 From: Stan Milam Sent on: 02/06/89 9:47 pm Subject: Reply: Quick Pascal vs. Turbo!

BASIC - ahhgggg! You must really love being a masochist! The day I really began to understand the power of Pascal (and later on C) I said I would never, never, never touch BASIC again. I have been true to my promise. I used to be pretty good in BASIC, but now I would have to learn it again. Well, if you really love BASIC and enjoy using it then I am not going to stand in your way or say anything more. Just enjoy (but you could enjoy more with Pascal).

Rgrds

Stan the Dilemma Man

Message # 26 From: Pehl, Lee Sent on: 02/12/89 2:43 pm Subject: Reply: Quick Pascal vs. Turbo!

Sorry, I meant I like BASIC and I LOVE Pascal. (I keep forgetting that this is the Pascal Sig!) It is that I'm kind of nostalgic. I try my best to hold on to everything I've ever learned. My blood boils when those 'C' people trash our dear ol' beloved Pascal as "inadequate and obsolete." I know you feel this way too, Stan.

I still sweat when I do C pointers. That's why I do a lot of programming in Pascal, BASIC and - would you believe it - COBOL!

I know, there are tons of BASIC spaghetti code lying around. But, we can't blame BASIC! Just like the cliché 'Guns don't kill, people do.' BASIC doesn't make you a spaghetti coder. On the other hand, lousy programmers will do pasta-like code in every language they program with.

Regards..... Pehl, Lee

From the PRO SIG Conference

Message # 11 From: Stan Milam Sent on: 01/20/89 7:51 pm Subject: Reply: Selected SIG Happenings

Along time ago, programmers would code their programs in binary (NOT ASSEMBLER - REAL BINARY). Then came autocoder: this was an improvement. Then came Assembler: a very big improvement. Next languages like COBOL, FORTRAN, Pascal, and C came along. These high-level-languages were meant to allow programmers write programs more English like, with English-like spelling & punctuation. But guess what...we found out that REAL PROGRAMMERS can not use good English!

Message # 12 From: Fred Williams Sent on: 01/21/89 10:14 am Subject: Reply: Selected SIG Happenings

I misspell words to prevent accidental use of "Reserved" words. I never have really liked COBOL because like a lady of the evening, missing a preiod can cause you a lot of greiff!

Fred

Message # 15 From: John Taber Sent on: 01/24/89 9:12 pm Subject: Reply: Selected SIG Happenings

To avoid accidental use of "reserved" words, use APL. If you don't like APL, use German oder French (see the avoidance of "or" -- oder?). Et you can use Italian. Und Spanish. All reserved words (woerte) are English for (pour) reasons never explained.

;-) John K. Taber

Message # 16 From: Kent Cobb Sent on: 01/24/89 10:43 pm Subject: Reply: Selected SIG Happenings

When I was in college, I had a roommate who was taking Russian at the same time I was taking French. Whenever we got into an argument, he'd scream at me in Russian, and I'd scream back in French. We got along fine. I understood him about as well as I expect to ever understand APL.

Kent

Q



The Variety Store

Idea Whose Time Has Come, Gone and Come Again: Search for Cheap HD 3.5" Floppy Disks

Is PC history repeating itself with 3.5" floppies? An advertisement appeared in a recent issue of a nationally-distributed computer magazine for a machine which will add the "HD" hole in a standard 3.5" disk casing. According to the vendor, this modification allows use of inexpensive floppies in place of the expensive HD floppies.

Rumors abound that the 3.5" 1.44 MB, HD floppy is actually a common, high grade, 720 KB disk with only an added hole in the casing. The added hole, some claim, is all that differentiates the \$3.50 - 5.00 HD disk from its much less expensive, \$1.00 - 1.50 DD brethren.

3.5" disk manufacturers, however, deny this vehemently - just as they did in the case of the inexpensive single-sided 5.25" disks. Seems they worked in both drive types, SSDD and DSDD, equally well and at considerable savings.

PC users with long memories will remember the days when single-sided floppy disk drives were the norm. Many users discovered that most floppies worked well on both sides, but with one drawback. Lack of a second "write-protect" notch prevented use of the second side in the single-sided drive. Solution? A significant after market grew for hand-held notchers that would create (cut) a second write-protect notch on the other side of the floppy disk casing.

Jury is still out on 3.5" density question(s) - experts advise that PC users should be careful here.

Introduction of the 3.5" "disk notcher" looks like history repeating itself. Price listed for the machine is \$39.95 - and the maker points out that modifying 10 disks will recover the cost to the PC user.

Very High Density 3.5" Floppies to Arrive in April as Brier Technology Ships FLEXTRA Drives

Brier Technology will be shipping its 20 MB, BR 3020, 3.5" floppy drive with removable media in April, 1989 to OEM customers. Brier reported that Quadram of Norcross, GA, will be among the first suppliers to offer the FLEXTRA I drives.

Larger, 25 and 50 MB units will ship in the third and fourth quarters, respectively, according to Brier.

Prices for the BR 3020 were quoted at \$450 in quantities to OEM's.

Specifications for the 20 MB include a formatted, 20 MB capacity, 516 tracks per surface, average seek time of 35 ms, track to track seeks of 15 ms and 720 RPM rotation speed. Brier states that the drives will have linear voice coils actuators. All three drives will use the SCSI interface and transfer data at 1.25 MB/second to and from the buffer.

The Brier drives use 3.5" form factor diskettes, but only the BR 3225 (25 MB) drive is shown as capable of reading standard IBM formatted floppy disks. Brier hints, but doesn't promise, that the drives may work with "standard" 3.5" media. Diskettes are, however, servo-written, formatted and defect mapped by Brier at their San Jose, CA, plant.

Most Popular PC Word Processor Attacks Minis and Mainframes With Unix and VM/CMS Releases

WordPerfect's parents in Orem, Utah, have been quietly expanding their horizons beyond the PC market currently dominated by *WordPerfect*. At COMDEX/Fall 88, *WordPerfect* Corporation was displaying *WordPerfect* for the Unix world, and followed with a January release of *WordPerfect* for the IBM 370 to run under VM/CMS environment.

Version 4.2, not the latest 5.0x, has been the platform to bridge the PC - Mini gap.

Currently, *WordPerfect* for the Unix environment is functionally compatible and file compatible with *WordPerfect* 4.2 for the IBM PC. At the 386 level, it has been ported to SCO Xenix 386, System V, revision 2.1 or above, and Microport System V/386, revision 2.1 or higher and for the AT&T 6386 WGS and SUN 386i machines running Unix.

WordPerfect 4.2 for Unix is also available for AT&T 3B2 series, 3B15's, Hewlett-Packard 9000 series, NCR Tower 32's, Pyramid 98XE and 9000 series, Unisys 5000/35 and 5000/50's and VAX's running Ultrix ranging from the MICROVAX 2000 through VAX 9878's.

Prices quoted for Unix systems range from \$595 (SUN 386i, single-user workstation version) to \$19,000 for *WordPerfect* 4.2 in Ultrix on the VAX 9878. Pricing was not mentioned in the January release announcing *WordPerfect* 4.2 for the IBM 370 VM/CMS environment. ▶

Hewlett-Packard Enters Multiple-font Cartridge Wars with ProCollection

Hewlett-Packard announced their new ProCollection supercartridge and *Type Director* font generator and manager for LaserJet printers in March. ProCollection, the new supercartridge, contains 65 fonts including portrait and landscape fonts and two proportionally-spaced font families, Times Roman and Helvetica.

Type Director is Hewlett-Packard's software font-management program and creates, manages and installs LaserJet soft fonts for Microsoft Windows-based applications such as *Ventura Publisher* and *Aldus PageMaker*. The program also includes support for Microsoft Word, version 4.0 and above, and *WordPerfect*, version 5.0, as well as other programs.

Type Director creates fonts via typeface outlines available from Hewlett-Packard and Agfa Compugraphic with font-sizes ranging from tiny, 5-point faces to headline-sized 200-point faces.

Reported prices for the new Hewlett-Packard *Type Director* program and outline packages are \$95 and \$195 each, respectively. The new ProCollection cartridge reportedly lists at \$300.

MS WORD 5.0 Release Pushed Back Again - Bugs Cited As Cause for Shipping Delay

Microsoft's WORD 5.0 is delayed again, this time to "late April." Microsoft's problems getting the new release of WORD out were likened by *The Wall Street Journal* to those being experienced by Lotus in getting 1-2-3 version 3.0 into distribution.

According to the March 8, 1989, article in *WSJ*, Microsoft has had significantly more problems resolving program bugs in 5.0 than were anticipated. The article reported that Microsoft's stock "plunged" 14% with news that both WORD programs would be further delayed. This resulted in a "paper loss" to Bill Gates, Microsoft's co-founder, of \$174 million on the day. ■

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.

SMARTWare For Sale: Integrated "Smart System" by Informix includes word processor with spell checker, spreadsheet, data base manager, communications, and project processing language. \$400. Call Bernie at 817/451-4540(H) or 214/944-7443(W).

A Special Kind of Magic Square

by Sid Nolte

A magic square is square array of consecutive integers starting with 1. The row sums, the column sums, and the two diagonal sums are all the same value. Take the magic square in Figure 1 for example. The rows, columns, and diagonals all sum to 15. Such interlocking seems so curious that it is called magic because of its simplicity yet its complexity.

2	7	6
9	5	1
4	3	8

Figure 1

The size of the square is its order. Figure 1 pictures a magic square of order 3. There are methods or algorithms that can be used to create magic squares of any order greater than 2. There are many different ways to generate magic squares of the same order. However, it is not the purpose of this note to generate magic squares of order 999 but to investigate the property of a very special type of magic square called bimagic.

Take the magic square of order 8 in Figure 2 for example. Each row, column and diagonal has a sum of 260, not too remarkable. However, if one were to replace each number by its square: 4 replaces 2, 9 replaces 3, etc., we find that again all row, column and diagonal sums are identically equal to the number 11180. Now that is remarkable and indeed seems incredibly difficult to generate. So far as is known, there is not an algorithm which can be used to generate such a magic square, called bimagic. As a matter of fact it is not known what orders of bimagic squares can be generated at all.

For a number of years, it has been believed that bimagic squares of order less than 8 are impossible. That was enough to challenge me to prove that such a square does not exist or else to actually generate one. I started by considering in turn the orders 3, 4, 5, and 6 and without boring you with the somewhat tedious details easily proved that a bimagic square of order less than 7 does not exist. This was with pencil and paper and the use of simple logical deductions. It has taken a PC computer program, however to settle the lone remaining case of a bimagic square of order 7. A result that I will report on in this short note. ►

47	28	6	49	23	36	62	9
8	51	45	26	64	11	21	34
53	2	32	43	13	58	40	19
30	41	55	4	38	17	15	60
42	29	3	56	18	37	59	16
1	54	44	31	57	14	20	39
52	7	25	46	12	63	33	22
27	48	50	5	35	24	10	61

Figure 2

One way to settle the argument, is to use brute force. Just simply write a computer program to consider all of the possible positions that the 49 numbers can occupy and as each is placed, it is then tested to determine if the bimagic property holds true. If not, then go on to the next position. The problem with that approach is that there are 49! (49 factorial) or $49 \times 48 \times 47 \times \dots \times 3 \times 2 \times 1$ different ways to arrange those 49 numbers. In case you wish to calculate that number, and I do not, it would become clear that even with the fastest known computer today, it would take several centuries to be successful with such an approach. So before we begin to write such a program, it would be prudent to try to consider ways to reduce the search space to a much smaller number of trials.

My first stab at the problem was to see if there were actually any set of seven integers taken from the first 49 which add to 175 and whose squares add to 5775, the values that would be required for bimagic squares of order 7. These two numbers are obtained by adding the first 49 numbers and their squares and dividing by 7. Indeed with my Microsoft C program and an AT compatible, it took less than two minutes to generate all 1844 such sets of seven such numbers. For example the first set was: {49,45,20,18,16,15,12}.

If there is a bimagic square of order 7, we need only consider all of the ways that seven such sets can be selected. This number is about $1.6E+32$, smaller than 49 factorial but still much too large for an exhaustive search. However, the additional requirement that they must be non - intersecting (no two of the selected rows can contain the same number) at first led me into the blind alley of trying that approach anyway. Believe me, there are thousands of such sets each yielding a frustration in trying to further arrange the columns into the required bimagic order. This led to a second attempt to reduce the search space.

41	49	25	23	17	15	5
39	48	30	24	19	8	7
33	46	43	16	14	13	10
31	47	36	28	20	11	2
21	45	44	27	22	12	4
9	42	40	34	29	18	2
1	38	37	35	32	26	6

Figure 3

It is easy to show that any row, and of course any column, must have precisely three or seven odd numbers. Since there are exactly 25 odd numbers in the first 49, it follows that one row must have seven odd numbers and the other six must have but three odd numbers. I further reduced the search space by finding all of the rows of seven odd numbers that have one and only one number in common, one to serve as a row and the other a column. In about one minute, my program found 215 such pairs after eliminating symmetries. Now that is a number we can work with.

Taking each of the 215 pairs, it was easy to search for those remaining rows that will fill in the rest of the square. As it turned out, there are exactly 8 such squares. Figure 3 shows one of those eight squares. Notice that row one and column one each contain seven odd numbers, with 47 the common value. In about 2 more minutes of search time, I found the six more rows that filled in the remaining 36 numbers. Notice that all of the rows have a row sum of 175 and a sum of squares of 1775. In addition, column one has that property also. Now to find a shuffle of the remaining 36 values to make the proper column sum.

Unfortunately, it took only about one minute to discover that such an arrangement is not possible with any of the eight candidate squares. For example, there is not a set of seven numbers in which one is taken from each row, satisfies the sum conditions, and which contain the number 17 in the first row.

And so friends, remember that you read it here. There is no bimagic square of order less than 8. I know it is a great disappointment to you all to know that no such square exists. And what can be learned from all this except to try to reduce the search space? Probably not much. It was fun to me and kept me off the streets for a few evenings.

Sid

▲

Submitting an Article to the Newsletter

PC News articles are submitted to the newsletter exchange computer, or "Exchange" for short. The Exchange is a Hewlett Packard 50 computer running the HPUX (Unix) operating system. It really consists of a group of user accounts, or "logins", on this HP computer. We have redefined the common Unix commands to their DOS equivalents, so to anyone submitting an article, the Exchange looks like a multi-user DOS machine with a few extensions.

Call the Exchange at 214-830-6360 or 830-6361. Set your modem hardware *and* terminal emulator software to N-8-1. When you connect to the computer a Greek-looking prompt will appear. Transmit a break (Alt-B on Procomm Plus or Alt-F7 on Procomm). *login:* should then appear. Type *ntpcug* (all lower case). Immediately you will see *password:* Type *news* (all lower case). You will get a welcome message. The *NTPCUG>* prompt will appear. You are logged in and running.

BRIEF TIPS: To log off the computer, type <Ctrl>-d. Do not disconnect from the computer without logging off, you will hang the modem. Type all commands in lower case. For help type *hints*. For Unix Xmodem help, type *xhelp*. For Kermit help type *khhelp*. Other help is available; see hints.

COMMANDS: Unix cares about upper-case and lower-case, so type all commands and filenames in lower-case to avoid problems. Note that a file named *myfile.doc* is different from *Myfile.doc* or *MYFILE.DOC*.

Commands: NOTE: TYPE ALL COMMANDS IN LOWER CASE!

<i>dir</i>	list directory; works same as DOS but listing is not exactly the same.
<i>del</i>	Delete a file; same as DOS.
<i>rename</i>	Rename a file; same as DOS.
<i>copy</i>	Copy a file; same as DOS.
<i>type</i>	Type a file on screen; similar to the DOS MORE command. Press space bar for more, press <i>q</i> to quit.
<i>mail</i>	Send and receive mail messages.
<i>umodem</i>	Transfer files using XMODEM protocol. Type <i>xhelp</i> for more details.
<i>kermit</i>	Transfer files using KERMIT protocol. Type <i>khhelp</i> for more details.
<i>names</i>	Lists current NTPCUG newsletter login names on screen.
<i>submit</i>	Submit file to PC News. This command moves the file to the editor's home directory and removes it from the <i>ntpcug</i> directory. After using <i>submit</i> , the file you uploaded and submitted should not appear in the directory listing.

UPLOADING AND DOWNLOADING: Either the XMODEM (called *umodem* on Unix) or KERMIT protocols are available. For details type *xhelp* for *umodem* (XMODEM) help and *khhelp* for KERMIT help. Examples of use are in each help file.

MAIL: If you have mail, it will tell you. To read mail type *mail*. After each message there will be a "?" prompt. Type <Enter> to save the message. To send mail type *mail login-name*. (For example, to send mail to the editor, type *mail jgreen*. A list of other newsletter staff login-names is displayed by typing *names*.) The cursor will be positioned on the next line. Type your mail message using as many lines as you like. Type <Enter> when you get near the end of each line. When finished, type <Ctrl-d> to send the message. The *NTPCUG>* prompt will reappear.

ARTICLE FORMAT AND FILENAME EXTENSIONS: The newsletter staff has standardized on Microsoft WORD as our word processor. If your article has formatting (i.e. bold, italics, underline, etc.) we prefer that you submit it as a WORD formatted (*.DOC) file. If it has no formatting, please send straight ASCII text (*.TXT). If you have formatting but don't use WORD, we will accept another popular word processing package which can be translated into WORD format. Please, only use the DOC filename extension for WORD formatted files and the TXT filename extension for ASCII text files. Use your word processor's standard filename extension, so long as it is not DOC or TXT, for any other word processor formatted file.

ARTICLE STYLE: Type all copy flush left without justification. This includes headings, by-lines, and the first line of each paragraph. For ASCII text files, leave one blank line between paragraphs. For WORD .DOC files do not insert this blank line. Place a credit by-line (your name) between the title and first paragraph separated by blank lines. Don't use tabs in the text; Ventura ignores imbedded tabs in the format we use for the newsletter. The < and > symbols must be doubled if they appear in your text. Edit copy for grammar and spelling before submittal.

SUBMITTING AN ARTICLE: Log in to the Exchange and upload the file. If you wish you can check to see if the file transferred without errors by comparing the file length using *dir* or by downloading the file that you just uploaded and checking it. If you sent ASCII text in text mode, you can type it out with the *type* command. When you are satisfied that everything is OK, submit the file using the *submit* command. The syntax is *submit filename*. Send the editor (me) mail giving your name, telephone number, and the file name you submitted.

Jim Green

□

Inside the North Texas PC Users Group Community

Connie Andrews, Volunteer Coordinator
 Andy Oliver, Assistant Volunteer Coordinator

Volunteers at the Information Booth probably already know Andy Oliver and Andrine Stricherz. Andy, a former "Anchor" at the booth, has assumed the post of Assistant Volunteer Coordinator, and Andrine has been calling volunteers for the Booth the last several months (in addition to working on a BBS presentation for the March meeting). Takes a lot of work to coordinate meetings - thanks to you both.

What is an Anchor? Anchors commit to working the same hour every month to supervise operations during their hour at the Information Booth and coordinate with the Assistant Volunteer Coordinator. They are seasoned volunteers at the booth and able to introduce new volunteers to the ropes, answer/field questions, and in general take care of anything that comes up.

Anchor Allan Harbaugh and Former Anchor Zack Porter-field deserve the credit for this idea, which was refined by Former Anchor John Mackoy. Many thanks to them and to

Former Anchor Robert Hilliard and current Anchors Raymond Reyes, Tom Krieg, Paul Fredd, Larry Tucker, John Ferguson, Allan Harbaugh, Rick Griffith, and John Mackoy (what are you doing here, too, Mackoy?).

You've been seeing lots about the new newsletter deadline. The deadline for the March newsletter was February 10, eight days before our February meeting on the 18th. So, the February names couldn't be published until this April issue. And it looks like the same trend will hold true for the foreseeable future.

One of the benefits of NTPCUG membership is the drawings for members only at the monthly presentations in the auditorium. Keep in mind that Club policy is that volunteers scheduled and on duty at the time of a drawing on meeting day are eligible to win even though not in the Auditorium.

Our officers, directors, SIG leaders, newsletter publisher, editor, staff and writers are all volunteers. Their names are listed in other sections of this newsletter.

INFOMART Liaison:

Stuart Yarus
 Robert Hilliard
 Bob Russell
 Archie Pinkney

Presentation/Equipment Setup and Breakdown:

Timothy Carmichael
 John Ogle
 Tom Fowlston

Information/Registration Booth

Connie Andrews (Anchor)
 Mike Ashley
 K. B. Barton
 David Clinkscales
 Lonny Cordell
 Gary Dula
 Dean Duncan
 John Dyer
 Paul Fredd (Anchor)
 Rodney Haas
 Allan Harbaugh (Anchor)
 Delbra Henderson
 Chris Jung
 Tom Krieg (Anchor)
 John Mackoy (Anchor)
 Claude McClure
 Tom McCullough
 Douglas McQuaid
 Tony Nogueras
 Andy Oliver (Anchor)
 Raymond Reyes (Anchor)
 Andrine Stricherz
 Eugene Taylor
 Juanita Taylor
 Connie Testa
 Gary Thierry
 John Trotter
 Larry Tucker (Anchor)
 Raul Vela
 Paul Williams

Disk of the Month (DOM) volunteers:

DOM table

Dan Allen
 Joe Allen
 Roy Bales
 Paul Buehrle
 Gene Carleton
 Jay Chambliss
 Mike Conner
 Dawn Cupit
 Bill Drissel
 Shawn Dunn
 Pat Henley
 M. Homer
 Bob Karlebach
 Clifton Little
 Bob Marchlo
 Duane Martin
 Bob Post
 Tom Scurlock
 Jerry Stone
 Oscar Tyler
 Claude Walston

DOM Central Committee

Preston Brashear
 Charles Carter
 Kathryn Crawford
 Mark Grunner
 Howard Hamilton
 Hal Horton
 Kenneth Loafman
 Pete Testa, BBS Liaison

DOM Review/Presentation

Preston Brashear (2)
 Charles Carter (2)
 Lonny Cordell
 Tim Davis
 Dean Duncan
 Vincent Galnes (5)
 Pat Henley
 Roy Minut
 Kenneth Loafman

Bulletin Board System (BBS) Volunteers:

BBS Sysops

Tom Prickett
 Maggie Mooney

BBS Steering Committee

Andrew Chalk
 Kent Cobb
 David McGehee
 Pete Testa
 Fred Williams

BBS Champion

Andrine Stricherz

Public Relations Committee

Francis Bright
 Annette Hyde
 Ron Kerr
 Peh L. Lee
 Elwood Lindell
 Charles Lucas
 Tony Nogueras
 Reagan Andrews

VOLUNTEER NUMBERS TO CALL

1. BBS: (817) 461-0425 (metro) or (817) 461-0506 (metro). Leave a message on the Volunteer Conference as to your area of interest and/or hours you would like to work on meeting day. This is the best and easiest/fastest way for our volunteers to get your name and follow through.
2. On meeting day, sign up at the Information Booth or DOM Booth to work those areas in a coming month.
3. By phone:

Auditorium Presentations	
Timothy Carmichael	331-6303 (h) 661-4626 (w)
DOM Activities	
Bill Drissel	264-9680 (h)
General Information	
Connie Andrews	828-0699 (h)
Information Booth	
Andy Oliver	223-4044 (h)



9:00 AM - 10:00 AM

askSam - A Powerful Information Manager

10:00 AM - 11:00 AM

Graphics in Windows Using
Designer and Graph Plus

See page 1 for additional information about these programs.

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
Hardware Solutions
Personal Users

10:00 - 10:55

Astrometry
Graphics
Local Area Networks
Personal Users

11:30 - 11:55

Orientation

12:00 - 12:55

C Language
Communications
Personal Users
RBase
Stock Mkt Investing

1:00 - 1:55

Business Applications
LOTUS
Personal Users
Turbo Pascal
WORD

2:00 - 2:55

Advanced Programmers
Cryptanalysis
DAC Easy Accounting
Databases



North Texas PC Users Group, Inc.

P.O. Box 780066, Dallas, TX 75378-0066

Phone (214)746-4699 for recorded information about the User Group and meeting dates.

The North Texas PC Users Group, Inc., is a non-profit, independent group, not associated with IBM or any other Corporation. Membership is open to owners and others interested in exchanging ideas, information, hardware, predictions, and other items related to IBM Personal and compatible computers. To join the Group, complete the application blank printed elsewhere in this newsletter, and send it with \$24 membership dues to the Membership Director whose address is shown below. A subscription to the newsletter is included with each membership. The Group meets once each month, usually on the second Saturday. See cover for date, time and place of the next User Group meeting.

Board of Directors

Jim Holsington, Chairman	Phil Chamberlain
Reagan Andrews, Ph.D.	Sid Noke, Ph.D. Zack Porterfield

Officers

President	Jim Holsington	(214)416-3101 h
	Voice Mail	(214)931-4426
President-Elect	Zack Porterfield	(214)434-1844 w
Program Chair	Timothy Carmichael	(214)331-6303 w
	Charles Kruboth	(214)
Treasurer	Ken Conner, CPA	(214)669-3377 w
Secretary	David McGehee	(214)681-0202 h
Membership Dir.	John Mackoy	(214)291-0787 h
Advertising Dir.	Ron Kerr	(214)360-0666 w (214)223-6743 h (214)596-2539
Disk of the Month Group Statistician	Kathryn Crawford	
Volunteer Coord.	Connie Testa Connie Andrews	

Member Emeritus

Stuart Yarus

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

BULLETIN BOARD (817)461-0425 (Metro)
(817)461-0506 (Metro)

SYSOP: - Tom Prickett
(voice) (214)690-9087
Asst. SYSOP. - Maggie Moomsey
Technical Advisors: Fred Williams
Pete Testa
User Relations: Kent Cobb
Information Mgt: Dan Marmion
Technical Services: Dwight Neal

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.)

Special Interest Groups

SIG Coordinator	Phil Chamberlain	(214)243-6034h
	Zack Porterfield	(214)434-1844 w
Astrometry	Arlin Collins	(214)351-5137 h
Assembler	Andrew Chak, Ph.D.	(214)226-3461 h
	Stan Milam	(817)548-1573
Business Appc.	Bruce Schubert	(214)348-5700 w
C Language	Sid Noke, Ph.D.	(214)233-6178 h
Communications	Pete Testa	(214)495-7506
	Wm. Bennett	(817)348-0862 h (817)762-3059 w Metro 430-8173
Cryptanalysis	John Taber	(214)660-1823
	John Thomas	(214)235-2559
DAC Software	Pur Shaw	(214)255-4400 h
Databases	Rodney Haas	(214)404-4612 w (214)418-3101 h
DOS	Jim Holsington	(214)828-0699 h
	Reagan Andrews, Ph.D.	(214)341-6507 h
Genealogy	Minnie Champ	(214)307-1259 h
Graphics	Richard Terreo	(214)681-0202 h
Hdw Solutions	David McGehee	(214)937-9676 w (214)937-5851 h
	Gary Johnson	(214)492-1316
Local Area Net	Fred Williams	(214)750-6130
	Dan Marmion	(214)864-8174 h
LOTUS	Mark Gruner	(214)229-9216 h
	Pat Henley	(214)867-1679 h
Personal Users	Bob Presley	(214)343-3554
Programmers	Kent Cobb	(214)418-3101 h
	Jim Holsington	(214)242-1094 w
R:Base	Alan Aberts	(214)352-0888 h
	Con Branham	(214)279-7973
Stock Market	Cifil Murphy	(214)341-4774 w
	Richard Holman	(214)276-1524 h
Turbo Pascal	Don Chick	(817)548-1573
	Stan Milam	(214)828-0699
WORD	Reagan Andrews, Ph.D.	(214)746-4880
Wordstar	Quentin Marshall	(214)746-4880
	Cliff Kinard	(214)746-4880



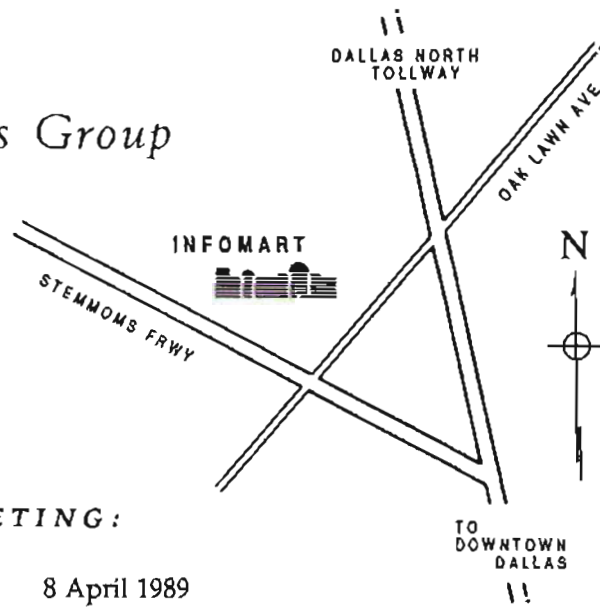
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NEXT MEETING:

8 April 1989