OTTAWA PC NEWS

OPCUG gets two new Special Interest Groups

by Lynda Simons

Two new OPCUG Special Interest Groups (SIGs) will meet for the first time this month: one for users of Fox products, the Fox SIG, and for desktop publishers, the DTP SIG.

In the past, our SIGs have been started up by OPCUG members. The new Fox SIG, however, was instigated by Fox.

The Fox approach

The idea of an alliance between software companies and computer user groups is far from new. OPCUG, however, has never before formed such an alliance because no company has ever offered the services that Fox is offering.

Not only does Fox plan to provide the Fox SIG with patches, press releases and updates—in abundance, says Andrew MacNeill, the acting Fox SIG coordinator—Fox also provided the impetus to start the group.

Back in February, Fox put out feelers to find the people interested in a Fox user group and found about 100 of them. Fox then set about finding the right setting for them, which is how they have arrived as a special interest group at OPCUG. Everyone benefits: the Fox users have a comfortable, convenient home; OPCUG gets an influx of new members who bring with them all the good stuff that Fox wants to bestow on them; and Fox gets a single channel through which to get the good stuff to its users.

Fox SIG meeting date

The first meeting of the Fox SIG is April 23rd at Sir Robert Borden at 7:30. This will be an organizational meeting chaired by Andrew Mac-Neill. Andrew will also be showing the latest release of Fox with the RUN module and the enhanced FoxApp. For full details, sign onto the PUB and go into the Fox SIG message area.

The DTP SIG

Unlike the Fox SIG, which was a twinkle in someone's eye way back in February, the DTP SIG is still in its formative stages. There will be a fuller report on this next month. However, if you are at all interested in Desktop Publishing and graphics applications, plan to attend the first meeting. It will be mostly organizational, but also a chance to meet like-minded people and to be a founding member.

DTP SIG meeting date

Subject to availability of space, the first meeting of the DTP SIG will be at 7:00 p.m. before the general meeting in a classroom at Sir Robert Borden High School on Tuesday, April 28th. Julie Dustin will chair the meeting.

Why SIGs are important

Having companies like Fox interested in working with us makes the existence of product-related SIGs very important. To take advantage of such companies' offers to cooperate, we must have knowledgeable users with whom these companies can deal. The OPCUG executive does not necessarily know enough about all possible products to do this adequately on behalf of the members. However, the SIGs will quickly generate members who can.

Each SIG will, however, benefit more people than just its own members. It will provide a pool of specialized knowledge for the dabbler and the newcomer to that field. The advent of these two new SIGs is good news for all OPCUG members whether they use Fox and DTP products or not.

❖❖❖

Ready... Set... Draw! with Micrografx applications

by Jackson Hibler

The Micrografx demonstration of Designer 3.1, by Greg Kastelein, Sales Manager for Micrografx, was an excellent lesson in how a thoroughly-prepared, well-equipped presenter can showcase a product and make it look easy to use. Designer is a premier illustration/drawing package and was originally released at the same time as Windows. It was arguably the first major product to prove the usefulness of Windows — which was then a wobbly new mount.

Designer brought the power of vector graphic drawing to the PC...and, at the meeting, Greg's 486 PC with 8 MB of RAM brought the power of today's PC to Designer.

Pixels and Vectors: a word of explanation

Pixel "paint" packages reproduce images from a fixed array of discrete bits laid down in the original design. Although capable of displaying complex images in a single pass, those pixel paint images must be painstakingly reworked to remove the "jaggies" and other artifacts each time the scale of the drawing is changed.

Vector "drawing" packages reproduce images from mathematical formulae to define the shapes and lines of the design. The benefit of the latter is quick mutability: vector images can be easily scaled, stretched, or distorted and still display continuous smooth lines and proportionate curves. This is important for images whose borders define their information content such as typefaces and fonts or engineering and architectural drawings.

Practice, or CAD, makes perfect?

Four years ago, Willie Smith, Chief Architect of Minto Developments Inc., gave us an AutoCAD demo. He told us then that the ines-capable and painstaking first task of the drawing process is to build the original design. Computer Aided Design (CAD) packages were the first to exploit vector drawing formulas for this task on the PC. Designer owes much of its heritage—and quite a bit of its user interface—to CAD.

Greg showed us how Designer tries to provide a consistent and sensible interface to aid that first drafting process. The results showed the power of Designer but I doubt I could have done the same without many hours of study and practice.

"...Windows Draw is a 'joy to use'..."

Layers upon layers

Designer does boast of another legacy from CAD: layers. Multiple drawing layers allow the user to build the final image from computationally-discrete parts, rather like a stack of transparencies. This partitioning of the mathematical overhead of vector images yields movable, independently reusable components. CorelDRAW presently lacks this facility and it will be interesting to see if they can give us layering without muddling their intuitive interface.

CorelDRAW's Style

CorelDRAW departs from this CAD-like working style with a more intuitive way to produce vector graphics. Its undisputed success has been sufficient to draw Micrografx' direct fire in recent ads. It may be true that Corel does not provide context-sensitive help or 24-hour telephone support but, perhaps it doesn't need to, given its well-designed tutorials. Beginning Designer users may need that late-night help!

Corel was the reputed master of typography and fonts—essential for vector illustration packages—until last fall. Then they let some bugs slip into their Adobe Type 1 font converter just as their new version was being compared to Micrografx' in the press. "That's all fixed now," says Corel. But Micrografx has run with the ball handed to them and bundled Adobe Type Manager, 175 Type 1 fonts and Adobe Type Align with Designer 3.1. (This game may extend to yet another inning when TrueType shows up in Windows 3.1...)

Windows Draw

Greg also gave us a peek at Micrografx' approach to an easier user interface. Called Windows Draw, it abandons multiple layers and the Adobe font library but promises much of Designer's capability. I got the impression Windows Draw is to Designer what AutoSketch is to Autocad. But Terry Mahoney has found it to be more than just a watered-down version: he reports that Windows Draw is a "joy to use"!

A Coat of Paint

Despite their qualities, vector graphics packages cannot do everything well. The shapes don't always reproduce an artist's drawing accurately. Bezier curves and other solutions have helped, but when designs get too computationally complex, the result can be difficult to print. Also, colour fills or scanned images require the design to be polished pixel by pixel, bit by bit, to get the best representation. Paint programs can shine here, such as Micrografx' Picture Publisher. I'm looking forward to a more detailed demo of it in the future!

I'm also looking forward to Corel's response to Designer's challenge. Some of us may be jaded, but Corel may be feeling just a bit green...with envy!

❖❖❖

So how's Microsoft's year been, Bob?

by Lynda Simons

It's just a year since Bob Scowcroft of Microsoft last presented to our group. Windows 3 was the star of that show, and Jackson Hibler, for one, was impressed. Nonetheless, in his OPCUG newsletter review of Bob's presentation, Jackson, wondered: "Can Windows 3 carry it off?" Well, judging from the hordes anxiously trying to get their hands on version 3.1, it would seem so. Eighty copies came and went at my small, local store before I could get my copy, and I'm in there almost every day! Windows 3 has carried something off - a sizeable slice of the market at the least. Bob Scowcroft will, no doubt, come armed with sales figures when he presents the latest and greatest Microsoft products at our next meeting.

Windows 3.1, Excel, Powerpoint, Word

April 28th at Sir Robert Borden High School, Bob will present not only Windows 3.1 but also Microsoft's other latest offerings, two of which, Excel 4.0 and Powerpoint 3.0, have only just been announced and haven't actually hit the streets yet. We'll also see Word for Windows 2.0 which has now been out for a couple of months. In Bob's words, he'll be giving "a functional overview of the products, placing them alongside competitive products".

Mail for Windows

If enough people are interested, Bob will also show us Microsoft Mail for Windows. About a year ago Microsoft acquired Consumer Software and its popular LAN e-mail package *Network Courier* which it renamed Microsoft Mail. Since the acquisition, Microsoft has made Microsoft Mail available on a number of different platforms. So, if you would like to see the Windows version, come to the meeting prepared to wave your arms around.

Windows 3.1: Gotchas and Features

"So will you tell us which applications we'll have problems with under 3.1?" I asked. Bob doesn't like the word "problem" but did promise to deal with the issue. Mostly he's very excited about the "hundreds of additional" API's (Application Program Interfaces) added to version 3.1 . (It's the API's that allow us to run all the different applications with the one set of Windows drivers.) These API's will make those of us interested in running multimedia and pen-based applications happy. How? All will be revealed Tuesday, April 28th. See you there.

❖❖❖

Calendar *(subject to change)*

General Meeting Location: Sir Robert Borden HS
131 Greenbank Road

General Meeting Time: 8 p.m. to 10 p.m.

Date and Time	Topic and Location (if not SRB)
Thursday, April 23, 7:00 p.m.	Fox SIG's first meeting
Tuesday, April 28, 7:00 p.m.	DTP SIG's first meeting
Tuesday, April 28, 8:00 p.m.	Bob Scowcroft of Microsoft
Sun., May 10, 11 a.m. to 4 p.m.	Ontario Computer Fair Nepean Sportsplex
Thursday, May 21, 7:00 p.m.	Fox SIG meeting Confederation High School
Tuesday, May 26, 7:00 p.m.	DTP SIG meeting
Tuesday, May 26 at 8:00 pm.	John Nash & Jim Roy on Snoopguard and Victor Charlie: security and virus trapping
Tuesday, June 23, 7:00 p.m.	DTP SIG meeting
Tuesday, June 23, 8:00 p.m.	to be announced

Shareware for kids

by Mark Edwards

After having denied yet another request from my five-year-old for Nintendo, I resumed my search through the "Childrens Games" and "Educational Games" lists on the PUB. My specifications for educational computer games are a bit tough....the software has to be educational, interesting, and easy to use for those who don't read. From areas 19 & 20 of the PUB I made four choices, programs that are both educational and can help get kids familiar with the computer. My best picks are as follows:

Colouring Programs

EGACOLOR and BDINO (Bert's Dinosaur): Both programs offer a series of canned scenes that you can colour from a pre-defined palette using the mouse to select both
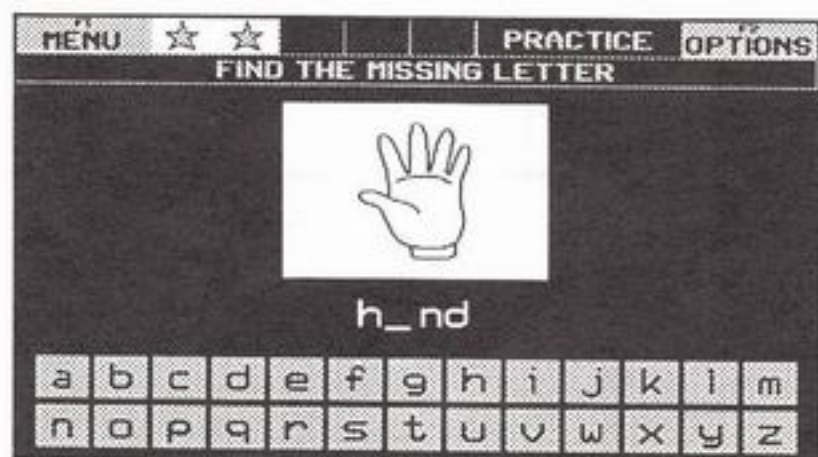
Figure 1

Figure 2

the colours and the objects to be coloured. EGACOLOR offers a much better palette, and has objects sized to allow easy colouring by small children.(See Fig.1.) BDINO's palette isn't very inspiring, and parts of the pictures are too small (try colouring dinosaur toenails for example). However, the advantage of BDINO is that you can scale the dinosaurs, then place them on the background.

Word Processors

KWP offers large on-screen type to make it easy to read, and simple icons to allow children to use the program, for example, a stop sign to quit. It also prints out in large print.

Alphabet Skills

Best are WRD_GLRY (Word Gallery) and ALPHA1-4 (Animated Alphabet). Word Gallery has an excellent

mouse-driven interface, and is easy to use. There are five different options from guessing the missing letter to spelling simple words. (See Fig. 2.) Animated Alphabet gets children to guess the first letter of the word relating to the picture on screen. Once the letter is chosen the picture moves. "Look Daddy...a mouse!" was the response from my daughter (translated slightly from two-year-old-ese). (See Fig. 3.) FUN_KEYS is also pretty good for teaching kids to recognize letters. When the correct letter is pressed, a song is played (Twinkle, twinkle...etc). (See Fig. 4.)

Math Skills

It is somewhat harder to find easy math skills programs. The best is Math Castle, in which the child answers simple math questions to energize a laser and blast aliens. I know...a bit like Nintendo, but at least they are learning something other than just straight slaughter.
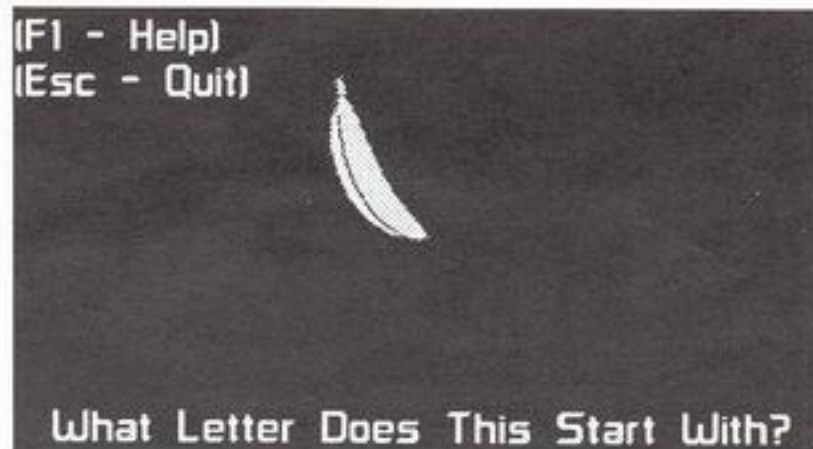

Figure 3

Honourable Mention

For very young kids, try SARAH. This program draws circles, lines, fish, etc. on the screen as various keys are pressed. If the function keys are pressed, various tunes are played. While not teaching anything directly, it is providing a response to an input, and can teach children to push keys rather than pounding on them - after many reminders.

There are a number of menu systems that are set-up for kids, and although I looked for games for children who don't yet read, I have found that my son, for example, can use a simple text menu, and quickly learns which line runs which program, so I may be able to add other games to this list soon. If any of you have your own favourites, please drop me a line on the PUB.

❖❖❖
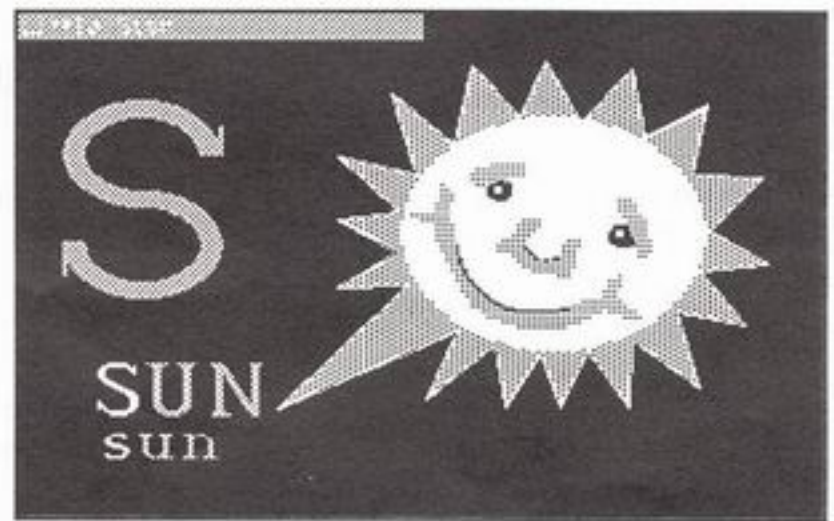
Figure 4

Review of Windows 3.1

Is it true, what they say about Windows 3.1?

by Harald Friese

Is Windows 3.1 better than 3.0? By now you're reading all the hype in the computer rags and you wonder if it really is true? In a word: YES! I have been using 3.1 for about two beta versions and a sum total of about four months. I am glad to be part of the experience, although it was tense at times. You know, the crashes, existing applications not working, incompatible hardware drivers. But each new version of Windows got better and pointed toward an operating system that was robust and more like something I wanted to be using.

Installation and Setup

Installation is a snap. If left to "Express" install itself, it does a marvellous job of detecting your hardware and installed drivers and software. If you don't like that, choose "Custom" and have control over what you install and how.

Windows now has a host of pre-built PIFs to effectively set up about 100 of the most popular (and sometimes difficult-to-get-running) MS-DOS software packages. 3.1 even has a handy tutorial for new users of mice and Windows.

Sharing data

The mouse can now be used to cut and paste between DOS and Windows applications. Along with DLL (Dynamic Link Libraries) comes OLE (Object Linking and Embedding) to make the interchange of information and working between applications better and easier. Scrolling in DOS applications is now faster.

The once justifiably maligned file manager has been improved to the extent that I rarely use PCShell or DOS commands to maintain my files and directories any more.

Numerous subtle changes to the user interface make Windows more intuitive. UAEs (Unrecoverable Application Errors) have become the exception not the rule, and if you do get one, Dr Watson may give you a hint as to the cause. Generally, error handling is greatly improved with error messages sometimes telling you what steps to take to resolve the problem.

TrueType

Windows can use TrueType fonts which are generally of good quality. I've noticed that a few new decorative fonts have already been uploaded to the club's BBS. They generate fast and do away with the

formatting and font hassles associated with translating to and from the Apple environment. I didn't give up my Adobe Type Manager (version 2.0 is much quicker) and Postscript fonts though.

Windows does all this, and more, using less system memory and system resources. Operating and printing speed have been vastly improved. Problem applications can be CTRL-ALT-DELeted and the rest of your Windows session stays up and running. Laptops benefit as well, with support for their power saving features and displays.

The penalty

The penalty for all this is the price of the requisite hardware. An 80386SX, VGA, 4Mb of memory and 10Mb of free disk space or better is now recommended. Don't be fooled; this is not an incremental version release, but a significant rewrite of the program. And it works well. Windows 3.1 is proof that the future for Windows, and Microsoft, is a lot clearer now.

Now about those 20 hi-density 3.5" disks that require about 40Mb of disk space to install a Beta version of OS/2 2.0...

❖❖❖

Run-time file compression: two methods

*by Andrew Clyde
and Chris Taylor*

You have run out of space on your hard drive. You cannot a afford a new hard drive, but you are tired of constantly weeding your directories for space. One solution that has been discussed on the PUB is run-time file compression.

What is run-time compression?

Run-time file compression programs differ from programs like PKZIP and LHA in that the compression and decompression happen automatically while you are reading and writing files, and the process requires no user intervention once set up.

Two common methods

There are two common methods of run-time compression. One method, which we will refer to as 'executable compression', can only compress program files (*.EXE or *.COM files). Examples of programs that do this are PKLITE, LZEXE, TINYPROG and AXE. The second method, which we will refer to as 'disk compression', compresses all files on a disk. Examples of programs that do disk compression are Stacker and SuperStor.

Executable compression

The basic idea of executable compression is to use normal compression techniques of programs like PKZIP to compress the program and then to attach the decompression code to the executable file of the program. Then when you run the compressed program, it automatically decompresses itself in memory before running.

The advantage of this type of compression is that it does not take up any extra memory for device drivers to do the decompression. The compressed program takes up less disk space, and may even load faster because the time taken to do the decom-

pression in memory may be more than offset by the savings in time reading fewer bytes from disk.

The main disadvantage is that executable compression doesn't work with all programs, but it is a low-cost solution.

Disk compression

A disk compression program, which is a device driver you must load through CONFIG.SYS, works by setting aside a portion of your hard disk as a large hidden file. It makes that part of your disk appear to the operating system as a separate, much larger disk drive. When you write to the compressed disk drive, the device driver intercepts the command. It then compresses the data and writes it to disk as part of that hidden file. When you read from the compressed disk, the device driver intercepts the command and takes care of reading the correct portion of the hidden file and decompressing the data.

The advantage of disk compression is that all data gets compressed. All utility programs, including Norton's Unerase, and disk sector editors can continue to function normally. They simply see the compressed disk as a large logical disk drive, much like they would view a RAM disk.

The main disadvantage is that you must always load a device driver which generally takes 40-60K of memory. (On a 386 or 486, you can load this driver 'high', reducing its impact on conventional memory.) You will also notice a performance degradation on hard disk accesses. On a fast 386 or 486, this may be negligible, but it can be quite noticeable on a 286.

Virus Detection Problems

A lot of talk on the PUB was about the problem with viruses. This is only of concern with the programs doing executable compression. If an infected program gets compressed, a

virus scanning program must be able to recognize the fact that the file is compressed and perform the decompression in order to be able to recognize the virus. McAffee's SCAN program is able to do this with programs compressed with PKLITE and LZEXE, but we don't know about any other scanners. It is worth noting that many commercial programs are now compressed with PKLITE, LZEXE or some other, perhaps proprietary, program.

With disk compression programs, virus scanners only see the information after it has been decompressed by the device driver, so they are able to detect viruses without any problem.

Trying Them Out

If you want to try out executable compression programs, both PKLITE and LZEXE are available on The PUB. PKLITE is quite a bit easier to use and more flexible.

Of disk compression programs, there are two main options; Stacker and SuperStor. According to the literature (PC Magazine, Jan. 28, '92; and Info World, Feb. 17, '92), the software version of Stacker 2.0 was better than SuperStor 1.3 in both speed and its ability to compress files. Both retail for about $110, but a customized version of SuperStor 1.05 is included with DR DOS 6.0.

❖❖❖

Leaving Us?

We want to continue sending you newsletters: however, if your membership expires this month this will be the last newsletter you will receive...until you renew.

Check your mailing label for your expiry date.

To renew your membership, simply fill out the form on the back of the newsletter and send it in with the fee or see Paul Green at the next meeting.

Making your computer suit your needs

by Eric Clyde

Your microcomputer is an amazingly flexible machine. Even though, when you switch it on (or "boot" it), your computer always looks for the same two special files, these files do not always have to contain the same information. By changing the contents of these files, you can maximize the capabilities of your computer to best suit the job at hand.

Two special files

At boot up, the computer first loads the operating system. If the operating system is MS-DOS or PC-DOS, the system then looks for the two special files, CONFIG.SYS and AUTOEXEC.BAT. The computer will work if these files don't exist, but will always work better with well-written CONFIG.SYS and AUTO-EXEC.BAT files.

More than one operating system

Most of you use MS-DOS or PC-DOS, but there are other operating systems available, the most common being DR DOS, OS/2, QNX, and the various versions of UNIX. In this article, I will concentrate on MS-DOS, the most popular. PC-DOS and DR DOS are, for the most part, very similar.

The purpose of CONFIG.SYS

CONFIG.SYS is a file that you can change to customize your system. It controls how the computer uses memory, and how it communicates with devices such as your keyboard, mouse and printer. Every device has a device driver, a piece of software used by DOS to control the device. With CONFIG.SYS you can tell the computer which devices and drivers to use. You can also tell the computer which country conventions you want to use, that is date, time,

punctuation, currency, and language standards. You have 22 choices from Belgium to Yugoslavia.

You can also set up a RAM disk by installing a special device driver called RAMDRIVE.SYS. This sets up an area of your memory as if it were a disk drive. A RAM disk drive operates much faster than a real disk drive.

The purpose of AUTOEXEC.BAT

AUTOEXEC.BAT is a batch file. A batch file is a file containing a series of DOS commands exactly as you would type them to perform a task such as displaying a list of files with DIR. A batch file can contain any DOS command. An AUTO-EXEC.BAT file contains the DOS commands you want to carry out when you start your system. The most common AUTOEXEC.BAT file command is PROMPT which changes the appearance of your DOS prompt from the default C: to include the current directory, so that when you change directories the name of the new directory appears in the prompt. For example, C:\ becomes C:\WP51.

Suit the files to the task

You can vary these files to suit the task you have at hand. For instance, I don't always want to boot up with the same CONFIG.SYS and AUTOEXEC.BAT files. Mostly I use DOS 5.0, with a large RAM disk, but sometimes I use Windows 3.0, which uses the space I otherwise allocate to the RAM disk.

Use bootable floppies

I do this by having a number of bootable floppy disks, each with a different CONFIG.SYS and AUTO-EXEC.BAT file, and each disk being optimized for a certain task. For example, the CONFIG.SYS file which sets up my RAM disk capacity to 64k would read

```
device=ramdrive.sys 64
```

When I want to run Windows I boot with the floppy with a CON-FIG.SYS file which omits this command and an AUTOEXEC.BAT file which ends with the command WIN which loads Windows.

Your start up files can be as simple or as complicated as you need. Come to the beginners' session and learn how to maximize your system.

❖❖❖

Beginners' Corner

At 7:00 p.m., prior to the regular monthly OPCUG meetings, Eric Clyde holds special sessions for new users in Room 110.

If you have a topic you would like to have discussed, or questions arising from Eric's article, call Eric at 749-2387.

Historical note

Amazing Grace: Mother of COBOL dies

by Susan Phillips

Grace Murray Hopper, the developer of the COBOL language died this year on New Year's Day at the age of 84.

A mathematician and one of the first people to program a large-scale digital computer, Dr Hopper believed that a programmer ought to be able to use English-like instructions. Defying sceptics, who said computers could only be used for mathematics, she developed Flow-Matic, an early programming language, for the Univac computer. This was the main precursor of COBOL, the most widely used business programming language today which she, and her team, went on to develop.

In 1952 she wrote the first compiler, used on the Univac. Prior to this computers had to be programmed in low level language. Throughout her career, she vigorously promoted the standardization of programming languages so that they would be hardware independent.

After a U.S. Navy career of more than 40 years, she retired in 1986, with the rank of Rear Admiral, and became a senior consultant with Digital Equipment Corporation.

In 1991 she was awarded the US National Medal of Technology for "her pioneering accomplishments in the development of computer programming languages that simplified computer technology and opened the door to a significantly larger universe of users".

With her strong, no-nonsense approach to data processing, she brought structure and discipline to the art of programming. She also loved gadgets. However, her greatest pleasures came from working with people both as a teacher of mathematics and computer science and as a problem solver.

◇◇◇