OPCUGThe Ottawa PC Users' Group

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Mailing Address - 3 Thatcher Street, Nepean, Ontario, K2G 1S6 (613) 723-1329 (voice) (613) 723-7064 (BBS)

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THE TALE OF JOHNBACK.ZIP

By John Whelan OPCUG

Once upon a time, a PC in the federal government broke down and a number of WordPerfect documents were corrupted. After talking to users and management in the division, it was apparent to me that, although documents had been on the PC for over a year, no backups had ever been done!

Even if backups are made within an organization, often they are made with 'PC Tools' on one machine, 'FastBack' on another and through a tape backup unit on a third. Life gets confusing for both the person switched from machine to machine and the support staff.

What I felt was needed was a system that was "cost-free". It had to "shame" users into backing up their files if they weren't doing it; it had to be user-friendly; and it had to be obvious to support staff just what was on each diskette and how the data had to be recovered.

'Xcopy' seemed to do a little of what I wanted, but the message, "Insufficient disk space" might not be as easily understood by users as would, "Please put the next empty diskette in Drive a:". I met one user who didn't even know what a UART was, so the system had to be easy enough for them to use.

I introduced my concerns and ideas via the PUB. Messages flew. Michael Goddard quickly created a program that wandered down the disk and displayed the names of files that had the archive bit set. More messages flew. Slowly, the supporting bat files shaped up, the program was modified and the first version was produced.

Chris Taylor left a couple of messages about my .bat files, so I cleaned them up. Bonnie Carter helped make the documentation readable. What started off as a simple series of .bat files that ran the backup based on the 'archive' attribute and 'Xcopy' grew to include other more complex options. I included the Pascal source code to allow access to the code as well as a method of adding a couple of lines to the autoexec.bat file to 'shame' users into backing up data files.

Some users wanted to recycle the diskettes that had been xcopied. 'Del a:*.*' doesn't remove all subdirectories and files. Formatting diskettes takes too long. Chris Taylor came up with 'QDR' which deletes everything on the diskette,

Others expressed an interest in having the files compressed by PKZIP, so an option to copy the files (including the subdirectory name for each file) into a ZIP format onto the floppy was added.

Adding files to the ZIP file until the diskette was full resulted in a number of small programs and bat files. The basic ZIP system was slow and had too many hard disk accesses. Chris provided a RAM disk program that allows the user to put many small files onto the RAM disk within the 640k limit. I use a 120k RAM disk and add pkzip.exe, xcopy.exe and attrib.exe to it. These may be omitted in a smaller RAM disk.

The RAM disk is enabled at the start of a job and disabled at the end. If a RAM disk is already available, a couple of lines in the .bat file can be deleted. Also, if a user has more than one physical hard drive, he or she can take advantage of the second drive.

Continued on Page 2

NEXT MEETING

The next meeting of the Ottawa PC Users' Group will be held on Wednesday, January 31, 1989. The Guest Speaker will be Jamie Simser, a representative from WordPerfect. His topic will be WordPerfect 5.1.

FROM THE EDITOR

Welcome to the 1990's! As your Newsletter Editor, my duty is to you, the reader. I welcome your comments, ideas and suggestions for the Newsletter. Bring them to my attention at meetings, via the PUB or in a letter to the OPCUG.

A big thank you to the members who have so kindly contributed to the production of this Newsletter.

WIN SPECIALTY DISKS

Look for details in an article inside this Newsletter!

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more complex. Questions were added about sizes of disk drives and whether the user wishes to use the a: or b: drive and keep results in a parameter file called 'findfile.qqq'. This file may be deleted to change a configuration.

There is a facility for labelling the ZIP files (eg. 12Jan). The first diskette would be called 12Jan1. The system will not work if a single DOS partition requires more than 999 diskettes of pkzipped files.

While testing the system, I grew tired of waiting until the diskette needed changing. I arranged things so that ZIP files may be stacked onto the hard disk until it runs out of space, and the user is asked to insert diskettes in fairly rapidly. Also, diskettes may be formatted during the backup process.

'Maxi', a method of formatting a 360k diskette to 420k is intended for home users who wish to cram the last byte of information onto each diskette.

The system's strengths are its flexibility and simple subsystems. Its drawback is on deciding between the various choices. Once the system is set up, the actual running of it is very simple. Uncertain users should someone to set it up for them.

The complete system is in the Group's software library under the title JOHNBACK. The most recent version may be found in The PUB's DOS-UTILITY file area. Version chasers should check the File Upload area as well. I think the system is worth trying out.

> THE END (or is it?) * * *

MODEM FOR SALE

Smartem 1200 Baud modem. Hayse compatible. Manual included. (No serial cable). A1 condition. \$100.00 firm. Phone: Andre Lefrancois 236-8722.

The system's environment grew REALTIME CONFERENCING 3. Choose option '<J>oin'.

By: Stewart Bruce Bonnie Carter Chris Taylor

"From: STEWART BRUCE To: BONNIE CARTER Subj: CHAT MODE

/s,1 Hi Bonnie. I hope that this one comes through loud and clear. It was a little frustrating trying to chat with you last night because, first of all, I was in the middle of sending a private message to a friend when up pops Bonnie! Uh....how do I reply without making my private message sound silly?? Right! I rushed through finishing off the letter, saved it, checked which line that you where on, and proceeded to the on-line conference area. Somewhere in the middle of this I got another "Hi, are you there?" from you.

After re-reading the on-line help, fumbled with sending you a message until I didn't get an error message from the system. Then I wait... Nothing happens. Hmmm... I thought that I would send you a message instead, in case you had given up on getting through to me.

I was just into the third line of the letter to you when what pops up in the middle but another " Hi! Did you get this?" from Bonnie. @#!\$#! I aborted the message and jumped back into the Conference area. I fired off another "Howdy" to you and waited.... Nothing again. I had to give up, so I tried sending you an apology and then logged

Unless an evening is set aside for conferencing, it is just too cumbersome for communication. Sure is fun trying it out though. Stew"

The above PUB message is from a member who was trying to use Real-time Conferencing on The PUB. To assist members, the following is a set of instructions which were written by Chris Taylor, the Assistant SysOp, to assist members who wish to use The PUB's Real-time Conference mode.

- 1. Go to the Message section and select 'Real-time Conferencing'.
- 2. Choose '<W>ho' to see who else is on-line.

Send a message to another line with the command message" where 'n' is the line number of who you want to chat with.

For example: " /s,3 HELLO GEORGE" would cause "HELLO GEORGE" to appear on the screen of whoever is on

- 5. Wait for the person to respond. This may take several minutes as they may be in the middle of reading mail or viewing file lists. At this point you must still use /s,n message format. You can drop the /s,n once you enter a channel.
- 6. If you both use the command "/c 1" to enter a channel, you do not need to use "/s,n" and can just type back and forth. You can continue to use the "/" commands to communicate with those not on the channel, to get a list of who is on-line, etc.

7. The other person doesn't see what you type until you press 'Enter', so keep your lines short.

8. End a line with"..." if you need more than one line to finish your message.

9. Finish your message with "over" or "O" when you want to turn the conference over to the other person.

10. To exit from the "Chat" mode, type /QUIT.

11. Remember that help is available while conferencing with "/H".

12. Have fun!

A more detailed explanation along with other Conference options can be found in the PUB's help system by using the "!" option at any "Command:" prompt.



LARGE ARRAYS IN BASIC

By Harry Gross

One of the severe limitations in BASIC is the limits on the size of arrays. If you use the BASIC interpreter that comes with most purchases, the space available for program and data amounts to 64K total. Move up to the original MicroSoft compiler, and you have 64K for programming, and another 64K for data. Buy one of the later compilers, say Turbo BASIC, and you can have up to 64K for individual arrays or 64K for string arrays.

Life is getting better, but not good enough for greedy people, and other than FORTRAN compilers, that is the limit until OS/2 compilers are available. So what to do?

Buying a VAX or mini is out of the question for me as my house wiring is not up to it. The answer is simple, as all great truths are, and came to me in a midst of a reverie of sailing in the Caribbean while shovelling out the driveway. Map the array subscripts to random record numbers and we are in business!!

In expanding on this point, I assume that:

1) the reader is familiar with random records in BASIC.

2) a compiler is used.

3) a virtual drive, as large as needed is used.

Consider a 100 by 50 by 5 array. It will have 25,000 elements in it, and, if single precision, will require 100K of memory at 4 bytes each element. For the interpreter, an array may have up to 32,376 elements. the limit of the GET statement. For a compiler, the limit is 16,777,215.

Consider an array X[C,R], C columns by R rows, as in Figure 1. Then to obtain a record number N, for element X[c,r], the formula used is:

N = c + (r-1)*C

Interesting, but can be more useful. So let us move to a higher plane of existence and define another array X[C,R,P]. Again, C columns by R rows but in P planes. Our formula now becomes:

N = c + (r-1)*C + (p-1)*R*C

So let us now go on and use this in a program. For an array X![50,100,5], single precision with a requirement of 4 bytes per number, a total of (4x50x100x5=) 100,000 bytes are needed, well beyond present BASIC compilers. Consider the following code:

X!=0.0

OPEN "D:ARRAY.DAT" AS #1 LEN=4 ' assume D is your VDISK

FIELD #1, 4 AS X\$ LSET X\$=MKS\$(X!)

FOR N=1 TO 50*100*5: PUT #1,N: NEXT N

The above is optional but advisable. It sets up one contiguous section on disc for the array to occupy. While the concept will work on fixed or floppy discs, a virtual drive is preferred to keep speed up and wear and tear down. The array storage space is limited to the disk size, 360 to 1.44K for floppies and megabytes for fixed discs.

Let us use the following function to simplify things. DEF FNRec(c,r,p,Column,Row) =c + (r-1)*Column + (p-1)*Column*Row and proceed with the following program. OPEN "E:ARRAY.DAT" AS #1 LEN=4

```
' assume E is your VDISK
FIELD #1, 4 AS X$
 FOR c=1 TO Column
 FOR r=1 TO Row
 FOR p=1 TO Plane
```

' calculate the values, read them in from elsewhere, etc LSET X\$=MKS\$(X!) PUT #1,FNRec(c,r,p,Column,Row)

NEXT p,r,c

CLOSE #1

Having set up the array, any element may be accessed thusly:

OPEN "D:ARRAY.DAT" AS #1 LEN=4 ' assume D is your VDISK

FIELD #1, 4 AS XS

WHILE (some condition)

set up c,r,p here GET #1,FNRec(c,r,p,Column,Row)

X!=CVS!(X\$)

' do something with it

WEND CLOSE #1

What we have here is a bare outline. If a virtual drive is used, it will be necessary to save it when done.

Instead of rows, columns, and planes, we could use years, day of the year, and variables of the day, such as meteorology, stock market tables, etc. Extending this, we could have a four dimensional array involving year, day of the year, time of day, and a variable of time. Other extensions for those who may need them, would be arrays with other than unity as the lower bound.

Another generalization would be to a string array. Note that to simplify the explanation, the variables are not typed. This could be a consideration in some

applications.

Another useful routine is the inverse of the above. It changes the record number N to indices.

SUB Indices(N,c,r,p,Column,Row,Plane)

LOCAL m,a a=Column*Row p=INT(N/a) + 1m=N MOD a IF m=0 THEN p=p-1: c=Column:

r=Row: EXIT SUB r=INT(m/Column)+1 c=m MOD Column

IF c=0 THEN r=r-1: c=Column

END SUB

As a bonus, there will be a prize of the winner's choice of three specialty discs for the best generalization of the above to any number of dimensions. To simplify things, we will consider only arrays with a lower boundary of each dimension equal to unity. There are three parts to this: the derivation of the formula for the record number; the routine to use it; and the routine to change the record number back to subscripts. One disc is for each part. Deadline for submissions is March 1/90 and MAIL your solutions to me at:

824 Fleming Ave Ottawa, Ont. K1G 2Z2

Query: Bonnie Carter

Is there a way to delete a ROM file? I want to remove a directory, so I deleted all the files. There was a hidden file in it. I tried to delete it, but was unable to delete it and remove the directory.

Reply: John Whelan

Use the attrib. command to change your "read-only" file to "none-read only".

attrib filename.ext -R

Query: Dwight Coutts

What are the differences between DOS versions 3.2 and 3.3?

Reply: André Cyr

One feature of DOS 3.3 deals with the specific country setup using CODEPAGE. NLSFUNC plus improvements on existing commands take advantage of the new functions. The changes from 3.2 to 3.3 are explained at the beginning of the DOS manual.

Reply: John Whelan

Andre has mentioned one difference. Another is "Johnback" won't work unless you have DOS 3.3. The XCOPY and ATTRIB. commands now work on lower subdirectories with an /s parameter. This makes backing up your hard disk much easier. If you can, change to 3.3. If you work in the federal government, ask for an upgrade so you can access to the French accented upper case letters. Reply: Chris Taylor

One feature of 3.3 is the use of @ in front of a command in a batch file and not have it echo to the screen. The DOS 3.2 on my Toshiba 1200 lacks this feature. It makes cleaner batch files to start with "@ECHO OFF". If the version doesn't support the @ feature, you don't turn off the echo at all!

Reply: André Lefrancois

One difference is that 3.3 supports 3.5" disk drives.

Reply: Eric Clyde

Other functions that DOS 3.3 added include APPEND, which allow you to link subdirectories so that .exe and .com programs can find overlays, and, important to my mind, FASTOPEN, which keeps track of the location of files you have used on your hard disk. Various other commands were modified, presumably to remove bugs found in earlier versions.

Query: Michael Goddard

Reply: Howard Krakower

Why are the ROMs in micros ROMs and not EPROMs? Is there an electrical or structural difference between the gizmos that means an EPROM cannot not be used? My reasoning was that if EPROMs were used, all I had to do was walk the chips into a shop and get them re-programmed, not replaced.

The ROm chip in your micro could be either a PROM, EPROM or EEPROM. There is a certain amount of compatibility between these devices in that certain series have interchangeable possibilities. Thus, the micro could have a PROM (a one-shot device which is programmed only once), an EPROM (erasable programable read-only memory),

PUB TALK

which is erased using a source of ultra-violet light. I have an EPROM eraser or an EEPROM (which is similar to the EPROM except that it is electrically erased through the EPROM programmer). The chances are that, if the motherboard is compatible you could try an EPROM which has some other BIOS programmed into it. First, you should carefully count the pins on the device, as some ROMs do not have the same number of pins as the more common EPROMs.

If you want to try other BIOS chips, I can see what I can come up with and send you an experimental copy. However, it will be incumbent upon you to ensure that the ROM you end up using is legal, i.e., you have paid the royalties on it.

Reply: John Whelan

It is cheaper to make ROMs rather than EPROMs or EEPROMS, but it is much more expensive to set up the programming the first time. So if you need 5, use EPROMS if you need 2,000,000 and you are CERTAIN there are no bugs in your code, use ROMS.

The pin outs differ from chip to chip as well, but generally speaking, for each ROM manufactured, there is an equivalent EPROM. The reason is that then you can burn the EPROM, reprogram it until you have it correct and checked out, and then you burn the ROMS on the same basis.

One other strange animal you come across occasionally is an EPROM that you can't erase. EPROMs have little windows built in to the carrier chip, usually with a label over the top. Little windows cost money and it is slightly cheaper to make them without the windows. These chips can then be programmed by an EPROM programmer but can't be reprogrammed. They are more expensive than the mass produced ROM chips, but cheaper than proper EPROM chips.

Query: John Whelan

Having added several words to my WordPerfect supplementary dictionary, I now wish to doublecheck them for spelling and delete those that I added that were spelled wrong. How do I do this?

Also is it possible to remove words from the main dictionary? I'd like to remove 'wether' so that if I write it, the dictionary won't permit it. A wether is a castrated ram and I don't write much about these animals.

Reply: Bonnie Carter

Using the Speller Utility program, you can delete words from both the main and supplementary dictionaries. If you are using a hard disk, use the CD command CD\WP50 or CD\WP50\LEX to access the directory containing the dictionary and use the spell.exe program. You will see a menu. Choose (3) "delete words from dictionary". If the spell.exe program is in the current directory or in a directory which is included in your path command, just type "spell" to start the utility. One warning: if you have the May 5/88 or July 1988 release of WP 5.0 and DO NOT have a hard disk, do not try changing the main directory. You will destroy your dictionary.

From John Whelan:

It worked, it worked, it worked! Heavens, you learn all sorts of things here....

* * *

BAT HINTS

By Morris Turpin

Why batch files? What is to be gained? Can't I just as easily call my programs from the DOS prompt

or from my menu?

These are a few of the questions raised by computer users when first confronted with batch files. The purpose of this column is to show you that batch files are indeed useful and are usually the best way to gain access to any program on your hard disk. With batch files, you can set paths and prompts for special applications, use the error level codes that DOS returns, pass parameters to programs and make use of DOS environment variables. Batch files can be written to make decisions and branch operation based on those decisions or to accept input from the keyboard for branching. They can be written to be interactive; that is, to interrogate the user and accept the input supplied. If all this is meaningless to you at the moment, don't worry. Stick around and you'll soon be writing your own batch files. To be able to write batch files you will have to know something about DOS and the directory structure used by DOS, particulary as it applies to your own computer. Although the basics are beyond the scope of this column, I will attempt to write so that the computer novice can understand the concepts even though they may be unfamiliar with the DOS commands used.

To write batch files, you will need a text editor. You probably have EDLIN, the infamous line editor, on your DOS disk. I don't recommend using Edlin due to its unfriendly user interface, although it is perfectly adequate. Fortunately, there are many good text editors available. The Club has QEDIT, MultiEdit and other text editors available either through The PUB or on the Disk of the Month. Word processors may be used, but the text MUST be stored as "ASCII" text. (WordPerfect calls it "DOS" text).

GETTING STARTED

Before we can use batch files to full advantage, we must configure our computer. This is done when the computer is booted. You may or may not have a file in your root directory called CONFIG.SYS. This file is not necessary to operate your computer, but it does allow you to configure your computer to suit your needs. A typical Config.sys file for an XT is:

CONFIG.SYS
buffers=10
files=15
device=c:\dos\ansi.sys
shell=c:\dos\command.com c:\dos

/e:1024 /f /p break=on

I will briefly explain the entries in

the Config.sys file.

A BUFFER is a block of memory that DOS uses to hold data when reading or writing. The valid range is from 2 to 255 for DOS 3.3. For applications such as word processors, a number between 10 and 20 is recommended for best performance. If you have a lot of sub-directories you may want to increase that number to between 20 and 30. Keep in mind though that each buffer takes up 512 bytes of memory and increasing the number of buffers can slow down the operation of the computer.

FILES sets the number of files that DOScan have open at one time. The valid range is from 8 to 255 for DOS 3.3. Word processing programs recommend that files be set to a

number between 15 and 20.

DEVICE installs a specified device driver on the system list. There can be many lines starting with "DEVICE=" in your Config.sys file. In this case, we are loading the ANSI.SYS driver which is located in a subdirectory called "DOS". (Note that it is not necessary that the file be in the root directory. There are very good reasons for having as few files as possible in the root directory). Ansi.sys will enable us to control the cursor position, screen colours and attributes through our batch files.

The SHELL command tells DOS where the shell is and its name. In this case, it is COMMAND.COM (although it does not have to be) and it is in the DOS subdirectory. (Again note that this file is not in the root directory). The second C:\DOS in the line sets the comspec for the system (and makes the COMSPEC= line in the autoexec.bat file unnecessary). The three parameters used are:

/e - This parameter specifies the environment size, where xxx is the size in bytes, from 160 to 32,768 for DOS versions 3.2 and higher in paragraphs for DOS 3.1 where 1 paragraph equals 16 bytes. This is useful when long paths, many environment variables or programs employing user-defined environmental variables are used.

/p - This parameter will permanently expand the environment to the size set by the /e:xxx

parameter.

/f - This parameter is supported by command.com but is undocumented. It prevents the system from hanging when an attempt is made to change drives to one without a diskette installed. This is particulary useful when controlling your system from a remote location or if you get tired of the DOS "Abort, Retry, Fail?" line. It produces the same results as typing an "F" from the keyboard.

BREAK=ON- This statement extends the CTRL-C checking to functions other than while DOS is reading from the keyboard, such as

disk reading and writing.

I recommend that you have a subdirectory to keep all your DOS files. This will help ensure that you don't have different versions scattered around your hard drive.

Using your text editor, create a Config.sys (or edit your existing file) to include the above lines (do not delete any other drivers that may already have there). Save Config.sys in your root directory. If your DOS subdirectory is called something other than "DOS", use the name of YOUR subdirectory. Reboot your computer and everything should be as before, except that now we have configured our computer so that we can start writing batch files. Type SET at the DOS prompt. The DOS environment variables (comspec, path, prompt, etc.) will be displayed. Note that your comspec is set to C:\DOS (or whatever your subdirectory is called and providing that it was not over-written by your autoexec.bat file). If everything is OK at this point and you still have copies of COMMAND.COM and ANSLSYS in your root directory, delete them.

Next month we will look at the AUTOEXEC.BAT file, the path and prompt and begin writing batch files.

. . .

UPGRADE YOUR DOS?

By David Smith

With most popular Software programs, DOS improves with age (Bugs aside!). But, unlike my Bank account, she keeps getting larger! (Reliable authorities assure me Ms. Dos is a she!)

Back in August of 1981, Microsoft released the very first version of DOS, Version 1.0. Those were the days of single-sided 160K floppy diskettes. PCs of the time usually contained a whopping 64K of memory. As time and technology advanced, major advances in types of computers (such as the XT and the AT), combined with relatively simple changes such diskettes, double-sided diskettes came into being. Later followed 3.5 inch diskettes and high density disk drives. With each new hardware advancement, Software (DOS) had to enhance old features and add new ones capable of dealing with these changes.

DOS became more powerful and, to some degree, more user-friendly (Dos 4.0). The improvements, however, came with a price -- more RAM consumption. Users with hard disks larger than 32MB welcomed the ability to format their disks (DOS 4.0) without having to partition them. But what about those with 640K or less of RAM. We may do well to reflect on whether an upgrade is a wise choice.

Lets look at some statistics.

DOS	Size	Min. RAM Occupied*
DOS 1.0 DOS 2.0 DOS 3.0 DOS 4.0	13K 40K 59K 108K	10K 25K 30K 67K

*Minimum RAM Occupied = Total RAM occupied by system files immediately following bootup with no Autoexec.bat or Config.sys files.

As an illustration, a colleague of mine, whose PC has a total of 512K of RAM, was attracted by the features that DOD 3.3 offered and, using "SYS C", upgraded. Instantly, he discovered what "Insufficient Memory" meant when he tried to run Wordperfect as an editor while using Telix! It qucikly became apparent to him that, while Version 2.1 didn't have all the bells and whistles of 3.3, it did everything he required, whereas 3.3 just wasn't practical without upgrading his RAM. To downsize to his original DOS, he had to back up his files, reformat his hard disk and re-install his old DOS!

Other factors to take into account are the usual bugs that crop up with new versions of a software package, often after months and even years of being on the market (and DOS is no exception). Version 2.1 has been around a long time now and is a reliable bug-free product. For the manufacturers of laptops, who traditionnaly place DOS on ROM chips, 2.1 is attractive from a point of view of both size and reliability.

As users such as myself, who have 640K of RAM on a trusty old XT, see the newest versions of software packages (i.e. Wordperfect) getting progressively larger with each upgrade, suddenly even 640K of RAM isn't enough when trying to running other programs. Some seriously consider "downsizing" back to older versions of DOS.

For those wishing information in greater detail, there is an excellent article in the September 1989 issue (#30) of PC Resource entitled, "The Dos Version That's Right For You".

TIDBITS

Down At The PUB Chris Taylor

The PUB (short for <P>C <U>sers' Group ulletin Board) has many features that can make life easier. One is to set a default download protocol. From the main menu press U to get to the User Profile menu. Then press C to change configurations. One of the options is D - Set File Download

Protocol. Choose that option and set your default protocol to whatever you like. My preference is YModem Batch. It is fast, you can download multiple files in a single command, and the filename is passed along with the file, so you don't have to enter it. From then on, when you download a file, you won't be prompted for a file transfer protocol.

Cursing Lost Cursors By Michael Goddard

A poorly behaved program left a colleague without a cursor. I was asked for a utility to restore the cursor. Another colleague had trouble seeing the cursor on her laptop.

This DEBUG script will create CURSOR.COM. Use an editor like TED to create an ASCII file (say, for example CURSOR.SCR) Re-direct the file to debug by typing DEBUG <CURSOR.SCR. If you use a word processor, use DOS text or plain ASCII files and include the blank line after INT 21 - CJT. Type CURSOR 0 if you want to turn off the cursor, or use a number from 1 to 7 for progressively larger cursors. Some Laptop owners include CURSOR 7 in AUTOEXEC.BAT.

The utility is written for CGA, MCGA, EGA and VGA systems. Replace the MOV CL,7 instruction with MOV CL,0D and the ADD CH,38 instruction with ADD CH,3E for monochrome versions. I have not tested this yet. Cavaet emptor!

Contents of CURSOR.SCR
A 100 MOV AX,4C00
CS: INT 21
MOV SI,[0080] RCX
ADD SI,0080 2A
AND SI,00FF N CURSOR.COM
CS: W

MOV CH,[SI] Q CMP CH,30 JZ 011D *

NOT CH ADD CH,38 JMP 011F NOP

MOV CH,20 MOV CL,07 MOV AH,01 INT 10

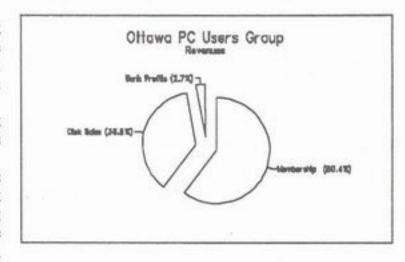
TREASURER'S REPORT

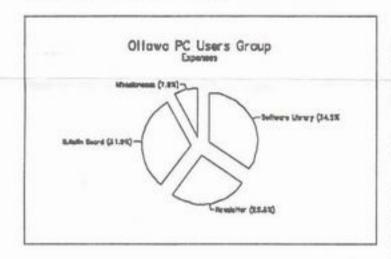
The graph at the right and the following report summarizes where your money comes from. Basically, the bulk of our revenue comes from membership dues with small amounts from software sales (see Software Library costs) and bank interest on term deposits.

The summary table shows a fatter balance last year offset by higher spending on hardware to set up the Group's

Bulletin Board System.

The BBS and the Newsletter took up the bulk of this year's expenses. Newsletter costs were a little lower than last year, as we published fewer issues due to editor/publishing problems. Compared with last year, the overall figures are lower due mostly to a late deposit of about \$3000 which will appear in next year's assets.





About a third of this year's BBS expenses went toward further upgrading of the board. We bought a new tower case and added a number of surge suppressors to the four modems that keep the Board running. We also upgraded the BBS software.

Miscellaneous expenses included meeting condiments, projection rentals, renting space for the annual flea market and other smaller items.

The projected 1990 budget includes purchasing a new 300M hard drive to increase capacity for the BBS, installing a 9600b modem and another telephone line, purchasing a 386 or 386SX portable computer for use at meetings and to run our desktop publishing software for the Newsletter. These improvements will be financed from our surplus and from

additional revenues generated from the membership fee increase. We are also putting funds aside for possible incorporation of the group.

1989 TREASURER'S REPORT - SUMMARY

		1987	1988	1989	Projected 1990
BANK	Opening Balance Revenues Expenses Closing Balance	\$12,436 \$17,932 (\$22,686) \$12,436	\$7,682 \$15,986 (\$12,979) \$7,682	\$10,689 \$24,600 (\$26,700) \$10,689	\$8,589
INCOME	Membership Disk Sales Bank Profits	\$11,340 \$6,304 \$288	\$9,660 \$5,887 \$439	\$18,200 \$6,000 \$400	
EXPENSES	Softtware Library Newsletter Bulletin Board Miscellaneous Incorporation	(\$5,453) (\$5,655) (\$10,780) (\$798)	(\$4,480) (\$3,351) (\$4,134) (\$1,014)	(\$6,000) (\$12,000) (\$6,200) (\$1,000)	(\$1,500)
ASSETS	Coffeemaker Telephone answering machine Library (diskettes/boxes) Membership software (Reflex)		Public address BBS equipm Newsletter so Corel Draw		

OTTAWA PC USERS' GROUP

EXECUTIVE

President Past President Treasurer	David Terroux Stu Moxley Tony Frith	238-4895 592-4933 231-7250 Weekdays
Secretary Program Chairman Membership Chairman Meeting Facilities Publicity Software Librarian Newsletter Editor BBS System Operator Bulk Purchasing	Claude Jarry Douglas Poulter Carl-Henri Gomez Stu Moxley André Cyr Chris Taylor Bonnie Carter Mike Schupan Terry Mahoney	671-0401 Weekends 521-3366 745-8768 731-1462 592-4933 561-5207 723-1329 236-1015 820-0293 225-2630 226-2615 FAX
ASSISTANTS		
Software Assistant Newsletter Assistant Contributing Newsletter Editors SPECIAL INTEREST GROUPS	John Ings Marc Riou Chris Taylor Marty Sells David Smith	235-8132 733-2092 723-1329 829-5606 837-9291
PCJr Enable Packages Whole Bit TV Show	Tom Mimee Bob Laidlaw Eric Clyde Sandy Shaw	828-9705 957-7035 749-2387 733-5088

THE OTTAWA PC USERS' GROUP MEMBERSHIP APPLICATION - Please Print

Last Name:	First Name:				
Mailing Address:					
		Office:			
Profession:	Business Name:				
Membership Period: Present until Ma	rch 31, 1990:	April 1, 1990 to March 30, 1991:			
Disk of the Month: YES NO	Size: 5 1/4" 3 1/2	72" Amount Enclosed \$			
	new member? Renewing				
How did you find out about the group	?				
What in particular interests you in the	Group?	Update the second			
		rogramming language Instruction			
Newsletter Input Me	mberships Software I	Library Promotion/Publicity _			
Hardware Techniques ?	Meeting Locations Ager	endas & Speakers Advertising			
Bulletin BoardOther					
Comments and suggestions:					