

Ottawa IBM-PC Users Group

3 Thatcher Street, Ottawa, Ontario, K2G 1S6

October, 1988

PC Magazine

Editor reveals computer industry trends

by Jackson Hibler
OPCUG

As one of the three executive editors of PC Magazine. Virtually every new development in the PC field flows across a desk that Gus Venditto has come to call the 'war zone'. From this flood he has distilled some trends and suspicions that he shared with us at the September meeting:

EISA:

EISA, or Enhanced Industry Standard Architecture, is believed to be the solution sought by Compaq, AST and the other PC clone manufacturers to compete against the **IBM Microchannel** Bus architecture. The EISA system is based on the present bus structure, but will add more lines on the end to give bus mastering, rotating

CPU requests, and multiprocessing... essentially the same features promised by IBM's Microchannel, while still able to accept older cards (without the added capabilities, of course) as well.

Venditto explained that this system may save the clone makers' bacon... and the corresponding royalty payments to IBM for its Microchannel... if they can keep together to establish the 'standard'. But at \$2,500 a crack for other would-be participants to examine the specifications, it hardly seems an 'open' standard. And meanwhile, Venditto thinks that the Microchannel PS/2 machine is finally selling in enough numbers to give IBM a chance to establish a presence in the market with its new 'standard'.

When asked whether all these 'standards', new disk formats, graphics/video modes and such may be the undoing of the PC's magic as a universal system with a high degree of hardware and software interchangeability, Venditto responded that although technical progress was an inevitable force in the situation, he doubted things would get back to the Babel of the CP/M days. I hope he's right!

Presentation Manager:

Venditto said it was Microsoft that sold IBM on OS/2, but that it was the Mac that brought the Presentation Manager to the forefront of development. The Presentation Manager is a 'shell' that fits over OS/2. It appears very much like Windows to the user,

and it is towards this shell program that much of present software development is now targeted.

"I don't think the Presentation Manager will become that popular, though. It's a matter of taste, but command line functionality is still a powerful tool!" Venditto added.

DOS will continue to be a major operating system for some time.

Regardless of how OS/2 develops, it won't happen overnight. Microsoft itself says it will take four years to bring parity between OS/2 and DOS usage. During that same four years the release of new programs under DOS should drop to one quarter of present levels.

"DOS is reaching the end of its development... most of the tricks have been found," (and listed in Paul Somerson's new book: PC Magazine DOS Power Tools, we were reminded.). And while quick context switching software is probably sufficient for most individual users, Venditto suspected, it was the crash proof features of multi-tasking OS/2 that would make it appeal to us over these simpler solutions in the long run.

See 'Editor... page 4

Inside...

Character sets: what works page 2

Flea market page 3

Where to find a local BBS page 5

The 'PUB' is open for business page 6

Computer character sets can be modified

by Alex Mommers
Ottawa University

one of the main applications for microcomputers is word processing. The computer is teamed up with a printer of some kind, and out comes the correspondence, the newsletters, and what have you. This works quite satisfactorily, if you happen to write in English, and do not need to use scientific symbols or foreign characters. In other words, the microcomputer does a good job replacing the type writer.

One could argue that the micro-computer should be capable of producing all the characters that one wants, and printers should not have any limitations either. The reason why this is not the case is because micro users were never given the tools to customize their character sets. Instead there is a 'one size fits all' character set installed in the computer and the printer.

Making changes in

this standard set is considered very difficult. This series of articles will attempt to convince you that a custom character set is NOT difficult to install. Let's begin with a little history:

The typewriter is a good example of an office machine which needed standardization. After all, once you had figured out where the keys were on brand X, you would hope to find the same keys in the same location on brand Y's machine. But for a typewriter it really doesn't matter that much as the typewriter doesn't communicate with anything else. You can put the keys wherever you like them.

Things are different with commu-

nicating devices however, such as the telex or teletype machine. There just HAD to be a standard method of describing which combination of electrical pulses corresponded to which characters. Hence, the world now has the ASCII code (American Standard Code for Information Interchange). There are a few other standards, but they never really made it big.

The ASCII code system goes back a long time, and initially only included capital letters, numbers, and a few punctuation marks, because that was all the characters available on the teletype.

It quickly became apparent that the

While a typewriter meets the user's needs as a 'stand-alone' machine, modern computers need standardization to they can communicate with other computers.

world also needed to communicate in lower case characters, and that some codes had to be reserved for machine control, such as line feeds, carriage returns and a few other things. So the ASCII code was expanded to a total of 128 defined characters: the first 32 for machine control and the remainder for characters, numbers and punctuation marks. This made it a seven-bit code, (2 to the 7th power is 128) and the world was happy for a long time, in fact the seven-bit code is still the standard for computer communications.

The first microcomputers used the

ASCII code system to transfer information from the keyboard to the screen.

Extended ASCII set:

This communication channel is called a data bus, a set of wires that connects all devices to the microprocessor. However, this data bus had eight wires. One of the computer companies decided to take advantage of the extra bit to bump the number of defined characters to 256. Now, they had additional space available for international and graphic characters, mathematical symbols and (ch.

That's how the world got the IBM extended ASCH character set.

An important implication of this eight-bit set is that one can use the upper half for custom characters meant for 'in house' use, and leave the lower (ASCII) half unchanged. If you want to know which characters are defined under this stan-

dard, you can look in your (IBM) computer, DOS or BASIC manual.

The IBM set has some foreign language characters, but it is rather weak on Cyrillic and Hebrew, for example. Meanwhile, some printer manufacturers (notably Epson) were using the 8th bit to print italics, but they soon (or not so soon) followed suit so that IBM-PC users could obtain the same characters on the paper that they saw on their computer screen. The world was at peace again, and generally accepted that the IBM extended ASCII set was all there was. Changing this was considered next to impos-

Continued on page 3

Users have greater control

ASCII became standard for communications

sible, and definitely beyond the talents of the humble microcomputer user.

But people soon discovered that they could 'download' characters to a printer so that they could replace things they didn't want with things they did want. In doing so, they inevitably discovered that the screen and the printer are two different devices. A change on the printer does not affect the screen at all. Low technology came to the rescue in the form of a piece of paper, usually stuck to the monitor, to translate 'What You See' into 'What You Get'. Some persistent individuals would call 'Tech Support' to inquire about modifying their computer's screen character set. They found that this was an impossible or at least (reasonable request and if it could be done at all it would be very

complicated. So they lived with it.

Then DOS 3.3 threw a wrench in the gears. With DOS 3.3 you can choose between several character sets, renamed to CODE PAGES for the occasion. The choices are Code Page 437 (U.S.A., the old set), Code Page 863 (French Canadian), Code Page 850 (multilingual), Code Page 860 (Portugal), and Code Page 865 (Norway). A complete description of all these character sets can be found in the IBM DOS 3.3 manual.

So finally, users have a tool to change their screen character set. This has always been possible, of course, but not many people knew how. The DOS 3.3 solution is limited to IBM hardware like EGA cards and IBM printers, and needs a lot of fiddling

with CONFIG.SYS to get going, but it does work. The reward for trying to install 'code page switching' is usually a hung computer **if you didn't get the syntax** right. So those owners that meet the hardware requirements have a few choices of character sets. The rest of us are not any further ahead: still no Cyrillic.

Why is something that should be easy so difficult? Well... it really isn't. In the next few articles in this series I will show you how to implement ANY character set on ANY video card and on all but the most rudimentary printers. Next month's article will deal with video cards.

For those of you who can't wait that long, I can be reached at 744-1417.

Flea market...

Computer hardware, software and books are just a few of the items that will be featured at the annual Ottawa IBM-PC User's Group flea market. The market will begin at 1:30 p.m. in the Gatineau Room at the RA Centre. 2451 Riverside Drive, Ottawa, on Sunday, Nov. 6.

If you have a computer or computer-related hardware or software that you no longer need and want to sell or trade then the flea market is your kind of place. To reserve a table or for more information, contact Gord Hopkins at 828 3834 (evenings or weekends).

Calculating mortgages with spreadsheets

by André Cyr
OPCUG

A most frustrating experience when working with spreadsheets is to use the pre-programmed PMT function only to discover that the mortgage payment results are not correct... this is caused by a slightly different method of calculating mortgage payments in the United States. In the U. S. mortgages are compounded monthly, like a regular personal loan in Canada. The main difference is that in Canada mortgages are compounded semi-annually by lending institutions.

To obtain the correct figures, you have to make a slight modification to the contents of the PMT function as follows:

$$\text{PMT}(\text{principal}, (\text{rate}/2 + 1)^{(1/6)} - 1, \text{years} * 12)$$

rather than the prescribed formula

$$\text{PMT}(\text{principal}, \text{rate}, \text{years}).$$

OS/2 and the Presentation Manager

Editor reveals computer industry trends

From page 1

Programs to watch for the trend of OS/2 programming are: Lotus' Notes, a hypercard-without-the-graphics program; and Hewlett Packard's New Wave shell for OS/2. As to DOS 4: "I don't think it offers enough to be a threat to OS/2."

The big threat to OS/2 is not other operating systems, but the current high cost of memory! We may have reached the price peak as the 1 megabit chips are now coming on the market in quantity. "If you can wait six months, we should be back to where we were nine months ago," Venditto said, "but I doubt we will ever get back to the prices of two years ago." Hardware:

"The 8088 will still be around for the foreseeable future, but it is the 386 that is succeeding beyond Intel's wildest dreams."

Chips and Technologies Inc. will

The 8088 will be

around for some time...

accomplish for laptops what it first did for EGA (put virtually the whole thing onto a VLSI chipset), and then for the AT (most of it onto five VLSI chips). The results were smaller and very much cheaper packages, and such will be the story for laptops in the very near future.

Similar processes are already reducing the cost of VGA cards, but beware early models that are not really compatible. The next step will be IBM's 8514 graphics, but this is still not very high resolution compared to what's already available on worksta-

tions. Graphics co-processors are still in the future... no standards have emerged from the tumult.

And what about 'writable CDs'(compact disks)? "I have yet to see one that works!" Venditto added. PC Magazine Nitty-Gritty:

Although the new (and expensive!) PC MAGNET BBS (bulletin board) is being promoted by the magazine, the

older (and cheaper) PCMAG IRS BBS is still running, and will continue "as long as people call it."

When asked why a subscription to PC Magazine costs twice as much in Canada as in the U.S. while BYTE levies only a \$3 surcharge, Venditto looked just as puzzled as his questioners, and promised to look into it.

1988 IBM - PC Club Executive

President	Harry Gross	733 7989
Past President	Anne Moxley	592 4933
Treasurer	Mike Luckham	832 3829
Secretary	Eric Clyde	749 2387
Membership Chairman	Claude Jarry	521 3366
Meeting Facilities	Stu Moxley	592 4933
Publicity	Gord Hopkins	828 3834
Software Librarian	Chris Taylor	723 1329
Software Assistant	John Ings	
Newsletter Editor	André Cyr	561 5207
Newsletter Team	Ted Havrot	733 2710
	Jackson Hibler	523 3781
	Mike Luckham	832 3829
	Marc Riou	733 2092
	Mike Roy	744 0047
BBS Sysop	Bruce Miller	745 1151
Bulk Purchasing	Terry Mahoney	226 2615

Special Interest Groups

PCjr		
Enable	Bob Laidlaw	995 3708
PC/AT	Gord Hopkins	828 3834
Packages	Eric Clyde	749 2387
Whole Bit TV Show	Sandy Shaw	733 5088

Area has many bulletin board operations

Here's a list of some of the Bulletin Board System (BBS) operations in the

Ottawa-Hull area. This list was compiled by NAUBBS [(613) 7334081] as

AlterNet	230 9519	Opus	163/28
Bit Byters*	446 6234	TTBS	163/33
Canada's Capital"	233 1879	PcBoard	
Carleton Univ. (1)*	564 5651	Opus	163/30
Carleton Univ.(2)*	564 5672	Opus	163/30
Channel 23 (1)*	830 5391	TBBS	163/23
Channel 23 (2)	8309217	TBBS	163/23
Code Conjurers*	224 4480	Opus	163/6
Colossus Express	746 1216	Opus	
Contact*	839 5889	TBBS	163/26
Diplomacy Haven*	738 1361	Opus	163/22
Eaton's	234 5489	Fido	
Foundation*	722 3586	Homebrew	
Hyperion User's	723 6869	Fido	
I forget	731 9103	Opus	
Info-Serve	833 3096	QNX	
IOOCTALP	825 5922	Opus	163/20
KEBBS*	8367835	Opus	163/16
Kiwi-Land	829 4029	Opus	163/38
La Jungle	684 0120	Opus	
Lightspeed**	829 0282	Opus	163/32
Local 34	238 4288	Wildcat	
Microplay	722 8304	Opus	163/18
Mindbender's*	237 6714	PcBoard	163/27
Ned's*	523 8965	Opus	163/21
Night Owls	446 4457	QuickBBS	
Nitefiler*	225 2989	Opus	163/31
OverBoard	724 7953	Opus	163/25
Pink Floyd Express	778 7971	Opus	
Radio Shack	776 4737	Opus	
Remote Control*	737 6058	Opus	163/11
RJ's Byteline*	833 2186	Opus	163/9
Rolling Hills	825 0899	QNX	
Room 101"	836 7667	QNX	163/10
Sam's Place*	745 8666	Opus	163/34
Software Catalogue	521 3690	Opus	163/7
Source Code Central"	738 1793	PcBoard	163/4
Spaces	233 3141	Opus	163/3
Super Byte*	770 5163	Opus	163/19
Snyapse*	561 5268	PcBoard	
The Bureau" (OPCUG)	745 8015	Opus	163/14
The Heath Board*	728 4661	Opus	
Twilight Zone**	225 9074	Opus	163/1
ZIMWorld*	7275546	PcBoard	163/5

* = 2400 ** = 9600

of August 29.

Each BBS listed supports the IBM operating system. All of the BBSs support the 1200 baud rate. Those identified with a single asterisk (*) support 2400 baud while those with two asterisks (**) support 9600 baud.

Numbers in parenthesis Q indicate telephone line numbers, such as line 1 or line 2 on multi-line BBSs.

WordPerfect gets LAN feature

WordPerfect v5.0 can now be operated on a Local Area Network (LAN). The network version of this wordprocessing program (PCLAN) includes a master document *feature* that simplifies editing of large documents, such as books, by combining several files into one large file.

In its Sept. 2 edition, Business Computer News reported that the PCLAN version of WP 5.0 *requires* 384k of RAM at each workstation. The LAN version retails for \$995 plus \$225 for each workstation.

WordPerfect has new management system

J. B. Marketing, the Canadian distributor of *WordPerfect*, has announced that they will be distributing OVERDRIVE, a document management system from TurboSoft for WP.

Business Computer News reported Sept. 2 that *Overdrive* is an add-on software program that allows WP users to address envelopes, fill in pre-printed forms, like weightbills, and prepare legal documents. *Suggested* list price of Overdrive is \$129.95.

OPCUG's new bulletin board

The PUB opens for business

It's here, the PC User's Group Bulletin Board or 'PUB' for short. The PUB is an electronic board established to serve the needs of the club's expanding membership.

The PUB will provide members with information on the club and its meeting and other events, offer an electronic message exchange centre for members and a file transfer system.

The system driving the PUB is 'The Bread Board System' (TBBS), a multi-line communications program that can handle up to 16 simultaneous calls. TBBS also supports a variety of terminal types, baud rates, plus XMODEM and YMODEM file transfer protocols. The PUB will operate on an AT clone with 100 Mb hard disk and three 2400 baud Sportster modems by U.S. Robotics.

The PUB has been split into different function areas such as: club information, message areas, the club library, file areas plus a user profile/PUB information area. TBBS also has a handy HELP feature if you run into problems.

Members wanting to sign on should not experience any problems if they're using any of the popular communications programs like TELLY, PCTALK, Procomm, etc. The PUB's communications setting are: 300, 1200 or 2400 baud; 8 data bits; 1 stop bit; no parity.

When TBBS answers your call, you'll be greeted with a sign-on message. You'll be asked for your first and last names and then TBBS will search its files to discover if you are a valid user. Once validated, you'll be asked for your password. If you're not validated, you'll be asked a series of questions and given limited access to the

PUB. **Validation will take** one or two days. A note about passwords. Unlike some programs, TBBS does distinguish between UPPER CASE and lower case letters. Because of this feature, members are asked to enter their passwords in UPPER CASE characters.

After you gain access to the PUB, you'll be told of any public or private messages waiting for you followed by the main menu.

All menu options are selected by pressing the character enclosed in brackets '< >'. Some of the main commands are: <C> Club News and Information - meeting announcements, information for new members, names and phone numbers of the OPCUG's executive plus general club notices; <M> Message Sections -private and public messages from and

to members, a buy and sell area, and messages for the SYSOP (SYStem OPerator).

Other menu items are: <L> Library Section - listing of both Disk of the Month and speciality library disks and What's New; <F> File Section-general upload / download file area covering such interests as programming, applications, DOS and utilities, communications, graphics, fun and games and recent uploads. There's also an area for OPCUG newsletter submissions.

In addition to the current commands, users can also enter 'global' options from any command prompt. These are: /= return to main menu; , = user profile/PUB information; : = context-sensitive help; " = PUB menu map; ~ =goodbye menu; . = return to next higher menu level.

PUB's global options

/ = Return to main menu

, = User profile / PUB information

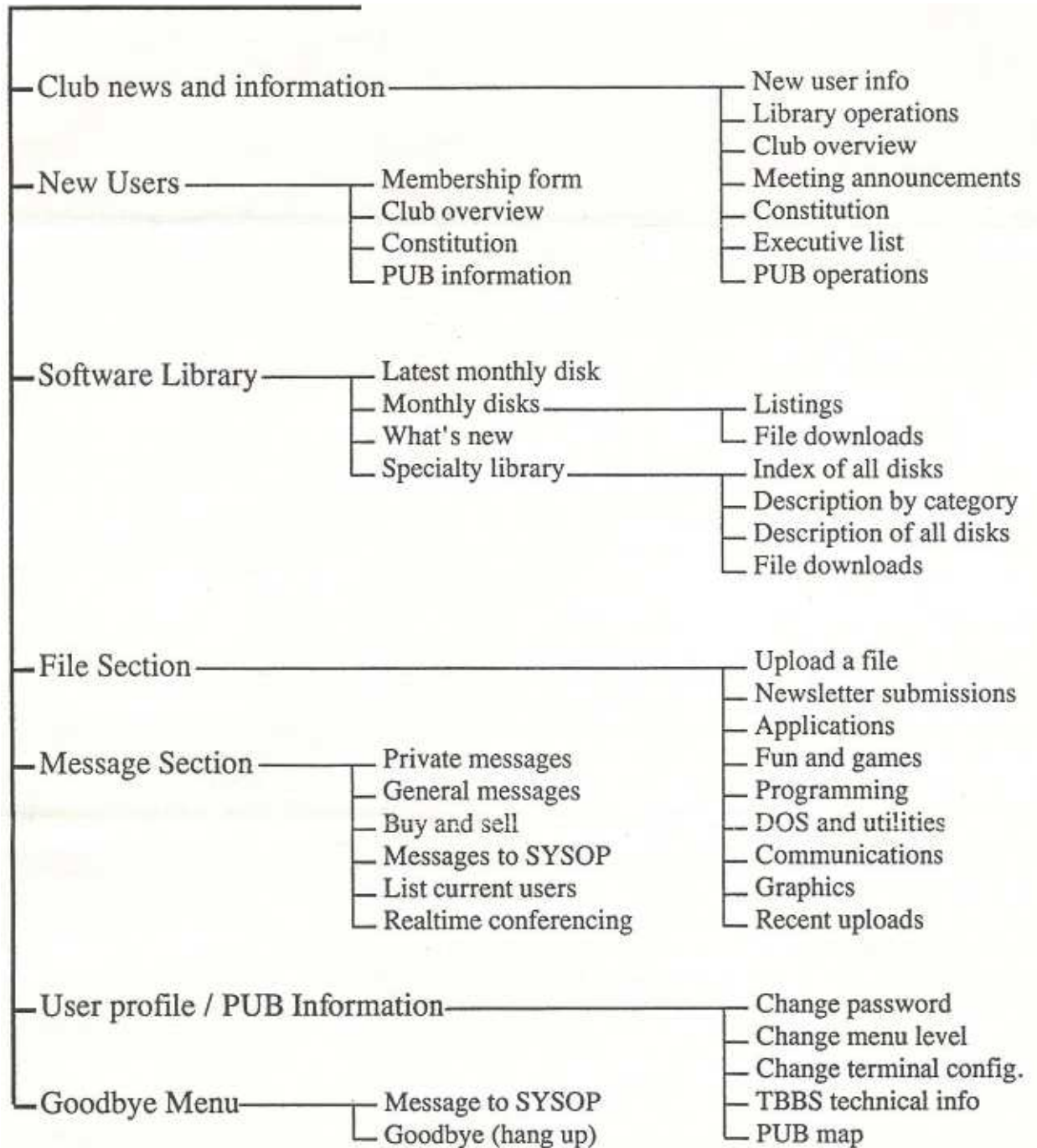
: = Context-sensitive help

" = PUB map

See PUB menu map on the next page

OPCUG introduces new bulletin board

'The PUB' map



LATE NEWS LATE NEWS LATE NEWS LATE NEWS LATE NEWS

I hope I am not being premature on this. Due to deadlines for newsletter submissions being earlier than actual phone line installation, Bell could still trip us up. But I have been promised that the three new phone lines for The PUB electronic bulletin board will be installed before the October meeting!

The three lines will be on a hunt group. This means that you only need contact the main phone number which is 723-7064. If that line is busy, you will automatically be switched to a free line, if there is one. Please don't try to call any other number! The chances of picking one of the right numbers is VERY slim as they are not sequential! If the new number is inoperative please use the BBS number listed on page 1 until the lines are installed.

As soon as the new lines go in, time limits will be increased to 1 hour/day. There will be no limit on the number of bytes members can download nor are there any upload/download ratios that must be maintained. This board is a service for members and you have already paid for it. Although we welcome new files, don't feel you must.

The PUB may be contacted at 300, 1200, or 2400 baud. The modem settings required are 8 data bits, 1 stop bit, no parity. Telix 3.0 users can find an auto-logon script in the Communications file area. We welcome auto-logon scripts for other communications software.

Although the file areas look a little sparse right now, please don't despair! There is 80 MBytes of disk space for file downloads and we intend to do our best at filling that as soon as possible. With a bit of luck, the entire software library will be available on-line.

Menus on The PUB are fairly stable now, but there will undoubtedly be some changes as comments come in. Thank you and please - enjoy yourselves!