

# Ottawa IBM-PC Users Group

3 Thatcher Street, Ottawa, Ontario, K2G 1S6

June, 1988

Measures file size

## CHECKUP may solve 'virus' problem

by Mike Luckham

Jackson Hibler's been talking a lot about 'viruses' lately. You remember, the kind that 'infect' your old familiar .COM and .EXE programs and cause schizophrenic behavior, or worse! Trouble is, you don't usually know when a virus has invaded your system until it's too late!

According to Jackson's research, your computer can 'catch' a virus the same way you or I would... by coming

into contact with an 'infected' computer or computer disk! Downloading game programs from BBS's has entered the realm of Russian Roulette! Once the virus has taken hold on your disk, it remains dormant for hours... days... even years, and when conditions are right, it activates itself and does its dirty work! .

These viruses sound like tough nuts to crack! Even the Pentagon's worried! Can't anyone do something?

Well, a virus is just a self-replicating computer program which tacks a copy of itself on the end of a .COM or .EXE file. When an infected program is run, in effect the virus program runs too and can infect more files, or transmit a copy of the virus to another

computer, or erase your disk; in short, whatever the programmer intended the virus to do!

Too bad, but computers lack even the simplest of immune systems! They're just not capable of recognizing or dealing with viruses by themselves... they weren't designed for it. 'Anti-virus' programs such as FLU-SHOT can help, but must be carefully matched to each virus; a different virus may slip through unnoticed.

Lucky for us that Jackson's not just a doom-sayer... he thinks he has a solution. He's been pushing the idea of a 'CRC Check' program as the best general-purpose anti-viral defence, and I agree with him. That's why I've

continued on page 2

## Program raffle...

Help one of Canada's top chess players and possibly win the accounting package Clan Accountant. The package is the prize in a raffle scheduled for the June 29 meetings of the OPCUG. Proceeds from ticket sales, at \$2 minimum, will go towards blind chess player Donald Beaulieu.

The same meeting will feature Nancy D'Amico of Sir-Tech who will speak on accounting and games. Plan to attend this last meeting before the summer break.

## WordPerfect v5.0

## New kid on the block

by Mike Roy  
OPCUG

WordPerfect version 5.0 (WP) is the newest kid on the block in the word processing world. And like any new kid, it has a few teething problems.

The first problem I encountered was WP's refusal to install properly. The program kept identifying files it couldn't find. One in particular was the spelling dictionary.

continued on page 4



\$20 to \$25 per chip

## Micro-chip prices are on the increase

By Terance P. Mahoney

Prices for DRAMs have been spiralling upwards with no sign of early relief. This week the lowest wholesale level quote we received on 100ns 256k chips was just under \$20 per chip. No significant quantities were available at this price. Many quotes were in the

\$25 range. There are significant shortages of all widely used and some not so widely used DRAMs eg. (four x 64k). Market predictions vary, but no relief has been predicted before the fall, if then. Some pundits say no relief until next year.

How does this affect you? Computer prices have started to increase. One well known manufacturer has raised prices by about 10 per cent across the board. Prices on expansion products have started to rise. One popular EGA board with eight 256K chips on it has increased in price by

almost 15 per cent. The 640k AT clone is making a comeback as well as the 512k model.

We thought the 640k AT had disappeared like the dinosaurs. One meg ATs had become the standard. Usually these were accompanied by print spooling and ram disk software. In some cases they had software capable of using the additional RAM as expanded (Lotus/Intel) memory. I still think a 640k AT is a dinosaur. If you expand memory in the future you will have a handful of 64k chips you can

continued on page 6

## Disk - 52 is fully packed

by Chris Taylor  
Software Librarian

As the deadline for the newsletter approaches, the contents of Disk-52 has grown to more than 500k. And the documentation is not yet complete! Guess I have some editing to do.

Anyway, look forward to SOME of the following: an April fools trick (slightly late) for your friends or enemies, a very nice backgammon game, a CHECKSUM program to help detect if a virus has bitten you, a utility to compare files and show the differences on screen and in context, and an arcade game where you must serve some very demanding customers.

Disk-52 also contains a very nice program for slowing down your computer with a pop-up window for changing the speed, a calendar/appointment manager, a utility that will graphically display disk usage and technical stats, a byte editor, a nifty replacement for the boring old PAUSE command, some funny one-liners, and a utility that can cross-reference any source code or document.

## CHECKUP may solve virus problem

from page 1

written his program, placed it the public domain, and called it CHECKUP.

With CHECKUP, you can take a program's 'temperature'. CHECKUP carefully examines your file and comes up with a number... very likely a different number for every file you try. Jot the number down! If you ever CHECKUP a file and get a different number, watch out! Something has changed in that file. Perhaps it's been infected by a virus.

CHECKUP uses an advanced CRC (Cyclic Redundancy Check) checksum algorithm which detects missing, added or scrambled information. The number which CHECKUP calculates is derived from close scrutiny of each and every byte in your file! You can use it on document files too!

Jackson's been using CHECKUP for a few weeks now. He has a number of strategic files (like COMMAND.COM and

CONFIG.SYS) to be checked each time his computer is turned on, so he's added this line to his AUTOEXEC.BAT file:

```
checkup -i checkup.lst
```

The '-i' tells CHECKUP that the file CHECKUP.LST contains the names of the files he wants checked, such as:

```
/command.com  
/config.sys  
/autoexec.bat  
/dos/format.com  
/dos/chkdsk.com
```

When AUTOEXEC.BAT is executed, CHECKUP reports the CRC of the group of files in this way:

```
42152 (23152 bytes checked)
```

The left-hand number (in our example '42152') is what you want to

continued on page 3



# OPCUG library has interesting history

In the May edition of the Ottawa IBM-PC Users Group newsletter, a system failure destroyed part of the article by Chris Taylor on the history of the OPCUG library. Here is the complete article. We apologize for any inconvenience this error may have caused.

By Chris Taylor  
Software Librarian

There is something about round numbers that cries out for attention. As this is Disk number 50, I would like to take a look at some of the changes that the software library has seen during the past few years.

Disk-01 was released in March, 1983. The librarian's name on the monthly disk was missing until Barry Armstrong's name appeared at Disk-05 in October, 1983.

At Disk-07, in January, 1984, Gord Hopkins and Mike Schupan took over as librarians. The library benefitted greatly as Gord had come from the Northern Alberta PC Users' Group and had brought their library with him. Also, Gord had written an ele-

gant BASIC program to provide a nice menuing system for the monthly disks.

I joined the club at Disk-15 in October, 1984, and got involved with the library a month later. Mike Schupan was sole librarian at the time. My job was to gather software. I was not too good at that, but did manage to come up with a few programs a month. As I became more proficient, Mike let me take over more and more of the duties. I became the librarian at Disk-26 in November, 1985.

At that time the monthly disks had a copy of IBM BASICA on them in order to run Gord's menuing system. People with clones would have their computers hang-up if they booted with the monthly disk, as it required the IBM ROM BASIC as well as the BASICA on the disk. I decided to return to a batch file menuing system starting with DISK-30 in April, 1986. A few utilities from the library were used for control. It was a simple system, small, and not too slow. Several variations were used as different utilities became available.

When PC-Magazine published the Lotus-style menuing system SLASH-BAR, I changed the format of the monthly disks to use it. I was impressed with its small size, flexibility, ease of use, and speed. It has been used since Disk-41 in May, 1987.

Paranoia about virus programs prompted the IBM-PC Users Group to drop the operating system from the monthly disks. On the positive side, there will now be 40K more space available each month for useful programs. Any disk purchased after February, 1988 will not contain the operating system.

As I was sure many novices would be confused by the 'No system' error message provided by DOS if they attempted to boot from the monthly disk, I borrowed a technique from Peter Norton. Norton found a way to use most of the boot sector to run a small program displaying a message. Try booting any monthly disk purchased after February, 1988.

The library continues to grow by leaps and bounds. The entire library, which consists of the monthly disks, the specialty library and demo disks, now contains more than 300 disks. There are programs of virtually every type in the library. My thanks to everyone who has made the library what it is today.

## Calendar ...

Meetings of the Ottawa IBM-PC Users Group are held on the last Wednesday of the month except in July and December. The Meeting are held at the National Research Council Auditorium, 100 Sussex Drive (Gothic Building facing King Edward Avenue). Memberships and club disks are available at 7:30 p.m. with the regular meeting starting at 8 p.m. Free parking is available at the rear of the Gothic Building.

The next meeting will be on:

**August 31.**

## CHECKUP...

from page 2

remember. CHECKUP will always give the same number for the same group of files so long as the file names are in the same order, and so long as the contents or sizes of the files have not changed. And a virus, any virus, has to change files to replicate itself!

CHECKUP will be available at the June meeting of the OPCUG on Disk number 52.



## Clip-art graphics included

# Major improvements added to new version

from page 1

It seems that in its haste to market WP v5.0, the programmers had renamed the spelling file but forgot to tell anyone. WP kept looking for WP{WP}EN.LEX and all I had to offer was WP{WP}UK.LEX (a British spelling dictionary). The solution is to copy WP{WP}UK.LEX to a blank disk, rename it WP{WP}EN.LEX and then send it back into WP.

A toll-free call to WP's Canadian distributor, JB Marketing, provided some of the answers for the other files. The service representative suggested removing all of the WP v5.0 stuff from the hard disk and then doing a manual installation (a:\ copy \*.\* c:\ wp50) of the six major disks, ie: WP 1 and 2, the Speller, the Thesaurus, the Learning disk and the Fonts/Graphics disk. Having done that, WP settled down and began to operate properly.

While there are those who detest complex programs with complex keyboard commands, WP v5.0 had come a long way from v4.2.

Because it's loaded with features such as 'page preview', 'graphics' and 'style sheets', it's easy to see why it gobbles up 384k and why WP Corp recommends installing the program on a hard disk. Its ancestor, WP v4.2 used only 205k.

### Keyboard changes

One of the biggest changes is an optional keyboard file, ALTERNAT.WPK, which allows the user to change some of the function keys. WP v4.2 had the bad habit of using Function key F3 as the HELP

key while F1, used as the HELP key in many programs, was the CANCEL key. WP v5.0 has changed all that. Yes, it still offers the older v4.2 set-up

... WordPerfect v5.0 has answered the needs of writers and word processors with a host of features...

but the ALTERNAT.WPK file changes F1 to the HELP key and F3 becomes a REPEAT key (sound familiar?). There's also another optional keyboard file for the IBM enhanced keyboard.

Other changes to the function keys include: SETUP for identifying where backup files are stored, etc., STYLE for style sheets and GRAPHICS, yes graphics, for clip-art graphics included with the program. There's 30 of them including a pencil, a clock, a map of the U.S.A., a flag, a gift-wrapped package, etc. Depending on your printer, you can incorporate these graphics into your text. It's a type of low level PageMaker program.

Microsoft Word users will recognize the PAGE PREVIEW feature of WP v5.0. It does what the name suggests. When entering this mode, a page appears with text on it to show what the text will look like in the final document. If a letter is too high on the page or if you want to reformat the margins to improve the appearance,

then PAGE PREVIEW shows the results of the changes. This feature also offers both 100 and 200 per cent views. To move from page to page, you use the PgUp or PgDn keys.

WP v5.0 offers a choice of screen measurements. For example, it

Defaults to inches and identifies the position of the cursor by inches from the top and the left margins of the page. It also offers the same style of measurements in centimetres, points and the older WP v4.2 method, ie: line number and

cursor position in the text that will be appreciated by typists and word processing operators.

Getting started in WP v5.0 is reasonably easy. There's both a separate book full of lessons that corresponds with the tutorial files on the learning disk or you can use the on-screen tutorial which gives you a good, basic instruction in the program. The owner's manual comes in the familiar three-ring format plus there's two keyboard templates, one for the standard IBM keyboard and the other for the enhanced keyboard and a quick reference card showing all the keyboard commands.

WordPerfect v4.2 has become one of the most popular word processing programs in North America. WordPerfect v5.0 offers more features, has corrected some of the shortcomings found in v4.2 and now offers a logical, powerful approach to word processing. Yes, there's the odd bug but so far the bugs have been more of a minor nuisance instead of a major problem. This new kid can hold its own.



# IBM, the PC and the computer marketplace

by Jackson Hibler  
OPCUG

Conventional wisdom would have it that IBM is the master marketer. And indeed, if success in the personal computer field is to be taken as sufficient evidence, who can argue? But having 'given the name' to the PC arena does not mean IBM is the master player therein. Lets look back a bit:

When IBM introduced the PC in 1981 their marketing people projected sales of about 50,000 a year over the first five years. In fact they sold a whole order of magnitude more in those first five years... some 3,000,000. Now you would think that they would have revised their marketing thinking in the face of such results. But have they? Perhaps not.

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...PC sales were projected to reach 50,000 units a year

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First of all, the PC was just a blip in a much larger chart of endeavor back then. The mainframe and mini arena was where IBM concentrated its efforts. Its marketing strategy and knowledge really related to that field... and still does. Of prime importance were the several thousand 'information systems managers' that made the computer buying decisions and then sold their decisions to management. IBM has concentrated on selling to those individuals: coddling,

cajoling and stroking that small but vital link in the marketing chain. IBM realized early on that it would pay them to go one-on-one even many-on-one with these people. They did, and the results are history. This was big marketing, no doubt, but not mass-marketing. What IBM was about to get into with the PC, however, was a mass market.

IBM may have now convinced itself that the personal computer's 'time had come' and they just happened to be at the right place and time in 1981... nonsense! The PC's 'time' had come a couple of years before with the maturation of CP/M... people were ready to buy a PC! But that operating system's 'device independence' had not triggered easy transportability of programs and expansion equipment between machines as had been hoped... disk formats under CP/M proliferated... it was still 'Babel' in the personal computer market place. Customers? "No, thank you."

Back then some very bright people in the Entry Systems

Division of IBM decided to standardize the operating system and disk format (to start); but most importantly, they opened the architecture of the machine to allow expansion of the hardware as well as the software. The idea probably wasn't to open the market to competitors so much as to open the machine to third-party sources of parts. Paradoxically, it was opening the machine to competition that really 'made' the machine! You don't see a 'standard' develop unless it is darned handy for a very large number of players. An open architecture let add-in manufacturers and, later, 'clone' manufacturers enhance, ex-

pand and proliferate the machine. It was the fact that lots of equipment and software could be seen accumulating around the machine that brought in the customers still jaded from the failure of CP/M. This machine was open-ended; it had a future! Suddenly it wasn't going to be just 50,000 units a year anymore... an embarrassment of riches that seems to have concerned IBM more with the embarrassment than with the riches.

At the moment, there appear to be

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The PC population is estimated to be close to 11,000,000...

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some 11,000,000 PCs, XTs and ATs out there and IBM has sold some 40 to 50 per cent of 'them. You'd think they would be delighted, right? Nope. Instead they grind their teeth over the 6,000,000 PCs they didn't get to sell... as if they would ever have got to sell their pile without the presence of the other clone makers that legitimized the market. I contend that without the clones, IBM would have been right about selling 50,000 a year. Apple, with superior equipment, operating system and software has endured a long costly battle to establish itself in the market. But IBM looks to Apple with envy for its closed architecture and stranglehold on its market niche.

continued on page 6



# IBM and the personal computer marketplace

from page 5

The operative word is niche!

So now IBM is trying the Apple route with the Microchannel PS/2 architecture; and the CP/M route with a 'device independent'... really meaning a slightly, but significantly, differ-

ent architecture, and ultimately it seems, inherit it!

I wonder if IBM realizes how close they are to 'betting the company' on the Microchannel PS/2? Sure, the market is bigger now and IBM will get to sell a lot of 'them no matter what

just remain another incompatible machine on the fringe of the standard PC world... sold to old information systems manager groupies and darned few others.

There's an old adage from the stock market: "Bulls can make money. Bears can make money. But pigs get slaughtered." I don't think it is yet time to buy IBM's stock again... or a Microchannel PS/2 either!

P.S. The day after the above article was filed, the Globe and Mail (May 31, 1988) reported that IBM and Chips & Technologies have jointly agreed that licences or royalties will not be asked of C&T for their 'clone' components. This is understood to include C&T's PS/2 chipset. It is still mooted, however, that IBM plans to charge royalties to actual PS/2 'clone' manufacturers. I wonder, did IBM blink... or just wake up?

Remember, there's no OPCUG meeting in July. Next meeting - Aug. 31.

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Both IBM and Apple picked different routes for their products and the jury is still out on naming the winner...

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they do. But if the Microchannel PS/2 is to take off like the original PC did, the competition MUST adopt the architecture. Perhaps the smart marketing people in IBM know this: But the talk is all

about 'licensing' the PS/2. Is IBM really trying to reopen the clone kitchen with royalty nibble rights? If that works, IBM may well get to have its cake. But if the competition isn't encouraged to crowd around the table real soon now, IBM may have to dine alone: the Microchannel PS/2 will

ent version for each individual machine... OS/2 operating system. Meanwhile, Apple is struggling to 'open' its machine with the MAC II, and the 'device independent' CP/M withers for lack of devices! Funny, isn't it. Instead of dominating its standard, leading it and floating ever higher on top of a mass of clones, IBM has let companies like Compaq and AST lead development of the stan-

## Micro-chip...

from page 2

throw away. These chips will have cost you about 30 per cent of the cost of 256k chips today, but if you use disk caching or memory swapping software you gain more than that in utility.

When you expand you will pay retail prices for chips. Chips already installed in computers are purchased at the manufacturing level in volumes of 100,000 or more.

## Medicine for your computer

Stabilant 22 is a prescription chemical that provides an ounce of prevention or a pound of cure. Stabilant 22, a 'Byte Product of the Year', is a contact enhancer, lubricant and cleanser. Prescribed in small doses, this \$35 wonder drug is known to cure parity errors, flaky drives and many contact related difficulties. Sufficient dosage is supplied to solve problems for many years. P.S. Try it on your VCR or stereo connections. For a prescription call your bulk purchasers and ask Terry, Tim or Suzanne (225-2630 or 226-2615).



The Aliens are coming!

## Software librarian picks favorite game

BY Chris Taylor  
OPCUG

I'm often asked what is the best disk / game / utility / program in the software library. A very difficult question to answer. But I can pass on some comments on some of the programs I like.

One of my favorite games is

ROUND42, found on Disk-33. It's an arcade-style game that requires a CGA (Color/Graphics Adapter). It will run on a composite monitor, but to enjoy it in all its glory, a color monitor is a must.

As the name implies, the game provides 42 rounds of battle. The type of enemy (alien ships, of course) and the way they act changes with each

round. You must kill all the aliens in each round before advancing to the next.

The arrow keys let you move anywhere on the screen. Your arsenal consists of an unlimited number of bullets and a very limited number of phasers which are guaranteed to take out an alien. The aliens have a non-ending arsenal of bombs.

Not all rounds are unique. Every fourth round is a 'warp' round, where you must manoeuvre through a narrow path. Not counting duplicates, there are actually 19 unique alien killing rounds. The author saved the prettiest round for last.

If you manage to survive all 42 rounds, don't expect any congratulations. It all starts over at round 1 and the easy rounds are eliminated. I only found one extra unique round in playing a total of 101 rounds (my personal best).

The game is fast paced and tricky. For those with 'turbo' computers or 80286/386 processors, check out the program 'WHOA!' on Disk-52. It will allow you to slow down your computer and enjoy the game.

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## 1988 IBM - PC Club Executive

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## Special Interest Groups

PCjr		
Enable	Bob Laidlaw	995 3708
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Packages	Eric Clyde	749 2387
Whole Bit TV Show	Sandy Shaw	733 5088

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## SURVEY...

Look for a special membership survey coming in July. Members will be asked their views on the club's bulletin board service, the newsletter and the club's dues structure.