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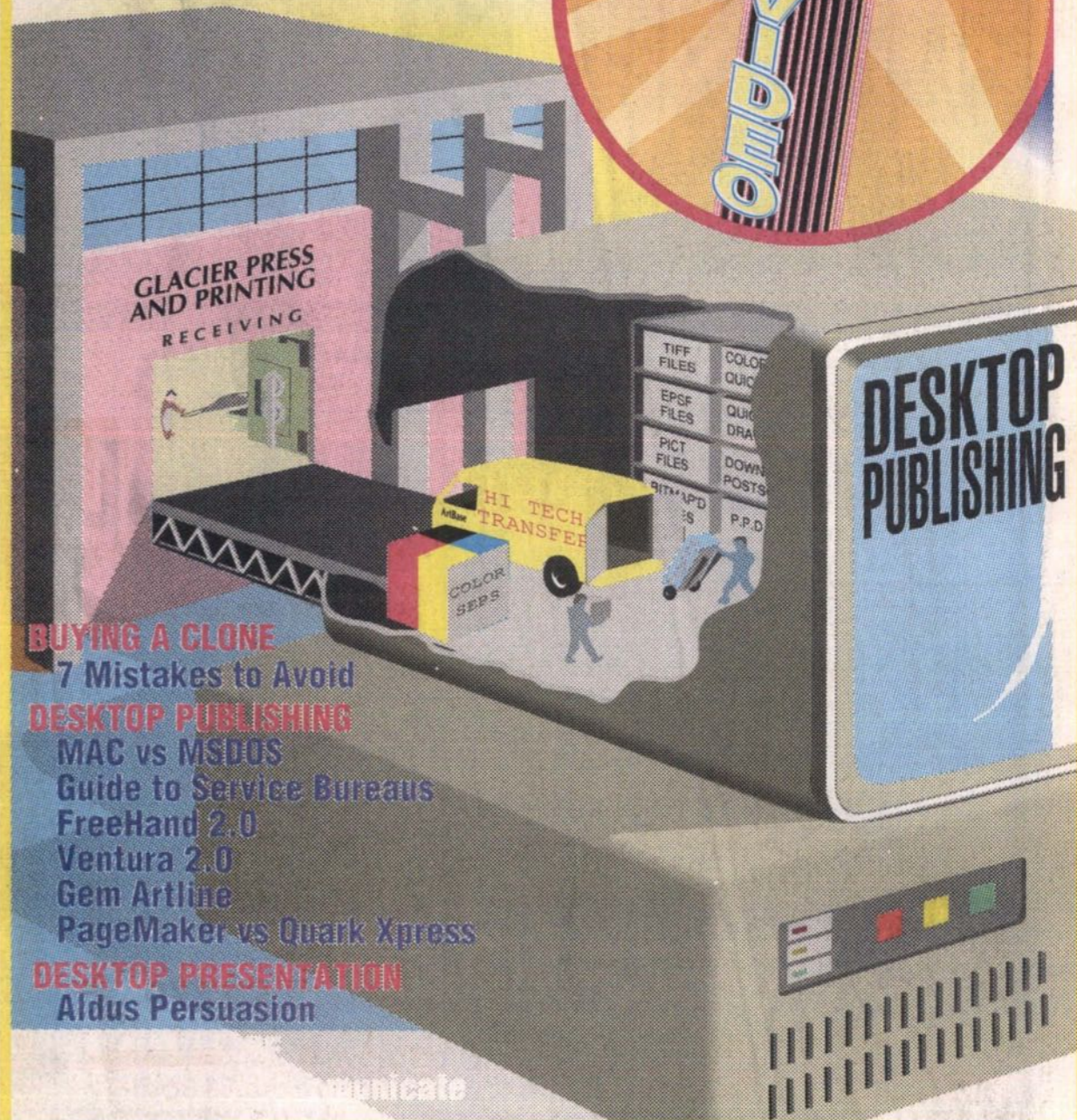
The COMPUTER PAPER

BRITISH COLUMBIA'S COMPUTER INFORMATION SOURCE

Vol 2, No. 3 March 1989

FREE

DESKTOP
OLDY



- BUYING A CLONE
- 7 Mistakes to Avoid
- DESKTOP PUBLISHING
- MAC vs MSDOS
- Guide to Service Bureaus
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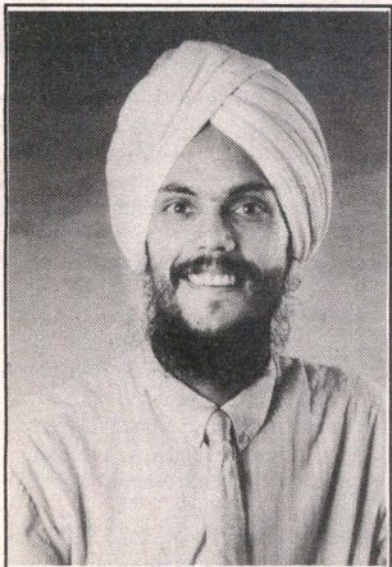
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The COMPUTER PAPER

BRITISH COLUMBIA'S COMPUTER INFORMATION SOURCE

Vol 2. No. 3 March 1989

FROM THE EDITOR



I feel a little strange writing my letter from the editor, it is not 2 a.m. on the night before press day, my usual hour for tapping out my opening letter. Things are getting more organized around here with the addition of some helpful new staff. We hope you will start to notice the changes in the coming months. Of primary importance we hope will be an increased emphasis on the graphic look of the paper. Most people tell us that they love the information content, but would like to see something a little easier on the eye. One of our goals in the coming months is to try and achieve that effect. Let us know what you think.

This month was fun for us as the issues and products of desktop publishing are near and dear to our hearts, since we do much of our publication with desktop technology. We hope at least some of it will be of interest to you. In some ways any

document that comes out of your computers will likely be affected by the technology of desktop publishing. A few years back when I went back to University, in the first year I was using an original IBM-PC with WordStar and Lotus 1-2-3 to put out my reports. About a quarter of my class mates had access to computers that year. The following year I had the use of an Apple Macintosh and would hand in my reports produced off a Laserwriter. By then more than half the class was using computers. It is my theory that I went up one grade point average simply by improving the slickness of the presentation. I don't believe that I worked any harder, it was just that everything looked so much more polished.

The interesting thing that has occurred in the interim is that many people's expectations of what is presentation quality have gone up as the technology to produce it has become readily available. Today you need not necessarily own a laser printer to get these effects, with the advent of service bureau's offering reasonably priced time rentals on laser printers and computers, if it has to look good, it can. See our report on the service bureau's available in the Lower Mainland for more details.

We are off to Victoria on Tuesday February 28th for the Victoria version of The Pacific Rim Computer and Communications Show. Tracon, the show's producers are putting a lot of effort into these shows to make them an important event in the calendars of software and hardware vendors. We wish them lots of success in this show and the Vancouver show in November.

If you are in the market for a new computer, please check out Roedy Green's article on Buying a Clone. It is jam packed with useful tips on what to look for in making sure that you get a quality machine.

We get many phone calls that goes something like this: "Where can I pick up your paper regularly. I tried the library, I tried my local computer store, I tried the convenience store, but they were all out." In response to these calls, we are planning a circulation increase in April to 50,000. We will also be adding a number of new distribution outlets to make it more convenient for you to pick them up. Thanks for the support, and please keep telling our advertisers "I saw your ad in The Computer Paper".

Watch for our next issue when we focus on spreadsheets and 386 computers.

Kirtan Singh Khalsa
Publisher/Editor

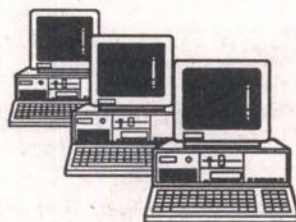
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Coming Editorial Schedule

April: Spreadsheets/386 Machines
Copy & Ad Deadline: Friday, March 17
May: Point of Sale/Printers
Copy & Ad Deadline: Wednesday, April 19
June: DOS/Hard Drives
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July: Memory Upgrades
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BUYING A CLONE

Seven mistakes to avoid in buying a clone. Our intrepid writer Roedy Green is back with some sound advice on buying clones. He recommends that you take along some canaries when you buy.

Buy MS-DOS
Get a Mac!



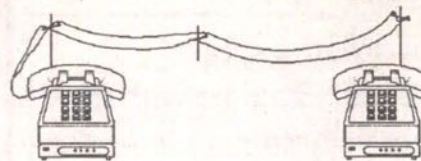
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Commodore's choice in monitors has positioned the Amiga well to take advantage of the boom in Camcorders and VCRs.



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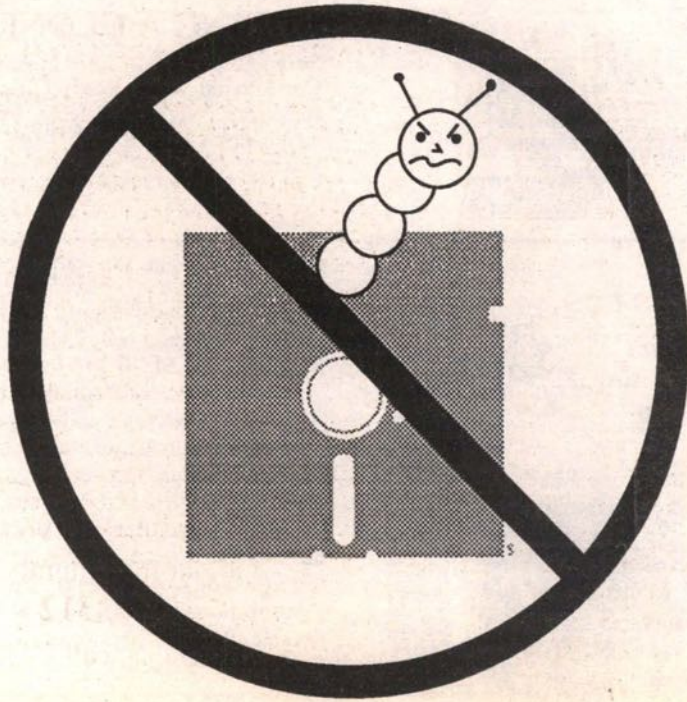
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LETTERS TO THE EDITOR

ConvertUnits Update

Dear Editor,

Thank you for reviewing our program ConvertUnits in the December issue of the Computer Paper. I would like to point to a few items you mentioned in your write-up.

The HyperCard version of ConvertUnits has the categories database built into the stack so you never have to find the CU Database folder—it's always there.

The latest version 1.0.1 of the Desk accessory now also has an "artificial intelligence" routine added to find or remember where the CU Databases folder is located whenever you want to change from one category to another.

In your review you mentioned that you would have liked to have seen a scrollable list of all the conversion factors. I sincerely doubt that anyone would have the patience to scroll through more than 1500 units! Rather than clutter up the program we have alphabetically listed all of the units, in their respective categories, in Part 6 of the manual. So, if the user isn't sure what category a certain conversion falls into, they can quickly find it in the manual. I would also like to mention that the manual contains many tips on the correct usage of conversions and the history of measurement in addition to all the techniques on customizing ConvertUnits to the user's specific needs.

Although the HyperCard version of ConvertUnits was only briefly mentioned in the article, I would like to note that it contains some conversions, in addition to those available in the Desk Accessory version, such as user editable currency conversions. The user is asked to confirm that the existing conversion factors is correct and if it isn't is given the opportunity to update the existing exchange rates.

The Desk Accessory requires a minimum of a 512kE Macintosh and the HyperCard version requires HyperCard version 1.2 (included with

purchase of the stack) and a minimum of 1 Mb of RAM.

The Canadian price for either the Desk Accessory or the HyperCard versions is \$69.95 or \$84.95 for both.

Larry DeFehr
Graphic Applications

Bedford Accounting

Dear Sir:

We read with interest The Computer Paper's January, 1989 review of Bedford Accounting. I am sure you won't be surprised to learn that we don't agree with some of the authors' conclusions. But, as a matter of policy, Bedford carefully reviews and appreciates all suggestions that may lead to improved products. We also applaud your newspaper's efforts to inform computer users on the important subject of accounting software for small businesses.

Please permit me a few observations that I think will add some further perspective for your readers.

We find the author's analysis of Bedford's user interface intriguing. Currently, there are more than 70,000 people in Canada and the United States using Bedford Accounting. We continually receive letters from these users who are extremely pleased with the product. To quote one recent letter, "...I just wanted to mention how pleased I am with your program...I have instant access to my business, the accounting is always up-to-date and we find we are watching our business with a totally different viewpoint now that we have the figures instantly...I have recommended your program to so many people and they are all pleased with it."—Alanna's Furs, Ottawa, Ontario.

The authors mentioned the article in PC Magazine (September, 1987) as a comprehensive source for researching what products are available for smaller businesses' accounting systems. It is interesting to note that in PC Magazine's review, which was conducted by Price Waterhouse, Bedford Accounting was awarded an "Editor's Choice" designation for low-priced accounting packages. To quote the summary, "This is truly a system. Bedford's six modules...are easy to install, easy to use, and so well integrated with one another that it makes accounting a snap—even for non-accountants."

Kristin Keyes Corporate Communications
Coordinator Bedford Software

Roedy Responds

Since J.P. Wilmshurst and I wrote a review of three low cost accounting packages, people have called to give us feedback.

Accountant Donna Hassack called to point out that Accpac Easy departments can be used to great advantage for purposes other than departments. For example, they could be used to track the income and expenses of different concert series.

She also pointed out that the Comcheq service bureau charges only \$20 per month to handle two batches of payroll cheques. At such low prices it is rarely worthwhile doing payroll yourself.

Gord Doolan of Pacific Polypipe pointed out that Dac Easy sells two companion products that correct the biggest problems with Dac Easy. The first GraphMate is a graphing program that also allows you to export data to a spreadsheet and to lookup by name. The second is a tutorial program. He pointed out these programs are often bundled free with Dac Easy and that no one in their right mind would use Dac Easy without the graphics program. He said that since August Dac Easy has provided phone support.

The article was slightly inaccurate regarding payroll. Accpac Easy has the ability to accumulate a few totals, though it cannot automatically calculate CPP, UIC, etc. Bedford carries more payroll information, but it too has no ability to calculate CPP.

ZOOMIT

Dear Roedy Green,

Your article on "ZOOMIT" in the February issue of The Computer Paper is the best piece of technical writing I've seen for a long time. When you finish reading most technical articles you have difficulty in writing a summary of the content. They ramble, they leave out or carefully hide the "meat," they throw in lots of irrelevant material, there's no easily recognized structure or direction.

Your piece was broken down into logical bite-

MASTHEAD

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size bits with a simple heading that you stuck to. When there was bad news with the system you faced it. When the competition had an edge it was acknowledged.

Congratulations and thanks for letting us see light at the end of this particular tunnel.

I'm a heavy AT user with a Telex program (Vitel) which allows me to use the AT for telex operation but the modem documentation and the manuals I have for Bitcom and Procom have left me gasping. How would you like to offer a hands-on program (perhaps through the V.S.B. Continuing Ed system) to help some paying customers such as myself. There are lots of us!!!

I'm going to write to ZOOMIT to ask for a directory of present users to see if it may be useful in my business. I'm heavily involved as a one-man-band doing training in Asia and Africa but have many business contacts in Eastern Canada. Ken Wheeler

See more of Roedy's technical writing wizardry in this month's article on "Buying a Clone".

Different Computers

I am an avid reader of your paper and find it to be very interesting especially for its local information content. However, I am disturbed to find it becoming more and more MS-DOS and Mac oriented, to the point of excluding most other types of machines. I am a student at the Emily Carr College majoring in computer arts. The machine of choice for our faculty is the Atari ST, because of its low price ease of programming, and emulation capabilities. The ST will run DOS and MAC software as well as its own making it a most versatile machine. I am most disappointed to find that the only local computer news paper ignores a machine that is the standard in the computer arts field in Canada. I realize that IBM compatibles make up 90% of the installed base in Canada, but this is primarily for business use. I think that by ignoring users of machines like the ST and the Amiga, you are alienating a whole genre of computer users, and therefore perhaps not bringing a complete picture of the computing world to your readers. Sincerely,

John Chapman

Computer arts-Emily Carr College

Although the DOS market does dominate the computer scene, we do attempt to give coverage in other areas. See the article on Amiga Desktop Video this month. When we set up our paper our primary focus was on business computing. This concept continues to evolve, though it will probably continue to be our theme. There are people running their businesses and doing interesting things on Atari STs, Amigas, C-64s, and even older CP/M machines. The reality is though that to effectively cover all areas, we would need a publication 5 or 10 times as big. Check out Newsbytes section as occasionally there are Atari stories running there.

BBS List

Dear Sir:

Your recent BBS list in the February issue has a few errors I wish to correct. First: two BBSes are no longer in operation and should be struck from the list. They are The Elite Force, and The Hole. As the former Mad Sysop of the former BBS, I am flattered that DeWayne included me in his list but I think he should check the numbers at least once a month. Due to a temporary case of unemployment I've been forced to move back into my parents' home and PERMANENTLY give up being a sysop. As for the latter BBS, (I'm a former member of The Hole before its demise), the sysop Gopher has taken down the board so he could devote more time to modding. Second: Magnetic Visions, the real-time chat board using an Apple-based DDIAL BBS software (7-lines, 300 baud), has lost Poobah and the 926 number. The new number is 325 5693.

Besides the update on the two defunct BBSes and Magnetic Vision, I only have one other comment to make. Thanks for printing DeWayne's list. I've found about 7 more boards to add to my growing list of new BBSes to call Stephen Kawamoto

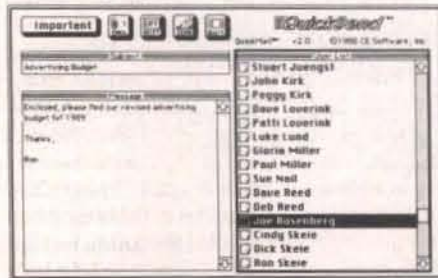
Thanks for the input, we are glad it was of service, and thanks again to DeWayne for doing the work and putting it together.

Omni College Offers Practical ACCPAC Course

Omni Professional Computer College feel they have a new angle on teaching Accounting software using PC's.. They have designed a computer course to teach the practical usage of the accounts receivable, accounts payable and General Ledger modules of the ACCPAC PLUS accounting software program. The course is designed to train the person doing the day to day work how to operate the modules in a practical manner. During the class room instruction the student will be able to follow the monthly accounting cycle of a company in a practice set.

The course takes two days or four evenings to cover all the material. Omni has scheduled Saturday classes for those who wish to participate but are currently working. All course fees are tax deductible.

For further information on this course call: Sheila Mead, Omni Professional Computer College Inc., 300-905 West Pender Street, Vancouver, 682-6664.



QuickMail 2.0 E-Mail For The Macintosh Is Now Shipping

According to the developer CE Software, QuickMail 2.0 is faster (up to 10 times faster), and provides easier communication. New user options include Hot Keys (QuickSend and QuickConference), optional large font display in the Main Screen, Copy and Paste Addresses and the ability to set time and date in Delayed Mail. The Mail Log can be turned on or off by each user, messages can be retrieved (even after they've been sent) and there are more command key equivalents for you keyboard lovers.

Those who found QuickMail too large to install on a floppy based machine will love version 2.0. QuickMail user software can be effectively cut to about half its previous size without losing any functionality by utilizing supplementary storage such as a file server, external drive, RAM disk, etc.!

QM Forms 2.0 has added new features. A Preview Mode shows how forms will look before they're installed. You can now select multiple items to be manipulated, align multiple items to the left, right, top or bottom and Cut, Copy or Paste multiple items. You can also view a form as text.

Remote was what makes this program stand out from other Macintosh E-Mail systems. It's now a stand-alone application. You can directly create new messages and replies. QuickMail (DA & Init) is no longer required to use QM remote.

QM Remote is now available as a separate product for those who need additional copies

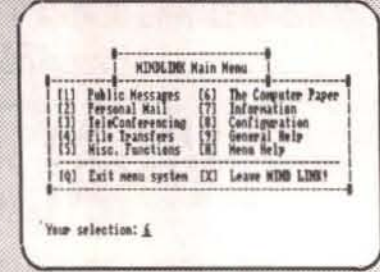
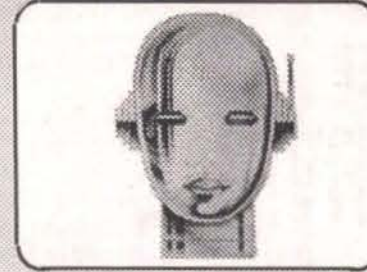
QM Server has been redesigned to be more efficient. It is based on "Store and Forward" technology so the user is not tied up while sending to multiple recipients. The network Administrator can configure the server to run Multiple Sessions (duties) on more powerful Macs. A Usage Status Bar graphically indicates the usage (or traffic) to help determine effective use of the Server. Once the network Administrator knows how much usage the server is getting, the number of Sessions can be changed to meet the network's needs. QuickMail is available from Macintosh dealers.

MacJet Lets Mac's Use HP LaserJet II Printers

VANCOUVER, BC January 19, 1989 — Laser Connection™, a wholly owned subsidiary of QMS, Inc. announced the addition of HP font cartridge support to their recently introduced MacJet™ software product. MacJet now supports all HP fonts, except bar codes.

MacJet, originally introduced last August, is a

MIND LINK! NEWS



Welcome to another issue of **MIND LINK!** News, a series of articles and tips about British Columbia's premiere Bulletin Board Service.

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The first thing to do when your TRIAL account on MIND LINK! is activated is set the system to run the way you wish it to. Many things are configurable with the most important ones being set up by answering a few simple questions.

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Selecting option 8 on the main menu will take you to the Configuration Menu. From here you can tell MIND LINK! what your screen size is, choose a cancel key, and select a terminal emulation. A terminal emulation, if your terminal program supports one, will allow MIND LINK! to display text in reverse video, underlined, and even in colour.

ONLINE ACCESS TO THE COMPUTER PAPER

Option 6 on the main menu will take you to The Computer Paper Menu where you can submit articles, leave a letter to the editor, or even upload a file for use by The Computer Paper. A similar menu can be reached by non-members by calling MIND LINK! and typing COMPUTER PAPER at the login prompt.

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software package that acts as a Quick Draw driver and is designed to give Apple Macintosh™ 512K, Plus, SE and II users the ability to print directly to any HP LaserJet™, LaserJet+, LaserJet Series II, LaserJet 500 or HP PCL™ compatible printers.

MacJet works with most Macintosh application packages, including MacPaint, MacDraft, MacDraw, MacWrite, MS Word™ and PageMaker. The MacJet package comes complete with easy-to-install software, Mac+/Mac Se/Mac II cabling, a user's guide and a variety of downloadable HP fonts, including portrait and landscape versions of TMS Roman (bold and italic) and Helvetica (bold and italic).

According to QMS, installing MacJet is quick and easy. After loading and configuring the software, the Mac is connected to the printer's RS-232 port and the proper baud rate is set. To select MacJet as your current printer, just pick the icon within the Chooser under the Apple menu and specify the appropriate printer port. Another feature of MacJet is an extra icon that lets users modify such MacJet features as number of copies, download font options, paper feed and baud rate.

"MacJet helps make multisystem environments more efficient by allowing Macs and PCs to share the same printer," said Neil Armentrout, Laser Connection president. "When used in conjunction with a printer-sharing device, such as Laser Connection's JetConnect™ PC, multiple host systems can share one printer, thereby distributing the overall cost of printing."

"The user of the HP Printer Control Language (HP PCL) makes MacJet one of the least expensive alternatives to a full PostScript printer," added Armentrout. "With MacJet, the printer is endowed with PostScript-like qualities while maintaining all the features and benefits of the Canon print engine, including eight page-per-minute output and Hewlett-Packard reliability."

MacJet carries a Canadian list price \$385 and has a one year limited warranty. MacJet will be shipping March and is available from QMS Computer Products Ltd. resellers.

Contact: QMS (604) 872-0631



QMS Offers New Laser For Medium Volume Applications

The QMS-PS 820 laser printer, the first Canon TX-based PostScript printer, is designed for medium-volume, multiuser and networked environments. In its initial release, the QMS-PS 820 will be available in a 110 volt version only.

The QMS-PS 820 print engine has an 8 ppm print speed, 10,000 print monthly duty cycle and 600,000 print rated engine life. The printer comes with two 200-sheet, letter-size paper input cassettes (legal, A4- and additional letter-size cassettes are also available) and has a manual feed path for envelopes and odd-size paper.

The QMS-PS 820 printer features a 68000 MPU-16 MHz controller with 2 MB RAM (expandable to 3 MB), 1 MB ROM and 35 Adobe typefaces. In addition to PostScript functionality, the controller has resident HP LaserJet+ (HPPCL), HP 7475A plotter (HPGL) and Diablo 630 emulations.

With RS-232, Centronics parallel and RS-422/Apple Talk interfaces, the QMS-PS 820 printer can instantly connect to most micro-, mini- and mainframe host systems.

The QMS-PS 820 printer has a Canadian list price of \$10,500 and comes with a one year, limited warranty. The printer is currently authorized resellers of QMS Computer Products Ltd.

Contact: QMS (604) 872-0631



Canon Offers Complete Desktop System For Publishers

Canon has introduced their solution for the desktop publisher as a bundled system.. Canon is the company behind the engine used in both the Apple LaserWriter and the HP LaserJet II. The 32-bit Canon Express system includes the Canon A-200SX IBM AT compatible 32-bit personal computer, the Canon IX-12 or IX-12F image scanner, and the Canon LBP-200V laser beam printer and Canon Expression software.

Powerful word processing, pre-designed stylesheets, and picture librarian function are some of the features that Canon Expression software offers. The Canon Express is a fully integrated system. This high-speed 32-bit personal computer instantly processes all your ideas. And the laser beam printer swiftly prints out your documents. Contact: Glen Cunningham, Canon Canada Inc. Suite 70, 10551 Shellbridge Way, Richmond, V6X 2W9 (604) 733-1439



Periodical Offered for FoxBase Developers

Pinnacle Publishing Inc., one of the leading publishers of monthly reference journals for users of database software products, is introducing foxtalk, a comprehensive monthly guide for users of FoxBASE+.

foxtalk will help you save time as well as make you a better user of FoxBASE+. It will be edited by Glenn Hart, a contributing editor to PC Magazine, and will have regular contributions from writers who will help you learn FoxBASE+ inside and out. People like George Goley IV, Pat Adams, Tom Rettig, David Irwin, Stephen Straley, and others. Available from Pinnacle Publishing PO Box 8099 Federal Way, WA 98003 for 12 issues \$89. (206)941-2300

The Partner Series Expands VAR Support

Systems West Consultants, Ltd., the Canadian distributor of The Partner Series accounting software, has announced a new extension to their VAR/Consultant Program.

Resellers of The Partner Series accounting software will now have the opportunity to have industry-specific templates marketed across Canada. The Partner Series software, a flexible user-defined accounting system, has provided the consultant with the ability to develop overlays relative to various types of business. Many resellers of the software have created exceptional templates for their clients which should be available to all users.

The program is designed to assist all resellers with expanding their particular market niche and providing them with alternative options when searching for the appropriate accounting system fit. The templates will be made available by Systems West through their monthly newsletter and various national marketing programs.

The Partner Series software is not sold "off the shelf" and can only be purchased through a qualified accounting practice or consulting service. The package will provide the end-user with full flexibility in reports and forms, thereby offering an unstructured approach to computerized systems.

For more information, please contact Systems West Consultants Ltd., 434-200 Granville Street, Vancouver, B.C. V6C 1S4. Locally call: (604) 681-4161 or toll-free: 1-800-663-1242.

VoiceCAD Now Supports AutoCAD V.10

VoiceCAD now gives you single command access to over 200 AutoCAD commands and access to an additional 250 commands using the command hierarchy including the 3D wireframe modeling, multiple view windows, and the pull down menus.

VoiceCAD allows you to create AutoCAD drawings using voice commands in place of selecting commands from the screen menu or by keyboard entry. VoiceCAD increases your accuracy in entering commands because your spoken commands replace key strokes, which reduces keying errors, and eliminates the need to move your eyes from the drawing to enter the commands.

According to TSS VoiceCAD's Canadian distributor, voice input is rapidly gaining acceptance in architectural and engineering companies, in manufacturing plants and for training the disabled because of the "hands free" input capability. The real value of voice input is with the productivity gain — up to a 50% reduction in command entry time over keying, or menu and template selection. Voice input allows the user to remain focused on creating graphic displays by minimizing the movement of eyes and hands between the drawing and the keyboard or templates.

VoiceCAD products are distributed in Canada by Tech Speak Systems, 23 Fintona Ave, Scarborough, Ontario M1E 1V4 (416) 284-9055

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EMJ Cut Prices on Acers

Guelph, Ontario — EMJ Data Systems. The exclusive Canadian distributor of the Acer line of computer products has recently announced a considerable price reduction on the following systems:]

Model 710 (1MB) XT price at AT speed 4.77 MHz/10MHz 8088, compact footprint, lightweight, built-in graphics display — suggested retail \$1,895.00. Model 900 - 12MHz AT, user selectable 8MHz mode 512Kb memory on main board — suggested retail \$2,995.00. 2MB memory on main board — suggested retail \$3,795.00. Model 910B 10MHz AT small footprint 6MHz/10MHz, 512KB RAM expandable to 1MB on main board — suggested retail \$2,295.00. Also available in standard footprint at 12MHz/8MHz speed — cost \$2,895.00.

Model 915 12MHz/8MHz compact footprint, 512K expandable to 1MB on main processor board. Built in 4 in 1 graphics display that supports EGA, CGA, HGA, and MDA — suggested retail \$2,845.00.

Model 1030 0 wait state 9.6MHz/8MHz mode, compact footprint with 640K on main board, built-in graphics display that supports MCGA and Hercules graphics, built-in PS/2 compatible mouse interface — cost \$1,995.00.

Model 1100/20MHz and 1100/16MHz, 2 MB on main board, multiple compatible speeds, Acer mouse included. Optional with 70MB hard drive suggested retail for 1100/20, \$7,095.00, suggested retail for 1100/16 — \$5,495.00. All of the above products include 12 month Xerox on-site and depot warranty. Acer Technologies is a \$500 million dollar US/year company with over 11 years of experience in high technology design and engineering.

According to Jim Estill, President of EMJ Data Systems, "This aggressive price cut will allow Acer to be even more competitive with other name brand computers." These price reductions were a result of lower prices from Acer, improved US exchange rates, lower duty charges and RAM prices. Jim Estill is confident EMJ Data Systems will double its sales of Acer computers in the next year.

Contact EMJ Data. Nahla Kor, (519) 837-2444

The Loan Calculator To The Rescue In Hot Housing Market

TeraSoft Wares, a Vancouver, B.C. based software producer, is now marketing their latest product, "The Loan Calculator." This software is useful to any enterprise relating to the loans and mortgages industry, and will be a valuable supplement to a company's existing customer services.

The Loan Calculator will determine principal and interest payments and all related functions. It will also produce amortization schedules on demand. The program is designed, specifically to be easy to use and extremely efficient.

The Loan Calculator was developed and tested in conjunction with the North Shore Credit Union (NSCU) of North Vancouver, B.C. Ron Davies, Chief Executive Officer of NSCU, says "...we would recommend it to anyone."

The Loan Calculator is available on 5-1/4 or 3-1/2 inch diskettes and is for all IBM compatible machines. Orders are accepted through TeraSoft Wares, P.O. Box 4288, Vancouver, B.C. V6B 3Z7 for \$79.95. For further information, a demonstration or brochure, write to TeraSoft Wares or call (604) 985-2224.

BoxNet Gets Good Press in PC Magazine

Rimart International, Vancouver distributor of BoxNet is glowing in the praise of its low cost Local Area Network. The February 14th issue of PC MAGAZINE says " Among the available products, the one I recommend is BoxNet...Since BoxNet uses your PC's serial port as the link between computers, the maximum speed it can achieve is 115 kilobits per second. The topology of BoxNet is distributed peer to peer, which lets every node on the network communicate with every other node...."

A New BoxNet — BoxNet IV is also now being offered to the public. BoxNet IV has added some very tangible substance to low cost local area connectivity networks.

BoxNet IV is a completely new product giving the users increased flexibility in the printing facilities (four parallel ports and 4 serial port accesses per station).

BoxNet IV supports Standard DOS 3.1 File and Record locking calls, Netbios Protocols, which gives the user a choice of multi-user or not. According to Rimart, BoxNet is easier to install than the original BoxNet.

BoxNet IV is \$199.00 per computer station. Upgrades from BoxNet are available for an additional cost is \$55.00 per station (minimum two stations) with approved serial numbers. The original BoxNet is still being offered at 124.95 per station.

This product is available through RIMART INTERNATIONAL INC. at 604-688-3717 as well as its many dealers across Canada.

Cleaning For Terminally Dirty Terminals

Have you noticed how dirt and dust cling to your terminal? Now there is a Richmond company that will come to your place of business, and return the exterior of your computer to "as-new" condition. The service includes leaving an anti-static film over the complete terminal. Tele-Clean Services has right to this newly patented line of cleaning products, and will perform this low cost preventative maintenance service on a satisfaction guaranteed basis.

According to Tele-Clean Service owner, Don Rosling, "A clean computer is your insurance for longer life and reduced repairs."

Call Tele-Clean at 272-9920 for further details.

Calema Offers Multi-User Accounting Solution

Calema Management Accounting & Information System is pleased to announce a new Accounting and Information System developed using a sophisticated database manager to run on micros.

The programs are written in a format which allows them to be easily modified to suit a customer's business needs.

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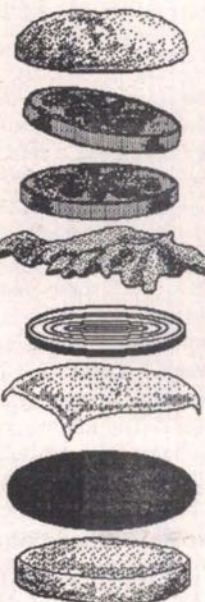
Alpha Computers Gives Away Laptop

True to their word, Alpha Computers has awarded a Zenith laptop to one of their lucky customers.

Mr. I.M. Mackenzie of Marathon Realty won a Zenith EaZy-PC computer package from Alpha Computer Automation Ltd. in the New Year Lucky draw. The machine was given away to Ian by Mr. Tommy Tao, vice president of Chinese Benevolent Association of Vancouver, witnessed by Duncan Finnigan of Zenith Data Systems on Jan. 25, 1989.

Local Restaurants Extend Their Welcome To Computer Users

Although we have no immediate plans to become a restaurant guide for computer users, we welcome this month two new advertisers whose restaurants extend their invitation to our readers. Burger Haven in Burnaby has been a meeting place for a number of User Groups for a while now. Paul, the owner of Greens and Gourmet on Broadway is also a regular reader and requests other computer users to drop by and sample some of his delicious vegetarian food.





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For further information, please contact your SmartPrint dealer.


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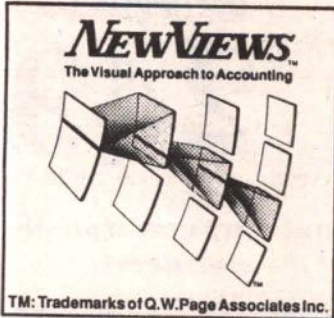
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APPLE WORLD

New IBM Printer Designed To Work With Macintoshes

MOUNTAIN VIEW, CALIFORNIA, U.S.A., 1989 JAN 25 (NB) — Analysts are still reeling about IBM's new Personal Page Printer II laser printer, the first printer IBM has ever made to work directly with Macintoshes on an AppleTalk network. IBM has licensed Adobe Systems' PostScript page description language for the printer, and has given it connections to work with a variety of machines, including its own PCs, PS/2s, and RTs, and Apple Macintoshes. The laser printer also provides IBM Proprinter XL and Hewlett Packard LaserJet emulation. The 300 dots-per-inch laser printer comes with 43 resident PostScript fonts and is priced at \$5,000. Says analyst, Rick Young, associate director of research for desktop publishing in Dataquest, San Jose, "For them [IBM] to offer a product that supports a whole set of protocols, it's really amazing." He told Newsbytes, "And it's even more amazing when you consider the animosity between IBM and Apple over the years. Remember the 1984 commercial?" Young adds that even more interesting is the apparent IBM acknowledgement that the AppleTalk networking scheme is significant. "It's the only user-installable and user-maintainable network in the world. The node cost and network management is still substantially higher for other networks." For Adobe, whose PostScript is already the standard in a majority of the world's laser printers, IBM's endorsement has been the final jewel in the crown. The contract is expected to bring millions of new dollars to the firm.

High Priced DRAMs

Depress Apple Earnings

CUPERTINO, CALIFORNIA, U.S.A., 1989 JAN 27 (NB) — Apple Computer has announced that second quarter earnings, ending March 30, will be in the range of 35 cents to 45 cents per share, compared to 61 cents per share for the same quarter last year. The firm blames the lower earnings on a mass purchase, at peak prices, of one megabit dynamic random access memory [DRAM] chips. The purchase was made during the worst of the DRAM shortage in 1988. Now, says Chairman John Sculley in a prepared statement, "We have a DRAM inventory at costs higher than current market costs." Sculley acknowledges that sales of high-end systems slowed right after Apple raised prices, due to higher DRAM prices, late last year. Last week, to get the high-end systems moving again, prices were lowered. The short-term effect, he says, is a depression of earnings. On the plus side, Sculley predicts new marketing programs will stimulate demand for Apple products, and the second half of the year will show improved fiscal performance. "We expect that Apple worldwide revenues will increase for the full year in the range of 30 percent or greater." (Wendy Woods/19880127/Contact: Barbara Krause, Apple, 408-974-3719)

Mac II Power Available For The Mac Plus And SE

SAN FRANCISCO, CALIFORNIA, U.S.A., 1989 JAN 19 (NB) — CSA introduced its new FasTrack accelerator board for the Macintosh Plus and SE at MacWorld Expo. The board is designed for math-intensive applications which use a coprocessor. FasTrack is capable of using a relatively slow and inexpensive 12 MHz 68020 chip but is able to take advantage of a Motorola 68882 math coprocessor running up to 33 MHz. In some cases, according to CSA, FasTrack is capable of providing the performance of a Mac II. Installation of the board requires removal of a Mac's 68020 chip. However, CSA offers free installation of a socket and FasTrack to customers who buy a 20 or 25 MHz 68882. The introductory price of \$895 includes the board, socket installation, a 12 MHz 68020 and a 20 MHz coprocessor.

New Book Lists Best

Public Domain Macintosh Software
SANTA CLARA, CALIFORNIA, U.S.A., 1989 FEB 4 (NB) — The Public Domain Exchange has

announced publication of a new book The Best Mac Deal, Edition II. The book describes more than 5,000 programs in 15 categories such as productivity, business, education, graphics, desktop publishing, and games, that are available from the Exchange's library. The Public Domain Exchange, a Macintosh equivalent of PC Sig, also offers hints and tips on how to use specific software, as well as provides an index to a product by subject or application name. The Best Mac Deal, Edition II is available from bookstores or through the Exchange for \$9.95 plus \$2 shipping at 2074C Walsh Avenue, Dept. 70, Santa Clara, CA 95050. Toll free phone is 800-331-8125, or in California or outside the U.S. call 408-496-0624.

New Macs Slated For Hanover Faire

CUPERTIN, CALIFORNIA, U.S.A., 1989 FEB 10 (NB) — Apple will roll out several new products including a new version of the Macintosh II, so says MacWeek. The March 7 introduction will reportedly be for a machine called the Macintosh IIcx, a three-slot, entry-level color Macintosh II with one floppy drive and one megabyte of random access memory in its basic configuration.

The paper also reports Apple will introduce a 21-inch monochrome monitor capable of displaying 16 shades of gray with a controller card, a 15-inch full-page monochrome monitor, and a 160-megabyte hard disk drive for the Macintosh II and IIx. Apple Computer would not comment on the report.

Claris Drops Support

For Apple-Labeled Products

MOUNTAIN VIEW, CALIFORNIA, U.S.A., 1989 FEB 1 (NB) — In a further demonstration of independence from its Apple Computer parent, Claris Corporation has announced it will no longer provide end-user support for Apple-labeled versions of its products. But Claris' Bob Gafford, customer support director, says the end-users can be taken back into the fold by buying Claris-labeled upgrades to such products as Filemaker, MacDraw, MacPaint, MacWrite, MacProject, or AppleWorks. Upgrades that are not free [some are] range in price from \$25 to \$169. For more information, contact the Claris Distribution Center at 800-544-8554 or 415-9628946.

ATARI

Frontier Software Ships

ST Hard Disk Utilities Package

HARROGATE, ENGLAND, 1989 Feb 04 (NB) — Frontier Software, the sole U.K. supplier of Supra's Atari ST products, has released the Supra hard disk utilities as a UKP49-95 package. The package was previously only available when bundled with Supra's hard disk systems for the ST.

Martin Walsh, Frontier's marketing manager, said modestly that the package was now being made available to all Atari hard disk users, on account of it being the best on the market.

"We are make the Supra utilities, which have been widely acclaimed as being the best, available separately, so that hard drive owners who don't own a Supradrive, can experience the benefits this software offers," he said.

Database Releases Atari ST

Version Of Mini Office Professional

MACCLESFIELD, ENGLAND, 1989 FEB 18 (NB) — Database Software has launched its Mini Office series of business software on the Atari ST. The product launch follows the success of the package on several other machines, notably the BBC micro and PC.

To accommodate all its facilities, Mini Office

NEWSBYTES is written by Wendy Woods, Wayne Yacco, Dana Blankenhorn, Jon Pepper, Steve Gold, Peter Vekinis, Ken Takahashi, Naoyuki Yazawa, and Paul Zucker. Newsworthy Canadian press releases can be sent to Grant Buckler, CANADIAN BUREAU 859 Kennedy Road, #203, Scarborough, Toronto, Ontario ph: 416/285-0644 E-mail: Source, IP2008; PC Canada PC1176, fax 416/285-5261

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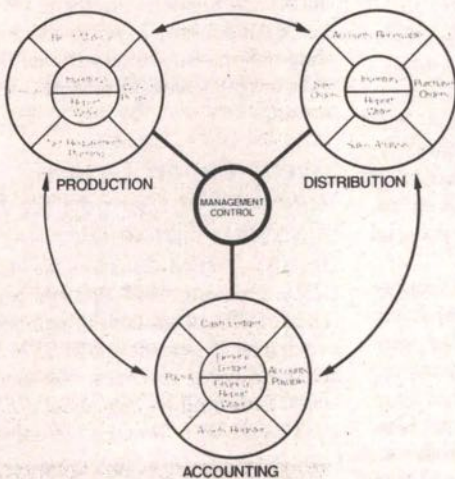


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has been split into five separate modules, all of which will retail for UKP 24-95. Two of the modules - Spreadsheet and Communications - were launched last week, with Document Processor, Database and Presentation Graphics modules following on shortly.

The Communications package looks interesting, since it supports viewdata and scrolling ASCII formats, although it is restricted to ASCII, X-Modem and Kermit file transfers, as well as CET telesoftware download on viewdata systems. For the money, however, the Communications module looks to offer good value for money.

Frontier Cuts Price Of 30MB Atari ST Supradrive

HARROGATE, ENGLAND, 1989 FEB 17 (NB) — Frontier Software has cut the price of its most popular Atari ST hard disk, the Supradrive 30Mb unit, from UKP 595-95 to UKP 495-95 including 15 per cent value added tax [VAT]. The drive was released in October last year to replace Supra's existing 20Mb unit.

Why the price cut? According to Martin Walsh, Frontier's marketing manager, the company has been able to renegotiate its contracts with Supra Corporation in the US. Since Frontier has the exclusive UK distribution rights, the company has been able to purchase in volume.

"We're happy to be able to pass on the benefits of our renegotiation in pricing with Supra. I'm sure that the new retail price of UKP 499-95 will make the 30Mb drives accessible to even more Atari ST users," he said.

B.C. BYTES

Canadian Industry Veteran To Head Institute

VANCOUVER, BRITISH COLUMBIA, CANADA, 1989 FEB 6 (NB) — Michael Volker, founder of one of Canada's first computer firms, is the new executive director of the British Columbia Advanced Systems Institute. The three-year-old institute, set up by the federal and provincial governments, promotes research and development in information technology, computer science, microelectronics, robotics and artificial intelligence. Volker was a founder of Volker-Craig Inc., a Waterloo, Ont., manufacturer of computer terminals, in the early 1970s.

Four professors at Vancouver's Simon Fraser University were elected fellows of the institute. Dr. Pavol Hell of the School of Computing Science was elected a senior fellow. Dr. Fred Birch and Dr. Slawomir Pilarski of the School of Computing Science and Dr. John Bird of the Engineering Science department were elected fellows.

Laptops Stolen From North Vancouver Retailer

(TCP) Three Bondwell Laptop Computers, each with 1 x 3-1/2" FD and 1 x 20mb HD, have been stolen from Strachan Computers off the showroom floor, during normal working hours. In each case, the thief left behind the power supply and computer manuals.

Strachan is offering a reward to anyone able to provide information to the RCMP that would lead to the apprehension and conviction of the thief.

The dates of the thefts were July 1988 — from 1334 Main St., North Vancouver; December 7, 1988 — from 1445 Main St., North Vancouver; Serial #1598 RCMP File #88-44265. January 18, 1989 — from 1445 Main St. N. Vancouver, Serial #4733 RCMP File #89-2220.

Since the thefts, Strachan has improved security to prevent a repetition of these thefts. After the December 7 theft, the lap-top computers were attached to the table with a light chain and padlock. On January 18, however, the thief cut the chain with wire cutters before removing the computer. Strachan plans further steps to secure the computers. If you have any information regarding these laptops, please contact: Richard Strachan of Strachan Computers, 984-8500.

BUSINESS

Computerland Franchisees Win Lawsuit

SAN FRANCISCO, CALIFORNIA, U.S.A., 1989 JAN 23 (NB) — ComputerLand Corporation has settled a class action lawsuit with its 800 franchi-

sees by giving them cash and letting them keep more of what they make. The dispute was started in 1984 by Michael Belling and Kenneth Klein, the former operators of the Marin County ComputerLand stores, who alleged that their giant parent was failing to honor contracts, ship products, and offer them discounts, leading to at least one business failure for a franchisee. After five years in litigation, ComputerLand Corporation has decided to award the plaintiffs a permanent contractual reduction in franchisee royalty rates from eight to five percent. \$5.2 million in debts will be forgiven for the class action suit members, and a \$720,000 fund will be distributed as well. The entire settlement is valued at over \$30 million.

Dell Keeps Growing While Executives Keep Walking

AUSTIN, TEXAS, U.S.A., 1989 JAN 23 (NB) — Dell Computer founder Michael Dell, who started his business while a University of Texas student, is fast gaining a reputation as a tough boss. Another five top executives have left in the last few weeks, clearing out a division built by Graham Beachum. Dell had hired Beachum from Tandy as vice president of marketing and sales after deciding to turn his small mail-order outfit into a brand name. Dell replaced the five by promoting from within. Beachum, now at Wang Labs, had hired away two of the five, while a third went back to Tandy and Mark Yamagata, yet another one-time Dell manager. Aside from the problems of suits who won't listen to the boss, Dell is doing well. On January 23 Dell signed leases for six buildings with 500,000 square feet of space in Northwest Austin. He'll replace a 123,000 square-foot facility and expand his present 55,000 square foot offices at a Trammell Crow development called Braker Center. Moving will take Dell employees most of the year, but they should then stay put, because Dell has options on land adjacent to the new digs. Included in the new offices will be a new cafeteria, volleyball courts, softball fields and an exercise room. Dell still calls its computers "IBM compatible," not Compaq-compatible, and is licensed to make PS/2 clones.

Worldwide High-Tech Repair Business Now Worth \$65 Billion

FORT MYERS, FLORIDA, U.S.A., 1989 JAN 27 (NB) — The business of repairing equipment containing micro chips grows merrily on. It was a \$65 billion business last year, with a 10 percent annual growth rate. The people who manage the repairmen, who prefer to be called technicians, are members of the Association of Field Service Managers. Executive Vice President George Keller told Newsbytes the word "field service" is a misnomer, and his 6,000 members manage 350,000 people who fix everything from airline terminals to the mainframes those terminals feed. Newsbytes readers are welcome to take a crack at a new name, he added. Keller also said that the \$65 billion figure came from the Boston consulting firm of Ledgeway & Associates, which got figures from the Top 100 companies in the field, like IBM and AT&T, Siemens, Philips and Eastman Kodak, then extrapolated, figuring the big boys represented 85 percent of total volume. The U.S., Keller adds, has 60 percent of the total high-tech service market.

Strong Export Growth Boosts IBM Canada Revenue

MARKHAM, ONTARIO, CANADA, 1989 JAN 20 (NB) — IBM Canada Ltd. had revenues of C\$3.693 billion in 1988, up 19 percent from 1987's figure of C\$3.104 billion. The company's exports, which rose 36 percent to C\$1.352 billion in 1988, helped to boost revenues. Net income for 1988 was C\$260 million, up about 12 percent from 1987's C\$231 million. At the end of 1988, IBM Canada had 12,605 employees, including 4,147 working in manufacturing and development.

IBM Reports 8 Percent Increase In Revenues In Fiscal 1988

POUGHKEEPSIE, NEW YORK, U.S.A., 1989 JAN 20 (NB) — IBM has reported that its revenues for fiscal 1988, which ended in December, 1988, reached \$59.7 billion - an increase of more than eight percent over 1987. Although sales increased by eight percent, profits slumped a little,

reporting at \$9 billion, or an increase of 4.05 percent. \$9.8 was paid as a share dividend, representing a gain of 12.85 per cent. Outside the U.S., the company earned \$4.1 billion on sales of \$34.4 billion - an increase of 15.5 percent.

Half Of Cellular Phone Manufacturer Sold To Provincial Carrier

CALGARY, ALBERTA, CANADA, 1989 JAN 25 (NB) — Alberta Government Telephones, a provincially owned telephone utility, will acquire 50 percent of Novatel Communications Ltd., the only Canadian cellular telephone manufacturer. Nova Corp., a pipelines and petrochemicals company, announced the sale of its stake in Novatel as part of an asset-trimming program. Nova will get C\$60 million for its half of the six-year-old company. Novatel had sales of C\$150 million last year and has 12 to 15 percent of the cellular telephone market in the United States. Alberta Government Telephones buys most of its cellular equipment from Novatel.

One Megabit DRAM Price Stabilizing

TOKYO, JAPAN, 1989 FEB 6 (NB) — There is some indication that prices for dynamic random access memory [DRAM] chips are starting to stabilize for the first time in a year and a half. One megabit DRAMs are going for 2,000 yen or \$15 in quantity, and have recently been offered with a 10-percent discount by some vendors. Meanwhile, DRAMs are still going for around 5,000 yen or \$38 in the spot market, such as Akihabara, Tokyo, the famous district for electronics goods.

Compaq Sales: 2.1 Gigabucks, Sets Records

HOUSTON, TEXAS, U.S.A., 1989 FEB 1 (NB) — Compaq Computer Corporation [NYSE:CPQ] announced record-setting sales and income figures for the year ended December 31, 1988. Sales of \$2.1 billion produced net income of \$255 million, increases of 69 percent and 87 percent, respectively, over the previous year. The company is the first ever to exceed \$2 billion within six years of its founding according to president and CEO Rod Canion.

During 1988 the company launched several new computers including the SLT/286 laptop computer—a machine small enough to fit on airline tray. The tray proved to be a convenient location for some critics who subsequently had the unit for lunch.

Dbase IV Walks Over Rest Of Market

SYDNEY, AUSTRALIA, 1989 FEB 8 (NB) — Ashton-Tate's flagship dBase IV has suffered all types of criticism lately — except from the marketplace. Its market share in Australia in December was more than 44 percent, making it a clear winner. When combined with stablemate III+ with 19.6 percent, Ashton-Tate had a crushing 63.9 percent of the PC database software market, according to the Micro Store Board report from Compass.

Tandy "Realignment" Announced

DALLAS, TEXAS, U.S.A., 1989 FEB 14 (NB) — In what Chairman John V. Roach termed a "realignment of marketing resources," that will, "sharpen the focus of each organization and will eliminate channel conflicts within," Tandy Corporation announced that its GRiD Systems Corp. subsidiary will now operate 61 of its sales, showroom, support and service centers in 53 markets nationwide. Radio Shack will continue to operate 300 Computer Centers. The announcement followed speculation a week earlier that Tandy would shift many struggling outlets to its recently acquired subsidiary in order to enhance its sales to large corporations and government units.

Samuel J. Wiegand, GRiD president and CEO, said that the establishment of GRiD System Centers indicates a substantially increased commitment to major corporate accounts and federal and state governments. "We will build our base of field automation systems customers, provide an expanded product line and expanded service and support capability to those customers and the business market in general," said Wiegand. "The 61 new GRiD Systems Centers will provide fo-

rumors for product sale and demonstration, as well as applications consulting and customer training. Our product offering will be increased to provide desktop work stations and servers, plus field support equipment such as cellular telephones and facsimile machines." Other benefits cited by Wiegand include additional support for laptop customers and significantly increased sales into "large corporations and major governmental agencies."

Comments made by Radio Shack President Bernard S. Appel at a press conference indicated that Radio Shack would be abandoning its efforts to sell into major national accounts in favor of smaller businesses and home offices. Parroting the words of Chairman Roach, Appel also used the term "sharpening the focus" to describe the pullback of Radio Shack efforts. With Radio Shack to concentrate on general business, home-office, professional and education markets, the

two Tandy organizations expect channel conflicts to be eliminated.

Leading Edge Faces Further Woes; Possible Bankruptcy

CANTON, MASSACHUSETTS, U.S.A., 1989 FEB 14 (NB) — The well-publicized problems of Leading Edge Hardware Products continue as the company faces yet another lawsuit surrounding the proposed sale of assets. A number of Leading Edge dealers have asked that the company be placed in involuntary bankruptcy, under Chapter 11 of the U.S. Bankruptcy Code. Last week a former programmer sued the company for royalties he said were due him from Leading Edge.

The action seems to make it increasingly difficult for Michael Shane, the Leading Edge founder and chairman, to complete the sale of assets to PC Systems of Riviera Beach, Fla. Though a spokes-

man for PC Systems said that the petition won't affect their ability to sell computers from Daewoo, the Korean firm that manufactures the Leading Edge brand PC, the situation was still unclear at press time. The dealers are claiming that millions in funds are due, in part because Leading Edge makes dealers pay for product one month prior to delivery.

The only thing that does seem clear for now, is that the last chapter in this stick situation is far from being written.

CANADIAN NEWS

IBM Canada President Adds Chairman's Title

MARKHAM, ONTARIO, CANADA, 1989 JAN 30 (NB) — John M. Thompson, president of IBM Canada Ltd., has been elected chairman of the company as well. He replaces Lorne K. Lodge,

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who has retired as chairman but will continue on the board of directors. Thompson has been with IBM Canada since 1966.

Control Data Chopping Development In Canada

MISSISSAUGA, ONTARIO, CANADA, 1989 FEB 1 (NB) — Control Data Canada is cutting its development facilities in Canada, reducing staff from just over 150 to about 20. The company said it is consolidating development activities in its Computer Products Division and will move most development to Minnesota. Some staff members from Mississauga will be offered jobs there, while others will be transferred to Control Data's Computing Devices division in Ottawa. The Mississauga team most recently developed Control Data's Cyber 930 departmental computer. Those who remain will do continuation engineering and support for the Cyber 93X product line, which will continue to be manufactured in Canada.

Compuserve Named Second Canadian Distributor For Samsung

MARKHAM, ONTARIO, CANADA, 1989 FEB 6 (NB) — Samsung Information Systems America, of San Jose, Calif., has signed Compuserve, of Markham, Ontario, to distribute its entire line of microcomputer and local-area networking hardware products. Terms of the agreement were not disclosed.

Compuserve has eight distribution locations across Canada and distributes computer products to retailers such as ComputerLand, Crowntek Business Centres and MicroAge. Compuserve previously carried some Samsung products under the Novell name. Canara Technologies Inc., of Mississauga, Ont., will also remain a Samsung distributor.

Samsung develops, manufactures and markets personal computers and local-area network hardware.

RealWorld Canada Hosts Dealer Event

TORONTO, ONTARIO, CANADA, 1989 FEB 15 (NB) — RealWorld Canada Inc., of Dieppe, New Brunswick, invited existing and prospective dealers from across Canada to a software showcase February 15-17. The newly established master value added distributor for RealWorld Corp. recently obtained exclusive rights to distribute and license RealWorld's 4-In-1 Basic Accounting for MS-DOS and a line of high-end accounting packages for MS-DOS, Unix, Xenix and Digital Equipment Corp.'s VAX systems.

CD-ROM

Microsoft Says CD-ROM Conference Sold Out
REDMOND, WASHINGTON, U.S.A., 1989

FEB 9 (NB) — If you want to exhibit at the Fourth International Conference on CD-ROM, you're out of luck. Microsoft cheerily reports that all the exhibit space at the Anaheim Hilton and Towers in Anaheim, California, is booked solid for the March 28-30 event. Microsoft says the 120 booths represent an increase of 50 percent over last year and attendance is up 30 percent. The space requirements are so critical that the company is also limiting the number of journalists who want to attend.

Some 50 speakers are on the roster for the event and conference sessions will cover such topics as intellectual property rights, standards, visualization of data, and multimedia production techniques. Registration for the event is \$950. Those interested in attending should contact Sherrie Eastman, conference planner, at 206-882-8080 for more information.

Panasonic To Unveil Low-Cost CD-ROM Player

SECAUCUS, NEW JERSEY, U.S.A., 1989 FEB 6 (NB) — Panasonic is expected to introduce the first CD-ROM [compact disk, read-only memory] drive to be priced under \$500 at the Microsoft CD-ROM conference in March. Most current products range from \$900 and up.

The drive will compromise on performance, with a slower access time than the most currently marketed products. Besides the CD-ROM capability, the player will have an audio output that will allow it to play compact discs.

Sourcedisc Has Info For CD-ROM Users

WATERLOO, ONTARIO, CANADA, 1989 JAN 23 (NB) — Trillium Computer Resources Inc.'s CD-ROM Sourcedisc is a catalogue of commercially available CD-ROM titles. For each entry it contains an outline of the disc's contents, and in many cases there are demonstrations as well. The disc also contains two reference databases. One lists acronyms commonly used in the CD-ROM industry. The other is a glossary of more than 500 CD-ROM-related terms. The CD-ROM Sourcedisc sells for C\$119.

COMMODORE

Burocare Launches Bernoulli Box For Commodore Amiga

HARROW, ENGLAND, 1989 FEB 10 (NB) — Burocare Graphics Design has launched a version of Iomega's Bernoulli Box data storage system for the Commodore Amiga. The removable disk cartridge system supports both Amiga-DOS and MS-DOS formats—the latter when the Amiga is fitted with the XT bridgeboard.

The drive units come in three configurations—single external at UKP1,295 and dual external at UKP1,895 for all Amigas, and a single internal unit for the Amiga 2000 series at UKP1,065. All units take standard 20Mbyte disk cartridges which cost UKP65 each.

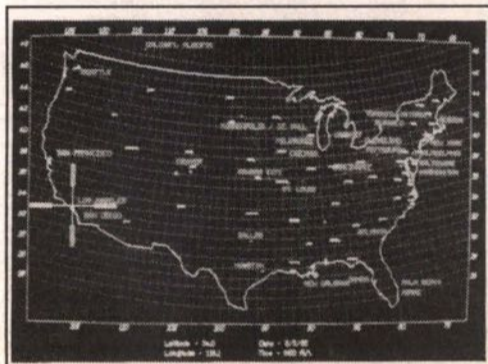
The Bernoulli Box system supplied by Burocare comes with a SCSI interface with autoconfiguration software for all Amiga-DOS commands. The system fits the first expansion slot on the Amiga 2000, or onto the Direct Memory Access [DMA] port on the Amiga 500 and 1000 series.

DESKTOP PUBLISHING & GRAPHICS

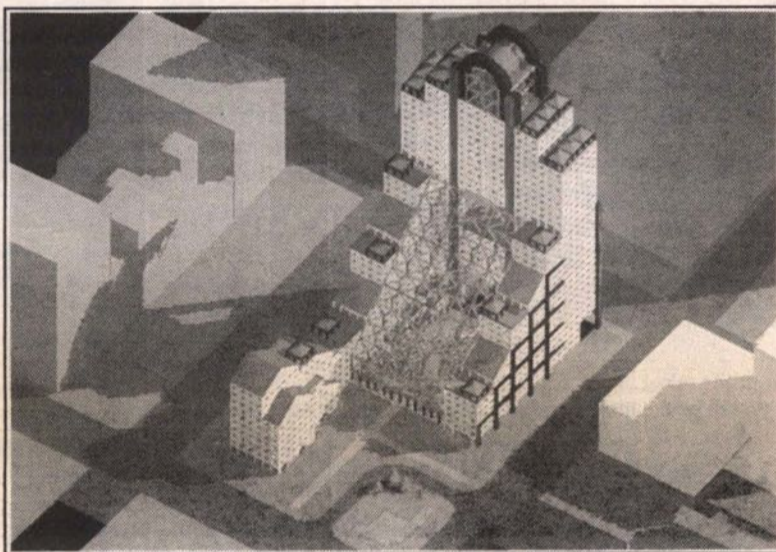
Adobe Announces New Mac Product, Ships Illustrator For The PC

MOUNTAIN VIEW, CALIFORNIA, U.S.A., 1989 JAN 26 (NB) — Shipments of the Windows version of Adobe Illustrator have started. The product offers such features as auto trace, bezier curves, DFX conversion, pen tool, freehand drawing, and zoom, among others, and comes bundled with Adobe Collector's Edition: Symbols, Borders and Letterforms. The \$695 package runs on a PC with at least 640KB [kilobytes] of random access memory, 256KB of expanded memory, a hard disk, a floppy drive, and an EGA, VGA or Hercules Monochrome interface and display.

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Adobe Streamline, slated for shipment at the end of February, is a new product which automatically traces bit-mapped images and quickly converts them to Adobe Illustrator files. The product is geared toward businesses with large libraries of art and want to use Streamline to archive them. The product requires a Macintosh SE, II or IIX and will cost \$395.

Designer 2.0 Announced

RICHARDSON, TEXAS, U.S.A., 1989 JAN 30 (NB) — Micrografx has announced an upgrade of its \$695 Designer "professional-illustration" tool. Designer 2.0 adds compatibility with the OS/2 Presentation Manager, automatic gradient fills, autotrace, Bezier-curve editing, a new freehand tool, spot-color and process-color separations, import and export filters for PCX, TIF, CGM and DXF file formats, context-sensitive help and other new features. The program supports over 150 graphics cards and printers including laser printers, plotters, and dot matrix printers. Support for Micrografx Color Postscript and Matrix and VideoShow film recorders are also included.

Upgrades of Designer 2.0 are free to Micrografx Extended Technical Support Service subscribers and to users who purchased Designer after February 1, 1989. Other users will be able to upgrade for \$99.

Separate version of Designer 2.0 will be provided for DOS and OS/2. Designer 2.0 PM will make use of OS/2's multitasking, extended memory, and protected mode operation. The PM version will be provided free of charge to registered Designer 2.0 users. However, Micrografx will require proof of an OS/2 purchase.

Seybold Speakers Scheduled

MALIBU, CALIFORNIA, U.S.A., 1989 JAN 26 (NB) — The ninth annual Seybold Seminars will be held March 13 - 17 at the Hyatt Regency Embarcadero Hotel in San Francisco, California. The conference's opening reception will be held on Sunday, March 12 in the Hyatt Regency Palm Court.

The publishing seminars hosted by Johnathan Seybold are scheduled to include key-executive speakers representing many of the industry's leading vendors. Among those listed to appear in a preliminary program are Adobe's John Warnock, Aldus's Paul Brainerd, Apple's Jean-Louis Gasse, Bitstream's Rob Friedman, Interleaf's Dave Boucher, Microsoft's Steve Ballmer, Sun Microsystems's Scott McNealy and Bill Joy, and Ventura Software's John Meyer.

Instant Color Publishing Center Opens

WEST LOS ANGELES, CALIFORNIA, U.S.A., 1989 JAN 23 (NB) — Imageland opened here billing itself as "the world's first instant color publishing center." Customers can use the facility's computer design system to create and print limited edition color calendars, greeting cards, brochures, textile hangings, tee shirts, ceramics, and other color reproductions.

The store is operated near UCLA by Color Laser Corporation. Company President Mitsuru Kataoka is also an associate professor and director of UCLA's Visual Design Research Group. According to Kataoka, "high-quality color design and reproduction formerly took days or weeks and required a team of specialists—including graphic designers and specialty print shops—and expensive color separations."

At Imageland, a photograph or other color image can be instantly turned into a customized printed piece using an Unda 250V Color Design and Production System. The system provides many of the functions of the large systems used to print national magazines. Output is produced on color laser printers. Designing and printing twenty copies of a typical six-page color piece costs approximately \$400 at the center as compared to \$2000 for the same production by traditional methods.

Uppercase Brings Adobe Streamline To Canadian Market

MARKHAM, ONTARIO, CANADA, 1989 FEB 16 (NB) — Adobe Streamline, a tracing program for art production from Adobe Systems, Inc. of Mountain View, Calif., is now available in Canada. Uppercase Technology Inc., Adobe's exclusive manufacturer's representative here, is now

selling the software for C\$525. The program converts bit-mapped files into Adobe Illustrator or encapsulated PostScript format.

EDUCATION

IBM Takes Role In Adult Literacy And Employment Training

ARMONK, NEW YORK, U.S.A. 1989 FEB 16 (NB) — IBM will be involved in a new program to help fight adult illiteracy and keep students in high school. Initially, the company will assist various community-based organizations, including loaning PS/2 computers and educational software.

In addition, the 76 IBM-supported job training centers involved in the program will be using an IBM software product called Principle of the Alphabet Literacy System, [PALS], developed by the noted educator, Dr. John Henry Martin. The value of IBM's participation in equipment and software to each center is approximately \$133,000.

GENERAL

Executives Nix NeXT, Back EISA In Technologic Survey

NEW YORK, NEW YORK, U.S.A., 1989 JAN 27 (NB) — A survey of more than 500 industry executives and investors polled at the Technologic Partners PC conference in December showed most never think NeXT Computer Systems will report a \$500 million year. The thumbs-down attitude also extended to Apple Computer's "look and feel" copyright lawsuit against Microsoft and Hewlett Packard, 67 percent of respondents saying that they felt Apple would lose. Among other surprises of the survey was that most expect Business Week magazine will pronounce that the shortage of dynamic random access memory chips over in June, 1989; IBM's OS/2 operating system will finally become the dominant operating system in 1992, they said. 18 percent, interestingly enough, responded to the question of when OS/2 would achieve dominance with "never." Most [80 percent] expect the anti-OS/2 group EISA to succeed, meanwhile. Finally, when asked which technology will be the more commercially important in five years, CD-ROM, Compact Disk Interactive, or Digital Video Interactive [DVI], a majority chose DVI [39 percent] while CD-ROM got second place with 37 percent; CDI got 24 percent of the votes. The Technologic newsletter Computer Letter is a weekly intelligence report on the computer industry priced at \$495 a year in the U.S. and Canada.

NEC Vs. Intel Battle Over; Microcode Protected By Copyright

SAN JOSE, CALIFORNIA, U.S.A., 1989 FEB 7 (NB) — The news was good and bad for Intel. After nearly five years in court and millions of dollars in court costs, Intel won its battle to prove microcode is protected by the same copyright laws which protect software. Now the bad news. Intel lost its battle to copyright the 8086 and 8088 microprocessors, about which the copyright battle originated.

The dispute arose when Intel accused NEC of copying the microcode in its 8086 and 8088 microprocessors. However, the court determined that NEC's V-series microprocessors did not infringe on the 8086 and 8088, their microcode, "when considered as a whole, is not substantially similar to the Intel microcode." The Judge also determined that Intel forfeited its copyright on the 8086 and 8088 by allowing second-source producers of the chips to manufacture them without a copyright notice. However, the landmark piece of the ruling by U.S. District Court Judge William Gray is that microcode, the instructions embedded within microprocessors, is protected by U.S. copyright law.

The ruling means that those who wish to "clone" a microprocessor may do so as long as they do not make exact copies. For Intel, it means millions of dollars in potential penalties it might have won against NEC, the world's largest and richest semiconductor manufacturer, have gone up in smoke.

Japan Charged With Floppy Disk Dumping

WASHINGTON, D.C., U.S.A., 1989 FEB 7 (NB)



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Toshiba T1200 HB/20MB	\$3,395
Zenith Supersport 286 20MB	\$4,749

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Epson LQ1050, 264/88 cps 132 col 6K	\$959
Epson LQ 2550 400/133 cps 132 col 6K	\$1,449
Fujitsu DL 3400	\$949
Roland PR-2417	\$565
Roland PR-9104	\$390

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ATI VGA Card	\$415
ATI VGA Wonder w/256K 800x600	\$449
Bocaram AT (Ems)	\$245
Bocaram XT (Ems)	\$195
Hercules Comp. Card	\$89
Paradise VGA plus	\$379

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Logitech C7 plus (serial)	\$115
Mitsubishi E Mouse	\$109

SOFTWARE

Bedford (New Version)	\$133
Bedford Worksheet	\$79
Carbon Copy plus	\$155
Clipper (Summer '87)	\$525
Dac Easy V3.0 (Cdn.)	\$75
dBase IV	SCALL
Easy Lan 2	\$249
Harvard Graphics 2.1 (Rev)	\$389
Harvard Total Project Mgr III	\$449
IBM OS/2	\$389
Lanlink	\$675
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Norton Utilities	\$75
Note it +	\$85
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Turbo Pascal 5.0	\$119
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NEC Multisync II CLR	\$799
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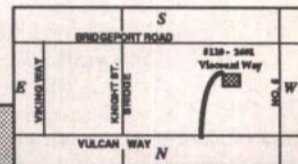
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— The Commerce Department has ruled that Japan has been illegally "dumping" 3.5-inch floppy disks on the U.S. market below fair market value and that duties might be imposed on future shipments. The International Trade Commission must now act on the complaint, which was brought to public attention by Verbatim Corporation. The Commerce Department says Sony is the worst offender, selling its diskettes at 51-percent under fair value; Fuji Photo disks are 50.52 percent under and Hitachi Maxell's are 27.73 percent underpriced.

New Europe 1992 Technology Newsletter Launched

AMSTERDAM, THE NETHERLANDS, 1989 FEB 17 (NB) — Sala Communications, the specialist Dutch computer and technical publisher, will launch a new newsletter to clarify the European Community's [EC's] 1992 Internal Market plan and its impact upon worldwide technology producers.

The newsletter, titled EUR/1992, and which is designed to make the EC's related publications readable, is designed to be a medium for those that need to understand the EC's plans for 1992. It outlines recent anti-dumping cases and, with the help of sources placed well within the organisation, offers information on forthcoming events that could affect businesses on a worldwide basis.

EUR/1992 is edited in Brussels and Amsterdam and is published on a monthly basis. Subscriptions to the newsletter cost \$495 a year, including air-mail postage to any worldwide destination.

Businessland Canada Opens For Business

MARKHAM, ONTARIO, CANADA, 1989 FEB 13 (NB) — Businessland Canada has officially opened its doors here, and plans to spread across the country within a couple of years. Robert Henderson, vice-president and general manager of the Canadian operation, said there will eventu-

ally be nine to 12 locations across Canada. At present, Businessland has about 20 employees in Markham, Ontario, just north of Toronto. Unlike its parent company, Businessland Inc. of San Jose, Calif., Businessland Canada will not operate computer stores. The company will rely on a sales force who will call on customers, Henderson said. "We will never have a retail location." He said the American company is evolving in that direction as well.

IBM WORLD

Microsoft Launches Anti-Lotus Campaign

REDMOND, WASHINGTON, U.S.A., 1989 JAN 25 (NB) — Microsoft will offer free evaluation copies of Excel for Windows and nationwide Excel seminars in an effort to nip a Lotus 1-2-3 promotion in the bud. The spreadsheet war will also see Microsoft double its sales force and marketing group devoted to Microsoft Excel. To address any remaining barriers to change, Microsoft will also offer a price promotion and additional incentives for resellers and distributors. Microsoft Excel has garnered 12 percent of the market for spreadsheets on the '286 and '386 microprocessor platform and the company is out for more. As of February 1, Microsoft will send out a demo version of Excel which is copyable and has all the product features, but with the size of the worksheet restricted to 16 rows by 64 columns. U.S. customers can get a copy by calling 800-541-1261. Current Lotus 1-2-3 users who switch to Excel for Windows will be rewarded with a \$75 rebate or a free copy of Windows/286 or Windows/386. The final incentive is Microsoft's guarantee, which states that anyone unhappy with the product can receive a full refund through January 31, 1990. The guarantee is designed to give customers ample time to evaluate the coming update of Lotus 1-2-3.

PC Version Of Mathematica Released

CHAMPAIGN, ILLINOIS, U.S.A., 1989 JAN 27 (NB) — Wolfram Research has released a PC version of its Mathematica program. Mathematica, which does numeric, symbolic algebra, and graphic calculations, is available only for 80386-based computers with one megabyte of extended memory running MS-DOS. It comes in separate versions for machines with 80x87 and Weitek coprocessors, and is also distributed by IBM for AIX/RT systems and by Sun Microsystems for Sun-3 and Sun-4 workstations. The PC version is limited in that it does not support the notebook interface used on the Macintosh or Next computers. Mathematica, which first came out for the Macintosh in June, 1988, was created by Stephen Wolfram, a professor at the University of Illinois who was the youngest doctorate recipient in Caltech history, getting the degree at age 20.

Q.W. Page Announces NewViews Discount For Public Accountants

ORONTO, ONTARIO, CANADA, 1989 JAN 23 (NB) — Q.W. Page Associates Inc. will knock 28 percent off the price of its NewViews accounting software for public accounting offices. Q.W. Page has also announced a Professional Accounting Partner program for those who provide accounting services with NewViews. "As the number of New Views users grows, more and more of our customers want an accountant who is familiar with the program they use," said Cathy Mallove, director of marketing. NewViews, for personal computers running the MS-DOS operating system, lists for \$995 in the United States, C\$1,295 in Canada.

Final Details Of EISA Bus Determined

LOS ANGELES, CALIFORNIA, U.S.A., 1989 JAN 16 (NB) — Local computer vendors AST Research and Epson America have joined with

other members of an international consortium to announce a final specification for the EISA [extended industry standard architecture] bus. EISA includes full 32-bit address and data-bus extensions, 32-bit direct-memory access, and 32-bit bus-master support. The standard also provides programmable board setup for automatic configuration of EISA boards and software aided configuration of existing switch-programmable boards and future EISA boards.

The standard is being offered as an open 32-bit bus alternative to IBM's MCA [Micro Channel Architecture]. EISA-standard boards offer manufacturers more board space than MCA boards and the consortium also claims that EISA will also provide faster data transfer rates and more available electrical power.

Another feature that the EISA group promotes as an advantage is its compatibility with early adapters for the PC. However, there does not seem to be very much evidence, based on present upgrade patterns, that users will actually use this feature. Rick Khan, owner of Micro Trends International, a 5,200 square-foot storefront computer showroom in Pasadena California, sells both IBM's MCA systems and Compaq and other AT-compatible machines. Khan tells Newsbytes that most of his customers don't use their old boards in the new '386 systems they buy even though they could. Instead they "want to use the most advanced boards available." Most of his computers are sold as complete systems even when they are sold to replace old equipment.

Computer systems incorporating the EISA bus are not expected to appear before the second half of 1989.

Physical connection to the EISA bus uses a two-level design which prevents existing cards from being inserted more than half way into bus-connector sockets but allows EISA cards to seat to the bottom. Standard cards rest on stops which allow their connectors to engage only the top row in the EISA socket. EISA cards have two rows of connections arranged one above the other along the card's edge connector. Top row EISA connections

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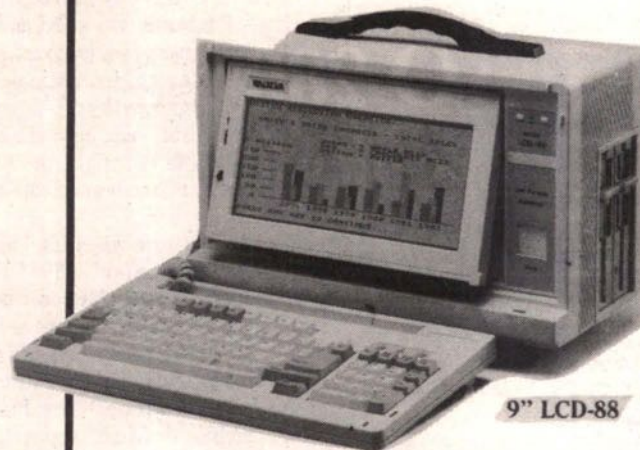
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are positioned just as those on existing cards. The bottom row has cut-outs into which the socket's stops pass allowing the card to seat fully. The card's connections are therefore able to engage both the top and bottom rows in the socket.

EISA Doesn't Live Here Anymore

BURBANK, CALIFORNIA, U.S.A., 1989 JAN 12 (NB) — Will EISA drive out MCA as proponents hope? According to one expert, it may not even survive in the face of a forthcoming onslaught from IBM. And he should know, Carl Warren is chairperson of a key group investigating AT-bus architecture standards: the IEEE Industry Study Group on Extensions to the AT bus. It's a group to which Compaq hasn't even bothered to respond although an invitation was made according to Carl. In reply to claims made in the recent announcement by the EISA group Carl Warren announced succinctly "I doubt it."

There are some obvious merits to his argument. For one thing, EISA's compatibility with the AT is touted by the group as maintaining continuity for users. But if old cards are ported to EISA machines, they obviously can not participate in the bus's advanced capabilities. Won't the machine become just another AT? That means EISA is really more of a choice between advanced architecture and compatibility than a combination of both. And, the EISA claims don't take into account IBM's plans for the MCA. They refer only to the currently implemented level of support, not what MCA's capable of doing.

Carl claims that minor changes in the MCA will be able to support speeds far in excess of the inherent limits of EISA. The next version will be what the technical and user communities want to see he says. MCA is the superior technology — by a long shot. Expect to see 95 MHz. bus speeds and some other surprises that no one's expecting he adds—all upwardly compatible with the existing MCA. Furthermore, Carl even sniffs at the openness of EISA when just a copy of the specification costs \$2500.

The special 4-month IEEE group that Carl

chairs is studying 32-bit extensions to the AT bus as a possible P-996 [nu bus] extension. And the committee is looking for input from anyone with suggestions. So, take your two cents and send ideas or questions to him via fax at 714-896-1313. Be sure to include a cover sheet with his name and the secret password "Mail Stop 21-2." He can also sometimes be reached at 714-896-3311, ext 0669.

IBM Begins Big Push For OS/2 And PS/2 Line

MONTVALE, NEW JERSEY, U.S.A., 1989 FEB 5 (NB)—IBM is attempting to speed up the acceptance process for the PS/2 line of computers and the OS/2 operating system with a number of recent market moves.

The company will be offering rebates on the purchase of OS/2 software tied to various hardware purchases. In addition, IBM plans to release a number of upgrades to OS/2 that are designed to increase the compatibility of OS/2 Presentation Manager with output device drivers.

Enhancements to both the MicroChannel architecture [MCA] and new PS/2 offerings are also planned. IBM is expected to release a PS/2 computer using the as yet unreleased 33Mhz version of the Intel 80386 microprocessor.

The IBM moves come at a propitious time for the company. Acceptance of the PS/2 line at last seems to be gaining ground and most major software developers feel the switch to OS/2 is inevitable among their customers. IBM also seems to be gaining momentum against the proposed EISA standard. EISA is an alternative devised by The Gang of Nine, spearheaded by Compaq. Stalled in their development effort, public opinion seems to be shifting toward the IBM's MCA as the next generation architecture for corporate users.

SuperCalc5 Ships

SAN JOSE, CALIFORNIA, U.S.A., 1989 FEB 6 (NB) — Computer Associates, the nation's second-largest software producer next to Microsoft, is shipping SuperCalc5, a spreadsheet which fea-

tures page and spreadsheet linking, annual report quality output, "boardroom-quality" graphics, and Lotus 1-2-3 compatibility. In addition, the spreadsheet runs the gamut of machines from the lowly 8086-based PC to the high-powered 80386-based computers, and integrates with CA-SuperCalc 5.0, the company's mainframe spreadsheet package. It also integrates with VAX-SuperCalc and can share files with mainframe databases such as DB2 and SQL/DS. Boasts Computer Associates' Abraham Poznanski, president of the firm's Micro Products Division, "That's what makes SuperCalc5 unique and what will make us successful in tapping this market."

The product retails for \$495. Registered owners of previous versions can upgrade for \$100. In the U.S. for information call 1-800-531-5236 extension 60 or 408-432-1727.

Supercalc 5 Shipping In Canada

VANCOUVER, BRITISH COLUMBIA, 1989 FEB 6 (NB) — Computer Associates Canada Ltd. is now shipping SuperCalc 5, the latest release of its spreadsheet for MS-DOS. The Canadian retail price is C\$599. Upgrades from earlier versions cost C\$120, except for registered owners who bought SuperCalc 4 after May 23, 1988 — they will pay only C\$25.

Low-Cost PC SCSI Coming

RANCHO CUCAMONGA, CALIFORNIA, U.S.A., 1989 FEB 1 (NB) — Rancho Technology will ship a low-cost SCSI [small computer system interface] adapter for the IBM PC and compatible computers next month. Available in four models, selling for as little as \$50 each in quantity, RT1000 host adapters allow the PC to use standard SCSI devices such as hard disks, tape backup systems, and WORM drives. According to an announcement, the devices use two ping-pong buffers and string I/O [input/output] memory moves to provide very high data-transfer rates at prices which are as little as one-third of comparable SCSI adapters.

Adapter configurations include models with and without floppy controllers. Floppy models can control high- and low-density floppy drives, in both 3.5" and 5.25" form factors, as well as SCSI devices, from a single bus slot. Up to nine SCSI devices and four floppy drives can be supported by a single board. Two models also include connectors for external devices. Single-unit prices range from \$95 to \$140. A floppy-only version of the RT1000 is also available.

Xerox Chops Prices On Kurzweil Systems

MOUNTAIN VIEW, CALIFORNIA, U.S.A., 1989 FEB 9 (NB) — Xerox Imaging Systems has lopped a whopping 59 percent off the price of its text-recognition scanning systems for IBM PC, XT or ATs and compatibles. The new pricing affects the Kurzweil Discover product line, consisting of scanner, 68020 co-processor card, software and documentation. Conversion software for most word processing and publishing systems is included. The prices range from the high-end Model 30, previously \$13,950 and now \$6,995, to the low-end Model 10, now \$3,995 or 46 percent cheaper.

Why are they doing it? Xerox believes the market for these products is exploding and, as Rolando Estevearena, president and chief executive of Xerox Imaging Systems states, "We are repricing our systems to allow a full range of users into the market."

Kurzweil character recognition technology uses artificial intelligence to automatically "learn" or recognize print styles and document formats. The systems can read thousands of type styles and sizes, according to the firm.

Hand-Held Remote Keyboard Available For PC

SUNNYVALE, CALIFORNIA, U.S.A., 1989 FEB 18 (NB) — Similar to a television remote control, the Remote Keyboard has been introduced by Forte Communications. The device is



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- Enhanced keyboard

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- 1.2MB floppy
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- High res. TTL monitor
- Clock/calendar
- Serial/parallel ports
- Enhanced keyboard

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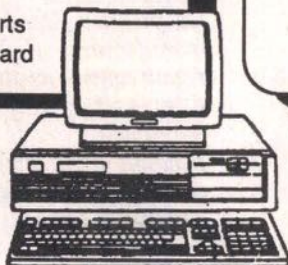
- 1MB RAM
- 360K floppy
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intended to provide remote interaction during presentations before large audiences allowing a speaker to directly control an IBM-compatible personal computer. Control passes via infra-red signals to a receiver attached to the computer's serial port [RS232 interface]. Software for the unit includes support for a built-in pointer. The \$395 apparatus weighs, approximately, a hefty ten ounces including batteries.

Handycalc Provides Specialized Calculators Under Windows

DORION, QUEBEC, CANADA, 1989 FEB 10 (NB) — Dexotek Canada Corp. has announced HandyCalc, a set of specialized calculators to run under Microsoft Windows. The C\$249.99 package also includes a calculator editor, so users can design their own specialized calculators. The supplied calculators are designed for scientific,

engineering, business and financial uses, among others. Each has a printable audit trail and up to 1,000 memory locations. Some permit multiple conversions from one unit of measure to another. The software requires 80K bytes of free memory, works with Windows Version 2.0 or higher, and is scheduled to ship in April.

OS/2 Presentation Manager Version Of Wordperfect Scheduled

MUNICH, WEST GERMANY, 1989 FEB 17 (NB) — Wordperfect Corporation has announced it is working on an OS/2 Presentation Manager version of Word Perfect 5.0, its best-selling word processing program.

Costing DM 1,800 (about \$1,000), the program will support System Application Architecture [SAA] menuing and facilities, as well as complete mouse support.

The package, which is scheduled for release

next month, is currently under the final stages of development at Wordperfect Corporation's US headquarters in Salt Lake City, Utah.

LANS

BICC Networks Announces Speed-Breaking Isolink Ethernet PC Cards

HEMEL HEMPSTEAD, ENGLAND, 1989 JAN 27 (NB) — BICC Data Networks has announced two Ethernet cards for the IBM PC-AT and PS/2-MCA and compatible PCs that break the one megabyte per second speed barrier. The Isolink AT and MCA cards, which retail [respectively] for UKP395 and UKP475, support a 16-bit architecture. According to BICC, the cards support a single station throughput of 527Kb/second and a file server throughput of 1060Kb/second under

Novell Netware software. Ian Scott, BICC's product marketing manager, reckons that the cards are the fastest on the market today. "They represent a major step forward for the professional workstation user, re-affirming our commitment to OSI standards," he said.

Novell Bundles Desqview With Netware

SALT LAKE CITY, UTAH, U.S.A., 1989 FEB 10 (NB) — Novell has begun to bundle free copies of the highly-acclaimed Desqview multitasking package with each copy of its Netware networking interconnectivity software package sold.

Desqview, which supports multitasking functions similar to Microsoft's Windows, has been digging into Microsoft's turf. James Bills, Novell's Executive Vice President is keen on the package. "Desqview is expected to fill the needs of our users. We offer multiuser environments, whilst DesqView offers multitasking," he said.

Biggest Connectivity Demonstration Slated

SANTA CLARA, CALIFORNIA, U.S.A., 1989 FEB 4 (NB) — The world's largest demonstration of applied networking among disparate systems is slated to take place at Connectathon '89, a round-the-clock connectivity marathon that tests interoperability among various implementations of the Open Network Computer/Network File System, NeWS and X11. NeWS and X11 are windowing technologies from Sun Microsystems and the Massachusetts Institute of Technology.

Connectathon '89, scheduled for February 13-17 at the Santa Clara Techmart, will feature IBM, DEC, Hewlett-Packard, Sun, Apple, and Cray all trying to achieve complete interoperability among all vendors. Well in excess of 2,000 connections is scheduled to occur.

The keynote address, by Mark Stahlman, senior research analyst with investment research firm Sanford C. Bernstein & Co., will discuss network computing on February 14 at 11 a.m. The event is open to exhibitors, customers, press, and industry analysts.

Wireless LAN May Be In Near Future

PRINCETON, NEW JERSEY, U.S.A., 1989 FEB 9 (NB) — The Hillier Group, of Princeton, N.J., has prototypes available of a wireless transceiver that could eventually eliminate cables from local area networks [LANs].

The firm has a new technology, called Spredex, that sends signals across a wider band than typical remote controls, and the company claims its innovation makes the product resistant to interference.

Though it is not yet in production, the plans are to license the technology for about \$10,000, allowing the wireless LAN to become if not a reality, than at least a possibility.

LAPTOPS

OS/2 Available For '386 Laptop Computer

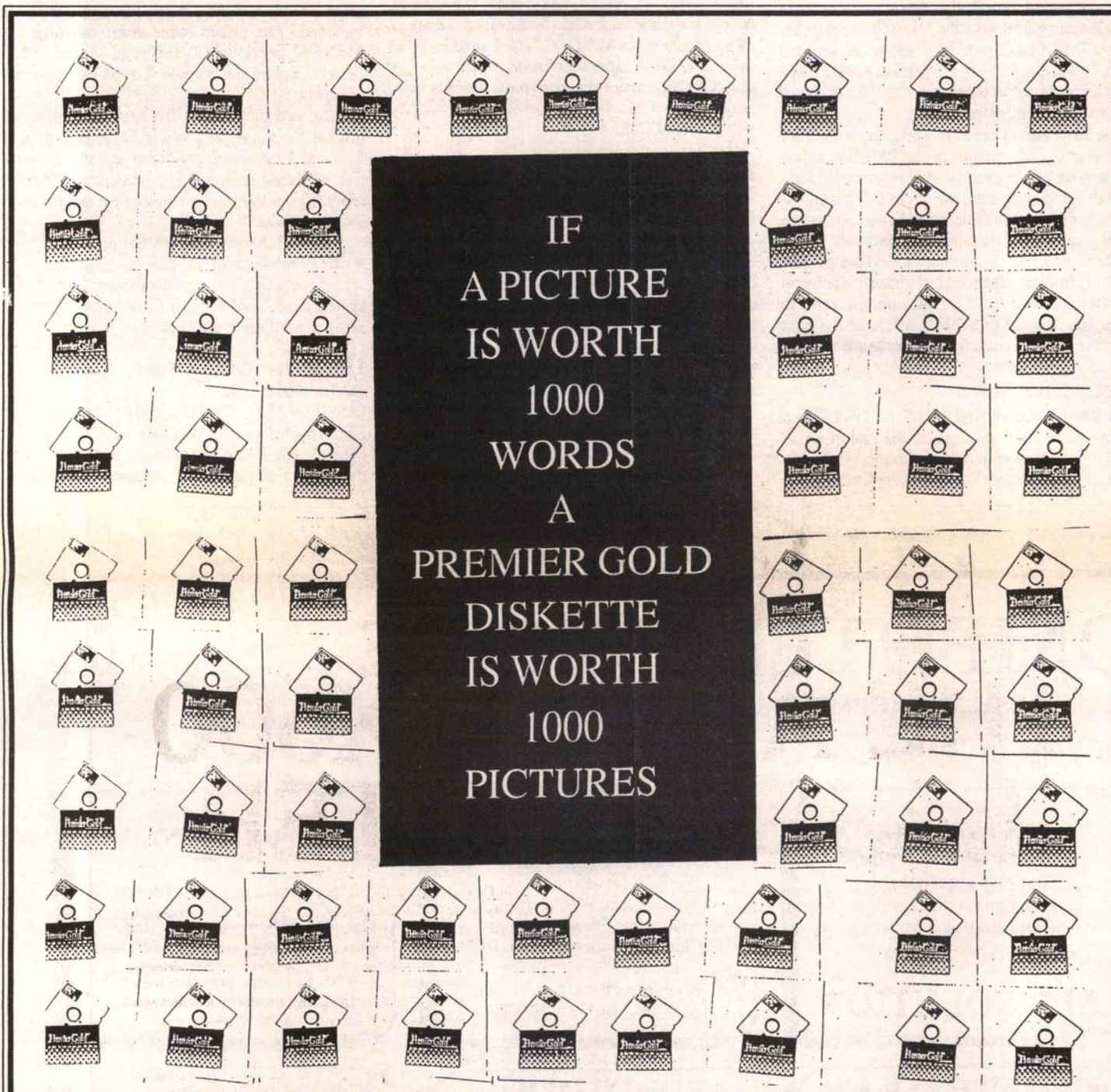
IRVINE, CALIFORNIA, U.S.A., 1989 JAN 23 (NB) — Toshiba America now offers Microsoft OS/2 version 1.0 for its T5100 PC-compatible laptop computer. The \$325 multitasking operating system allows the T5100 to run more than one application program simultaneously.

The 14.6-pound portable computer in shipped with 2 MB and a copy of MS DOS 3.3. Practical operation of multiple programs written for the operating system may require four or more megabytes in typical applications. OS/2 supports up to sixteen MB [megabytes] of linear user memory.

Hitachi Beats The Competition; Releases Colour Laptop

MUNICH, WEST GERMANY, 1989 FEB 10 (NB) — Hitachi is expected to leap-frog ahead of the competition with the release of the HC400, an 80286 microprocessor-based laptop with a colour liquid crystal display [LCD] screen.

The new machine, which bears a passing resemblance to the Toshiba 3100, hums along at 12MHz and features a six-inch colour LCD display with CGA graphics capability. The machine will ship shortly in West Germany at DM9000 [\$5,500],



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and is expected to be shown at next month's Hanover Computer Faire.

Portable Computer Show Announced For May

FRAMINGHAM, MASSACHUSETTS, U.S.A. 1989 FEB 16 (NB) — Portable Computing '89, the only show focused on portable and laptop computers, will be held May 31-June 1 at the Santa Clara Marriott, according to the IDG Conference Management Group.

The show will be sponsored by Portable Computer Review, Traveling Software Inc., and Hajar Associates. An additional East Coast show is scheduled for September 27-28 at the New York Marriott Marquis.

New Input Device Could Replace Mouse

WOBURN, MASSACHUSETTS, U.S.A., 1989 FEB 17 (NB) — Help may be on the way for all those naysayers who never felt comfortable with the mouse. A new product from MicroTouch Systems, called Touche, duplicates the functions of the mouse while eliminating separate cables and the need for extra desktop space. The product is a one-inch by two-inch rectangle that can be located on a keyboard. The cursor is positioned by moving a finger along the touch-sensitive glass surface, and then pressing on the product to duplicate the functions of the mouse button.

According to the company, the product will begin shipping in June or July, and will be incorporated in at least one laptop computer in the near future.

IBM Expected To Announce Laptop At Hanover Next Month

FRANKFURT, WEST GERMANY, 1989 FEB 01 (NB) — IBM is said to be readying a high-end laptop for release at the Hanover CeBit Fair next month. Sources suggest that machine - dubbed the PS/2 Model 90 - will include an 80386 microprocessor running at 20MHz and feature a 170Mb hard disk.

Unusually for a laptop, the Model 90 will feature Micro Channel Architecture [MCA] and a VGA-compatible screen. The technology used in the screen has not been revealed, but Newsbytes' sources suggest that a colour screen is a strong possibility.

Recent discussions by Newsbytes with several Japanese companies have revealed that full-size colour LCD screen technology could be available to IBM by the third or fourth quarter of this year. Production quantities of such screens are, however, at least one year off, said one source.

The same source - who wishes to remain anonymous - suggested that IBM may release the Model 90 laptop with a monochrome VGA option at Hanover, with a colour version following on next year. Another option, although less likely, is that IBM may opt for flat-screen video technology. Either way, the colour screen option is likely to prove highly expensive.

The CeBit Hanover fair runs March 8 to 15, 1989.

TRENDS & TECHNOLOGY

Smart Interpretation Machine May Help Japanese Overseas Travelers

TOKYO, JAPAN, 1989 JAN 19 (NB) — Matsushita Electric Industries has developed a prototype Japanese-English interpretation unit with the cooperation of Carnegie Mellon University, Pennsylvania. When a native Japanese speaks Japanese sentences to the machine, it will in turn understand and translate the message into English; afterwards translated English messages are conveyed aloud through the attached speaker as if by a native English speaker. The smart unit recognizes every human voice, regardless of sex, and there is no need to speak messages paragraph by paragraph to it. The prototype model consists of a voice recognition unit, a voice synthesis unit, and Matsushita's general-purpose workstation Sun 3. The firm says the word recognition rate is a staggering 80-percent, which is expected to be upgraded to 90-percent, if precise Japanese sentences are spoken to it, Matsushita has asserted.

Newsbytes watched the translated scene on a television and found that the machine was not able to translate ambiguous Japanese sentences into English, such as Atama Ga Warui, which literally means "my head is bad" in Japanese, but which must be translated into "I am stupid, dumb, dull," etc. Regarding untranslatable sentences, the machine responded with "Pardon?" on the screen and through the speaker. Matsushita boasts that a portable translation machine could be available in four or five years.

Visual Computer To Appear In Five Years?

TOKYO, JAPAN, 1989 JAN 24 (NB) — Japan System has launched a project to realize a visual data processing computer in cooperation with a group at the University of Tokyo represented by professor Toshiyuki Kunii. According to the report conveyed by Nikkei newspaper, the so-called

Visual Computer could easily input, process, and output visual information in a manner that mimics human eyes. For instance, the computer would visualize three-dimensional space or objects, synthesize the design or images based on the visual data, and then output picture information. The researchers expect to apply the technology in the fields of robotics, medicine, and education. The project is scheduled to be complete by 1994 and a product could possibly be on the market by 1999.

Cebus On A Chip From Canadian Company

VICTORIA, BRITISH COLUMBIA, CANADA, 1989 JAN 27 (NB) — AISI Research Corp. is the first to put the proposed CEBus home automation standard on a chip. The company has introduced Spirit, a single-chip implementation of the Consumer Electronics Bus standard it helped to de-

velop. CEBus is a standard for signalling among household appliances over ordinary power lines. It is designed to let appliances interact and be controlled by computers. The Spirit chip will sell for about five dollars.

Power Glove Replaces Joystick For Computer Games

HAWTHORNE, CALIFORNIA, U.S.A., 1989 JAN (NB) — Mattel has adopted the technology from a sophisticated \$9,000 input device and introduced an inexpensive version for playing computer games. The Power Glove is similar to the DataGlove used in robotics, simulation and CAD/CAM applications and should become available, for under \$100, in two sizes, this fall.

Power Glove will be sold for use with all Nintendo joystick-directed games. The glove plugs into the Nintendo Entertainment System and replaces the joystick. For example the action of a

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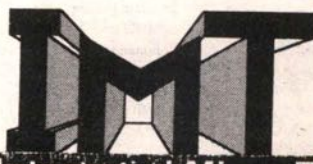
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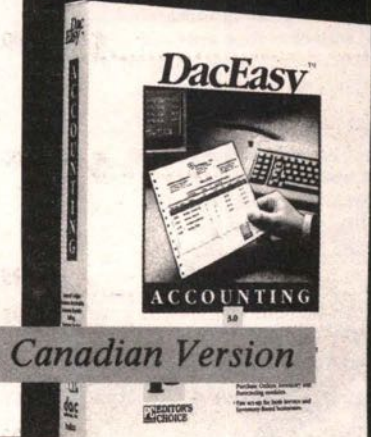
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clenched glove is used to direct blows in Mike Tyson's Punch Out. In Rad Racer the glove translates hand motion into steering-wheel movement in the program. Braking is initiated by pushing forward with an open hand.

Included with the glove is a keypad which contains a computer controller for the device. It allows the player to customize the glove's output for various games by entering an identification code. It is also possible to change playing speed or customize gestures and hand movements using the keypad.

In addition to existing Nintendo joystick games, Mattel is developing a series dedicated to the glove which will take full advantage of its capabilities. The first, titled Bad Street Brawler is scheduled for a fall introduction.

25 Megabytes On A Single 3.5-Inch Floppy

ROY, UTAH, U.S.A., 1989 JAN 31 (NB) — Iomega Corp. and Insite Peripherals of Santa Clara, California, have signed an agreement giving Iomega the right to use Insite's Floptical data-recording technology. The nonexclusive agreement gives Iomega an option to manufacture and sell products developed by Insite after an initial period of evaluation. It further specifies that Iomega will have the right to use Floptical technology with its own proprietary Bernoulli Technology.

Disk drive products using Floptical technology blend Insite's proprietary optical and magnetic recording technologies to provide 25 megabytes [20.8 megabytes formatted] of removable disk storage in a standard 3.5-inch microdiskette. The unit uses existing floppy disk drive technology and hardware to maintain the low cost of floppy technology. Insite is working to make the same drive work with standard 3.5-inch microdiskettes at 720Kbyte and 1.44 megabyte densities.

Track density of media in a Floptical drive is up to more than twice that found in drives by Bernoulli and Konica; it's more than three times as dense as Kodak's 10 Mbyte floppies. Bit densities are also somewhat higher.

486 Chip Launch In April - Earlier Than Many Expected

SYDNEY, AUSTRALIA, 1989 FEB 17 (NB) — The 80486 chip is to be released in April, according to sources close to Intel who told Newsbytes to 'keep the date free'. Previously not expected till late this year, the chip is already being field tested in various prototype PCs from companies such as Compaq and IBM. Analysts told Newsbytes that the 486 can be thought of as a 386 with a number of the associated chips taken on-board to dramatically reduce the component count and size of mother board in PCs using the new processor.

The chips will be used as the next generation of 'power' machines. The maximum clock speed of the 486 is likely to be higher than production 386s - partly due to the higher degree of integration.

In the meantime, 33MHz 386 machines are expected from Compaq and IBM within the next few weeks. Both of these machines have bus improvements which will further boost effective performance. Bill Gates' prediction that PCs will increase in speed by ten times over the next few years [due to software as well as hardware improvements] seems a safe bet.

TELECOMMUNICATIONS & FAX

Fax Mailboxes Without A Fax

SANTA CLARA, CALIFORNIA, U.S.A., 1989 JAN 23 (NB) — On the road and need those faxes fast? PayFAX Mailbox service has the fax for you. The firm has just started a new service that will allow a subscriber to dial a local number, and have the day's facsimile messages sent on the spot to a publicly-accessed PayFAX terminal. The mailbox service carries a \$60 annual fee and a \$1 per page charge upon delivery. There are more than 1,000 PayFAX Public Communications Centers being installed throughout the U.S. They serve as gateways to corporate networks and electronic mail services including Dialcom, Western Union Easylink, Dow Jones News and Retrieval, and MCI Mail. Headquartered in Santa Clara, the company projects growth to 30,000 centers handling more than 600,000/day by 1993.

Color Fax Machine Debuts

CAMPBELL, CALIFORNIA, U.S.A., 1989 JAN 30 (NB) — The world's first color fax machine has been introduced by a small start-up firm StarSignal, Inc. The Colorfax system, aimed at desktop publishers, graphic artists, and anyone else who needs to see documents instantly in 256,000 color combinations, will ship in March at a cost of \$20,000 per unit. But, Michael Widergren, assistant marketing manager told Newsbytes, that's a bargain. Considering the unit consists of a color scanner, color printer, and color copier, "its nearest competitor, a color copier made by Canon, costs three times more — \$75,000!" As well as pricey, however, the color facsimile unit is big — about the size of a washing machine. The color fax machine transmits a color copy at 19,200 bits per second, scans up to 300 dots per inch [dpi] but prints out at 240 dpi, and transmits a picture in four to five minutes. Widergren says his firm has no plan to license the technology, there is no competition on the market at this time, and that the company is working to integrate various types of printers to work with the Colorfax system.

Chevron Corporation and Lockheed are among the firm's first customers, expecting delivery shortly.

Desktop Cd-Rom Production The Newest Frontier

Los Gatos, California, U.S.A., 1989 Feb 3 (NB) — People who want to create their own CD-ROM disks can now do so on a desktop workstation attached to a PC. Optical Media International has unveiled the TOPIX Spectrum, a \$150,000 CD-ROM factory consisting of a PC/AT-compatible computer, a 1.52 gigabyte hard drive, a nine-track tape drive, proprietary CD encoding board, a digital audio interface, system software, and the Yamaha PDS compact disk recorder, which can record data to blank CDs in either in CD-Audio, CD-ROM or CD-I format. "We're the only ones that can deliver a complete system," Optical Media Chief Executive Officer Allen Adkins told Newsbytes.

Normally, a CD-ROM publisher had to prepare an intermediate master tape and then send it to a CD factory for standard pressing. The pressing process is expensive, costing as much as \$1,000 for factory set-up and low-quantity disk replication. With the TOPIX system, "a user can easily prepare their CD and then record CDs immediately, right on the desktop, in a matter of minutes at a cost less than \$100," says Adkins.

The TOPIX system is slated to ship in March. Each disk it creates can run on any microcomputer equipped with a CD-ROM drive, and will store 530 megabytes of data. Optical Media expects to have a European distributor soon.

Fax Card Prices Falling Fast

NORCROSS, GEORGIA, U.S.A., 1989 FEB 9 (NB) — With Quadram dropping the price of its internal JT Fax card to \$295, and companies in U.S. and the Far East rolling out fax switches at \$150-200, it seems computer users will be able to get full fax service for \$5-600 per PC by the end of the year. The JT-Fax 4800 modem is just as fast as those in dedicated machines selling for well over \$1,000, and with an automatic fax switch, programmed to turn the computer on when needed, you no longer need to miss a fax when you're asleep or out. With the internal card, you'll also have all the software tricks Japanese fax machine makers force you to pay extra for — like broadcasting, automatic re-dial, and the ability to log and preview calls. As junk fax proliferates this will also keep PC fax users from wasting paper — preview the incoming messages and dump the garbage before it sees the light of day.

Lower prices also mean it's possible to network fax within a computer network and turn a direct-mail operation into a junk-fax operation. So Quadram is also shipping a developers' toolkit for the 9600 baud product. 9600 baud fax cards sell for about \$700 range.

Multifunction Fax Machine From NEC

TOKYO, JAPAN, 1989 JAN 27 (NB) — NEC has begun marketing a multifunction facsimile machine, NEFAX SIGMA 5000. When connected with a personal computer, the machine will be a printer which prints out two sheets of A4 size paper per second and can also double as a data receiver

for PCs in a remote area. Also, it performs as an image scanner for a PC. Insert documents, pictures or drawings, and it will read the data into a computer. The price of this multifunction fax machine is 997,000 yen or \$7,670.

Teleglobe Canada Lowers International Fax Rates

MONTREAL, QUEBEC, CANADA, 1989 JAN 27 (NB) — Teleglobe Canada Inc. has reduced rates for Globefax, its store-and-forward facsimile service, by an average of 22 percent. For some destinations, reductions are as much as 35 percent. The rates took effect January 1. Teleglobe has also introduced new discount Globefax rates for deferred delivery in off-peak hours to 44 countries, including Hong Kong, India, Switzerland and New Zealand.

New IRD Studies Show The Online Future Is Fax And Audiotex

NEW CANAAN, CONNECTICUT, U.S.A., 1989 FEB 7 (NB) — The saturation of the fax market is nowhere in sight, according to a recent study by International Resources Development. It says three million machines will be installed in the U.S. by the end of this year, and 30 million will be installed by the mid-1990s. Distinctions between computers with fax capability and programmable fax machines will also erode, especially as the Group IV standard, which allows for color, more detail, and faster transmissions, becomes accepted. By the end of the century, they'll either be a Group 6 standard, the report says, or you won't be able to tell the difference between fax and online.

Another report predicts the combined voice mail-audiotex market, now worth \$1 billion, will grow to \$5 billion by 1993, driven by the Regional Bell Operating Companies. MCI and the RBOCs will also become stronger players in the audiotex market, which could mature with more offerings in financial services. As parts of the market become saturated, you can also expect providers to compete on price, something they don't do now.

BBS, Public Domain Software Movements Hurt First By Viruses

ALAMOGORDO, NEW MEXICO, U.S.A., 1989 FEB 9 (NB) — John Williams follows hacker boards and computer viruses, publishing his findings as diskette-based special reports under the name Computer Freaking. The disks contain known viruses, antidotes, and the latest in hacker mischief, as gleaned by Williams from hours and hours online.

Continuing reports of computer viruses are destroying both the BBS and public domain software movements, he says. Corporate PC managers are going beyond "regular sweeps for viruses, Trojan horses, and logic bombs" with products like Flu Shot Plus, from Software Concepts Design of New York City, Williams told Newsbytes. He said most companies are now forbidding the use of public domain or shareware on their systems, particularly if it's downloaded from a BBS. "One BBS reported that 15 percent of the software uploaded to him was infected or had major bugs," Williams said, so caution is justified.

"A lot of people don't trust any software from BBSs," Williams continued. "They've lost a lot of business. People are using the boards for e-mail now instead of exchanging shareware and public domain programs." He added darkly, "There's some suspicion some viruses might be written secretly by major software houses to discredit the competition. Most of the software that's infected is public domain and shareware. There's no quicker way to eliminate the competition than to scare people away from their products." Hacker boards are being put out of business regularly, he adds, and of the 30-40 he knew of a year ago, all but 1-2 of them are now down. "It's a chase game with law enforcement," he concludes, but, no, "Running a hacker BBS shouldn't be a crime."

Canada Remote Systems Moving

TORONTO, ONTARIO, CANADA, 1989 FEB 10 (NB) — Canada Remote Systems, a bulletin board system that started in a spare bedroom in 1981, will move in mid-March to new 4,000-square-foot headquarters with a custom-designed computer room. The new headquarters in Mississauga, Ontario — just west of Toronto — will also

include a combination showroom and seminar room and shipping facilities. Canada Remote now has more than 60 computers and 70 phone lines. Telephone numbers will be changing, and the BBS will be shut down most of the day on March 17.

Prodigy Opens In Boston

WHITE PLAINS, NEW YORK, U.S.A., 1989 FEB 16 (NB) — Prodigy has added Boston to its list of served markets, telling the city it's added experts from such WGBH-TV shows as This Old House, Last Chance Garage, Victory Garden, and Nova to its list of offerings. But "They've been with us since the start," spokesman Brian Ek told Newsbytes "We only put those in there because it was of local interest." Prodigy now serves Northern California, Southeastern Michigan, Northern Georgia and most of New England. It plans to be available nationwide in the next two years.

Also, the Bank of New England agreed to sell home banking services through Prodigy later this spring. Bill payment, funds transfers, and loan applications will all be offered. This will set up an interesting competition with banks which have previously signed up with Prodigy, like C&S in Atlanta, Georgia. "I know C&S has some California customers. The boundaries with something like electronic banking are quite gray," Ek said.

"The only strictly local applications are grocery applications," Ek continued. "You can look at the San Francisco grocer anytime, but they'd check your zip code. If you were to type Kroger, anywhere, you'd get Kroger," which only delivers to certain parts of Atlanta. "It checks to see if you're in the delivery area, and it gives you a map first." The same screen and software which denies delivery to a southside Atlanta resident keeps out San Francisco shoppers.

Compuserve Re-Selling Encryption Products For Its Network

CRANSTON, RHODE ISLAND, U.S.A., 1989 FEB 10 (NB) — CompuServe will re-sell encryption equipment from Cryptall L.P., with the hope the CompuServe Network can siphon off some of the bank transactions business. Instead of letting customers with big accounts check into their money through leased lines, encryption would let CompuServe charge packet network prices for the service.

UNIX

Everex Leaps Into Unix Market

FREMONT, CALIFORNIA, U.S.A., 1989 JAN 26 (NB) — Everex Systems will come out with a line of high performance Unix workstations in the second quarter of this year, thanks to an agreement it just inked with Opus Systems of Cupertino, California. Opus makes Unix systems and has over 9,000 installations of its Personal Mainframe line of products worldwide. Opus sees the Everex alliance as a ticket to wider distribution. "Everex's extensive distribution network opens new doors for our technology. This alliance promises a long and fruitful relationship," says Opus Systems President Gene Rosen. Until now, Everex has sold only IBM-compatible personal computers and storage devices. (Wendy Woods/19890127)

Can X/Open Be The Unix Messiah?

TOKYO, JAPAN, 1989 JAN 25 (NB) — The president of the X/Open, Geoff Morris, visited Tokyo on 23 January and announced plans to establish a Tokyo office by the end of January. Fujitsu will be the Japanese leader of X/Open because Mikio Tanaka, an assistant manager in research and planning at Fujitsu, has been appointed the head officer of the Tokyo office. Hitachi and NEC have missed a chance to take leadership even though they formally put their name on the list of X/Open on 25 January. X/Open will call for Japanese makers, software houses, and users, through its Japan office, to join the group and introduce its Common Application Environment. Also, it plans to publish the latest issue of specifications, the Portability Guide 3, in Japanese within this year. (Naoyuki Yazawa/19890126)

Continued on Page 53

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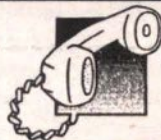
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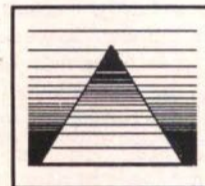
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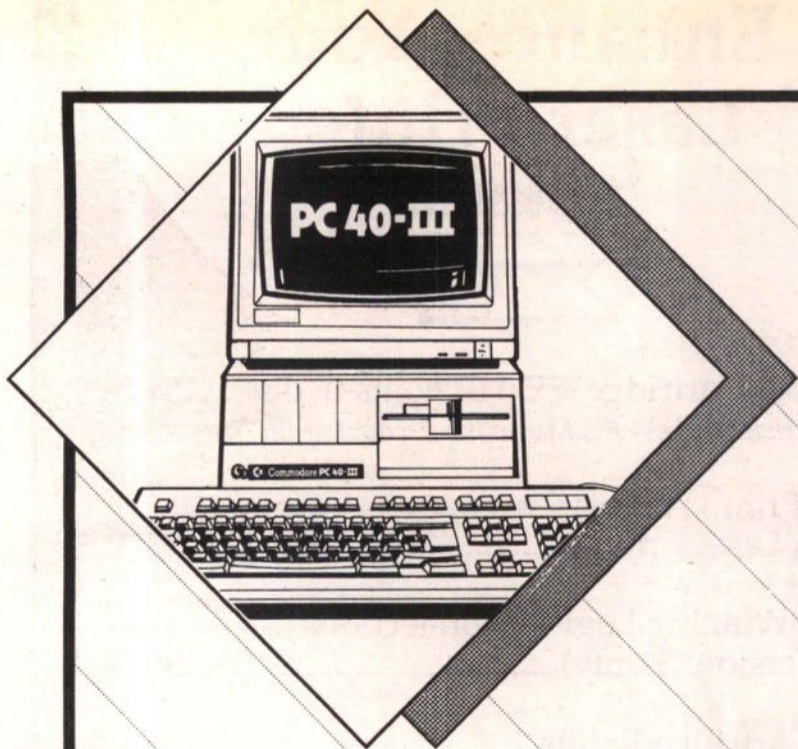
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Buying A Clone

Seven Common Mistakes

What are the seven most common mistakes people make buying XT and AT clone computers?

1. Buying a "compatible" machine that is not compatible.
2. Buying poor quality hardware.
3. Buying hardware first then finding out the software needed will not work with the hardware.
4. Buying from a retailer who knows almost nothing about computers.
5. Buying hardware more expensive than needed.
6. Forgetting to include the "optional" extras.
7. Attempting to set up the machine without expert help.

1. Compatible Machines That Aren't

IBM once sold two computers models, the XT and AT. Thousands of manufacturers cloned their own versions. The clones could not be too exact or IBM might sue. The larger companies like Wang, Tandy, AT&T, Xerox, Zenith, Olivetti, Compaq and Leading Edge designed in sufficient differences between their machines and IBM's to keep the corporate lawyers happy.

We have a seeming paradox. The larger and more respectable the manufacturer the more likely you are to have trouble with their machines because of incompatibilities with IBM.

However, even the Taiwanese and Korean clones have compatibility problems too.

What's So Bad About Incompatibility?

Programmers design for the IBM XT and AT. Programs work poorly or not at all on incompatible machines. Granted, there are programs that will run even on the most incompatible machines.

I could list the clones I have found compatible and incompatible, but I will not. Besides offending nearly every advertiser, such a list would be inaccurate. Manufacturers are constantly making minor changes to their models without telling anyone. These innocent changes often affect the degree of compatibility both positively and negatively.

For example, a client once bought twelve identical AT clones with matching printers all on one day, yet they had slightly different components and ROMs. You have to test the compatibility of the precise machine you plan to buy.

Canaries

How do you tell if a machine is compatible? In the old days, you took a canary down into a mine to detect lethal gas. What you need is a set of computerized "canaries" to detect incompatibilities.

Canaries are delicate programs, often so fussy you might not want to use them for daily work. Here are the canaries I use to rapidly flush out the incompatibilities:

IBM Advanced Diagnostics

This program will complain about any clone that does not have the letters "IBM" illegally burned into the BIOS, but it will also perform other useful tests.

Most important is the video test. Run it on a true IBM AT first to see how the test results should look. This test fingers incompatible monochrome graphics adapters (Hercules clone cards).

Alternatively, if you are fond of puns, you can use Microsoft's Flight Simulator as your video testing canary.

FastBack as a Canary

Use the older FastBack 5.14, not the newer, more robust FastBack Plus. Backup one directory to a virgin (unformatted) diskette, then use the Fastback Restore to read it back to hard disk. Bad clones will freeze up. This will reveal incompatible diskette controllers and bad DMA chips. Some models of Chinon diskette drives will fail this test.

SpinRite as a Canary

Use Gibson SpinRite 1.2B to re-interleave the all partitions of the hard disk. There is no need to let it run a long time. SpinRite will simply complain when you run it on an incompatible clone. It

will scramble the hard disk if you run it on a grossly incompatible clone. This test will uncover non-standard hard disk controllers.

Superkey as a Canary

Install Borland Superkey 1.16a. Hold down Alt-LeftShift, and tap out 1 3 0 on the numeric keypad. You should see an Ç (e acute accent) on your screen. This test will expose incompatible keyboard BIOSes. Hold down Alt-/ then tap the

Esc key. If your screen turns to snow you have collared an incompatible monochrome graphics adapter board. Be especially thorough testing monochrome adapter boards bearing the letters "MGP".

Test a program such as the public domain Abundance mailing database which supports Ctrl-Break. With Superkey, some incompatible AT BIOSes will generate a spray of random keystrokes when you hit Ctrl-Break.

Test a text editor such as Norton NE that changes the shape of the cursor. Make sure the cursor changes shape in the expected way. Some models of Compaq and Olivetti have troubles here. Fancy schizophrenic video cards that pretend to be various other types of video card often have trouble passing this test.

Diskette Compatibility Tests

Take along a few yellow diskettes. Format them and copy a few files back and forth to hard disk. This

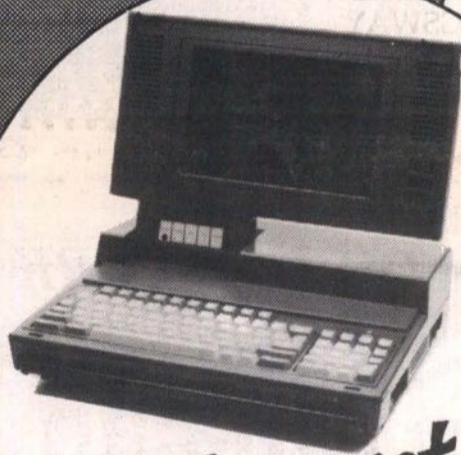
will blow the whistle on diskette drives that because they use optical sensors, do not work with semi-translucent media. This compatibility is important because software is often distributed on coloured diskettes. Some models of Toshiba drives will fail this test.

Open the computer case and repeat the test with black diskettes in a well lighted room. Some models of CDC drives will fail this test.

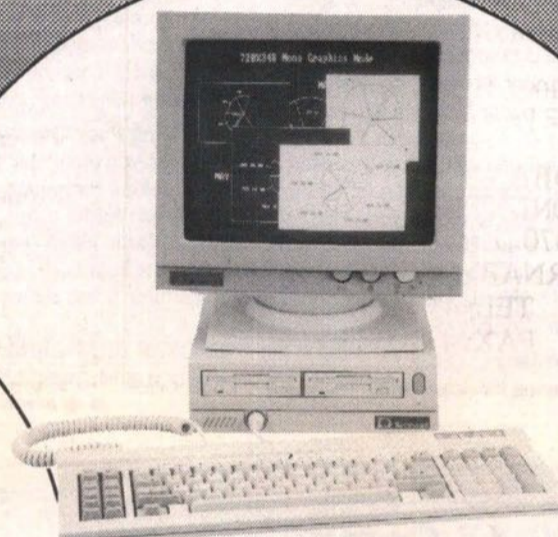
If you buy an AT, make sure it can exchange diskettes reliably with XT computers. To test, format an XT style 360KB diskette on the AT with: \DOS\Format a:/4

Then copy at least 360 thousand bytes of AT files to the floppy, and see if you can read them on an XT. It is amazing how many drives will fail this test. I have best success with Teac and Panasonic brand drives.

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The basic unit comes with 1 megabyte of memory standard, clock and calendar, two RS 232C serial ports, one parallel port and two expansion slots. The computer allows you to customize your system with optional external monitors, keyboards math coprocessor chips or disk drives.

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TRADEMARKS: Superset, IBM, PC/XT/AT

Superset 100

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Hard Disk Compatibility Tests

Even though some RLL hard disk controllers are reliable, it is safest to avoid RLL, ARLL or ERL disk controllers. MFM controllers are tried and true and are less likely to give compatibility problems.

Run CHKDSK on each disk partition C: D: etc. Total up the space to ensure you can access all the hard disk you paid for.

Make sure all hard disk partitions are formatted in the standard way with DOS 3.3. They should not need special drivers in CONFIG.SYS to make them work. Disk testing and defragmenting software may have compatibility problems otherwise.

Clock Battery Trouble

Clock battery trouble, strictly speaking, is not a compatibility issue, but it is something you should test while you are checking compatibility. Turn the AT power off for a half hour, then turn it back on. Check if DOS has forgotten the date and time. This is a difficult problem to test for, since you sometimes have to leave the machine off for 72 hours or more for the problem to show up. This is the number one hardware problem with Vancouver's AT clones.

Perform the same tests on an XT. If it fails, usually the problem is the retailer has supplied you with the wrong clock software. I have collected 36 different clock setting programs. Some people collect antique clocks, I collect clock software.

Compatibility Summary

All clones sold are "IBM compatible" to some extent. For all practical purposes the phrase is meaningless. Do not take the salesman's word for it, test the compatibility yourself on the very machine you will be buying. It makes no sense to test the compatibility of a computer in the shop then take home another one that's slightly different. As long as you do not waste the retailer's time, usually he will allow you to test to your heart's content as long as you want. Besides the canaries, make sure you also test all the other software you plan to use: e.g. MS Word, VP Planner Plus, Procomm, QDOS and Zoomit.

2. Poor Quality Hardware

There is an old saying "You get what you pay

for." If you shop solely on price you will be sorry. Poor quality hardware will frustrate you no end with flaky operation. By Murphy's law, it will work perfectly only when you take it back to the shop for servicing. You will pull your hair out in frustration trying to resolve problems with erratic hardware.

Recognizing Good Quality

How can you recognize good quality? First, have a look at a real IBM AT computer. Feel the keyboard, the sensuous resistance. IBM makes the Stradivarius of keyboards.

Look at the chips inside a well-made brand-name computer such as the Compaq or NEC. The chips are small and low profile with many fine wires attaching them to the surface. The monochrome graphics adapter is only four inches long with only a few chips. The solder traces are beautifully clean and even.

The ROM BIOS chip is prominent with an opulent hologram sticker on it letting you know it is a legitimate Phoenix or Award BIOS.

Appreciate the sturdy, well milled mounting brackets. Shiny big hexagonal mounting screws hold the boards securely in place. Wiggle the components—hard drive, floppy etc. to learn how securely they are supposed to be mounted.

Inside you will see famous brand names on all the boards and components—Adaptec, Chips and Technologies, Intel, NEC, Omti, Panasonic, Quadram, Teac, Texas Instruments, Toshiba, Western Digital, etc.

Make sure the power is off and pull out a card and examine its metallic fingers that fit into the motherboard. They are shiny with a generous coating of gold plating.

Recognizing Poor Quality

How can you recognize poor quality? Find the tinniest looking computer in the most disreputable shop you can find.

Black plastic chips (bearing no brand names) populate the boards. These are seconds the chip manufacturer is too ashamed to imprint with his logo.

The ROM BIOS chip has a piece of sticky plain tape over it advertising it is as a pirate copy. The

power supply does not state its size, e.g. 150 watts.

The monochrome graphics adapter is a full size card covered with thick black chips with thick legs. The solder traces look fuzzy, wavy and generally sloppy. There might be little jumper wires criss-crossing the boards. The engineer who designed the boards made errors and had to patch them up afterward with the wires.

The spare mounting brackets are flimsy with burrs. Wood screws (tiny conical mounting screws) hold the boards and components in place rather than proper nuts and bolts.

The keyboard feels dead and the keys rattle. By wiggling the keyboard cord a bit, you could easily break off the keyboard connector, because it is so poorly mounted.

Pull out a card and examine its metallic fingers. They will be dull, lightly pitted and dirty looking.

Even machines that look fine can give you grief: for example, early IBM ATs had hard disk troubles.

Quality Summary

Insist on looking "under the hood." Even if you know nothing about electronics, you can successfully judge quality. Look for at least a one-year guarantee—parts and labour, backed by a well known company. Long guarantees show the manufacturer has confidence in his product. Join the Vancouver PC Users Society and ask other members how they like the quality of the clones they bought.

3. Error: Buying Hardware First

Fools buy a computer first, then decide what they want to do with it, then go out to buy software.

Sages decide what they want to do with the computer first, then buy the software, then buy the hardware.

This advice applies most poignantly to word processors and printers.

Why Should You Buy Software First?

I wish I had a dollar for every phone call I received that went something like this:

"I bought the X word processor, and it won't work with my Y printer. When I bought the printer, the man said my printer was Epson compatible and thus it would work with any software,

including custom programs. What do I do now?"

I tell the client:

"I would charge you \$250 to write you an MS-Word printer driver and I might also charge another \$250 to write you a driver for an Abundance database program. Your printer would then work properly with those two programs, but nothing else. Or you could just experiment with different pre-written drivers till you find one that almost works."

Sometimes I have to tell him his printer will never fully strut its stuff the way it did during the computer store demo because there are no software hooks to exploit his printer's cleverness. He usually feels betrayed and angry. After all, the printer only cost \$400! Why should he spend another \$500 to make it work?

Why So Many Printers and Word Processors are Incompatible

Why is this? Epson makes at least 30 models of printer, all different. The models have some commonality in their commands. Any printer that uses some of the common set of commands calls itself "Epson compatible". This minor degree of compatibility is worthless when it comes to something as complex as a Microsoft Word printer driver.

There are only a handful of decent word processors, and hundreds of decent printers. Each word processor works properly on only a few dozen printers. Therefore you must buy your word processor first, then test drive the printer with it. Don't just print a page of plain text. Print a test document such as the public domain CAST.DOC too ensure you can access all the font sizes and type styles your printer claims to support.

Make Sure Your Hardware is Fast Enough

Programs like Aldus PageMaker and Microsoft Windows will run on almost any hardware. However, they run so slowly on most computers they are almost unusable. If you buy such packages, you must test drive them on your hardware to ensure they will run at a reasonable speed. Don't just do a few cursory keystrokes; do some real life work.

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a crude way to compare the speeds of two machines.

Summary: Buy Your Software First

Buy software first, then hardware. This rule also applies to graphics packages, accounting software and desktop publishing programs. Besides printers, video displays will only work with some programs. You must choose your software before you choose MDA, CGA, Hercules, Hercules Plus, EGA, VGA, PGA or any of the new high performance video cards.

Before you buy hardware, test the software you will be using on that hardware. Please note the word "test" in the previous sentence. Do not just ask the salesman. Do not just read the box the software comes in. Test the software on the hardware before you buy. It is easy to substitute hardware, but very difficult to find alternative software.

I hope I am stating the obvious, but it is also quite ok to choose your software, then test the hardware and software together, then buy the hardware and software all at the same time. Buying the software first simply makes it easier to perform all the tests.

4. Ignorant Retailers

There are retailers in this city who know next to nothing about computers. These people lie to you so convincingly because they do not even know they are lying. Fortunately, the most incompetent retailers go out of business within a couple of years. However, that may leave their customers holding worthless warranties.

How can you tell if your retailer knows what he is doing? First, he will have no reticence about taking the covers off the computer to show you its innards. Ask him to show you the CPU chip, the disk controller card, the video controller and the serial port UART chips. Look in the back of the shop to see if he has an oscilloscope and well-used tools for testing and repairing computers.

Competent retailers insist on giving you documentation on how to set every single dip switch and jumper in your machine. Incompetent ones assure you that:

"Technicians set all the switches correctly at the factory. There is no possibility they could be incorrectly set. There will never be any need to change them. You don't need any documentation."

I would estimate that about only one in five retailers takes the time to set up a computer properly. Check with members of groups like the Vancouver PC Users Society to find the good retailers. Take heart, buying a computer is not like buying a used car. Vancouver has a more than adequate supply of ethical, competent retailers.

5. Buying More Than You Need

I write custom software for charities. Unfortunately, charities usually come to see me after buying the hardware. I am horrified when I find out they spent twice what they needed to.

They buy expensive VGA colour when Hercules monochrome is perfectly adequate for word processing. They buy Rolls Royce brands like Compaq, Hayes and IBM when they could have bought equivalent high quality hardware for half the cost. They buy 80 MB disks to handle a text processing task that even an old 10 MB disk could have handled with ease. They buy \$3000 mag tape backup units where a slower \$450 unit would have been just as effective.

Because of rapid obsolescence and falling prices it does not pay to purchase more computing power than you plan to use in the next six months. Postpone purchases as long as possible because, in a few months, the equipment will be better and the prices will be lower.

Retailers naturally try to sell you a system more expensive than you really need. The best way to avoid spending too much is to be clear on what the computer will be used for, then get disinterested expert advice on what sort of hardware you will need.

6. "Optional" Extras

When you buy a computer, make a typewritten list of all the equipment that is to be included. This will avoid misunderstandings with the retailer and getting dinged for "optional extras" later. It will also probably save you a trip back to the shop to pick up a missing printer or power cable.

You would be amazed what some retailers consider optional extras. Various retailers have told me the following were optional extras: - the

screen- the printer- the printer cables- the chips to make the serial ports work - the internal serial port ribbon cable- the external serial port cable - the ram chips - the keyboard

Later I will discuss hardware and software setup. Partial hardware setup is often included at no extra charge. However, you will almost certainly have to pay extra for full setup. Be clear on exactly what services are included.

AT Hardware Checklist

Here is a typical checklist of all the components you need for an AT clone. You may not need everything on the list. The brands shown are for illustration only and are NOT intended as endorsements. In your own list, be sure to specify all brands. This way the retailer cannot switch in lower priced or incompatible components.

Make sure you have your checklist with you when you negotiate prices, otherwise you may be stuck later for hundreds of dollars in extra charges.

During initial negotiations, vendors are nearly always willing to throw in all cables, DOS, etc. free. If you don't make that clear during initial negotiations, you may end up paying extra.

7. Error: Do It Yourself Setup

Most retailers don't even open the boxes. You are completely responsible for installing and setting up your hardware and software. Most people are under the delusion that buying a computer is like buying a toaster. Yes, you can take it home and just plug it in, and it will appear to work. Yes, you can follow the simple instructions to install each software package, and they will often appear to work.

Innocents just start using the computer without even doing the setup work. They wonder why the mouse and modem won't work; why the disk is so slow, why other machines cannot exchange floppies successfully, why the machine reboots itself sporadically, why the printer freezes up every

once in a while, why chkdsk takes 10 minutes, and why the hard disk crashes frequently.

They know nothing of disk parking and thus gradually dig pits in their hard disks, eventually losing the entire disk. They know nothing of backups so when this crash comes, they lose the entire year's work.

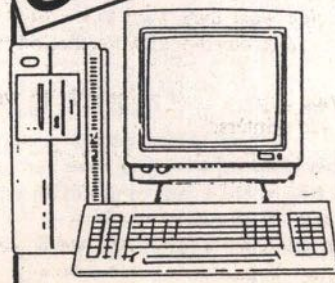
No matter how many times I warn novices of the importance of backups they adamantly refuse to do them properly. It takes a catastrophic loss before my words can sink in. It's like trying to explain to teenagers why they shouldn't drink and drive.

Novices suffer the ravages of TSR wars and egotistical installation programs that meddle with AUTOEXEC.BAT and CONFIG.SYS without any consideration for the other installed programs.

Innocents sometimes attempt to do the set up work without first being trained how to do it. Then they wonder why they have almost as much trouble

Believe it!

SALE



20 MEG PC/XT
A FAST WORKSTATION FOR HOME OR OFFICE

The 8088-2 Turbo Processor speeds along inside a compact yet fully expandable Desktop chassis. The Hard Drive, floppy drive, clock calendar, & graphics are all standard equipment. The Canada wide, 1 Year Warranty will ensure you value and productivity.

- 8088-2 Turbo Processor
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- Phoenix Bios
- 640 K RAM built in
- 20 Meg Hard Drive
- 360 K Panasonic Drive
- Full Graphics capable
- Microsoft, DOS & GW
- Amber Monitor & Keyboard

\$1425



AT/286 20 MEG
POWER TO BURN

When budgets are important & 80286 processing is mandatory, this Turbo AT will get the job done. With 640 K on board, expandable to 5 Megabytes. Included in its low price, a Multisync Amber Monitor, high resolution graphics, Floppy Drive, 20 Meg Hard Drive & a full year replacement warranty.

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- Clock/Calendar
- Phoenix Bios
- 640 K RAM built in
- 20 Meg Hard Drive
- 360 K Panasonic Drive
- Full Graphics capable
- Amber Monitor
- Enhanced Keyboard

\$1898

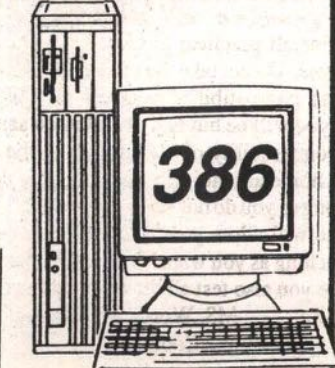


AT/286 EGA
TODAY'S BUSINESS SYSTEM

The graphics & power of this system have the ability to serve you years into the future. Offering built-in EGA (high resolution) color. With automatic switching & 132 color screen display. It is the choice for performance & compatibility under all office conditions.

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- Clock/Calendar
- Phoenix Bios
- 640 K RAM built in
- 40 Meg Hard Drive
- 360 K Panasonic Drive
- EGA Graphics
- EGA Monitor
- Enhanced Keyboard

\$2650



386 20 Mhz
THE ULTIMATE 40MEG SUPER SYSTEM

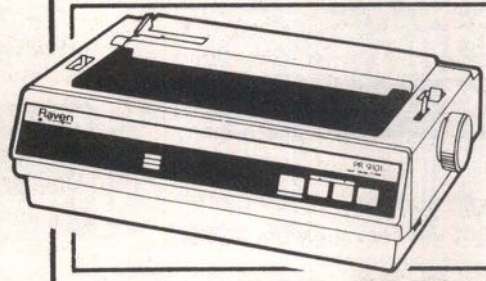
Combining our most powerful system, the "WARNER 386" with high speed memory and a fast 40 Meg hard drive. High end computing for todays special application software is just what you'll find in the WARNER 386.

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386

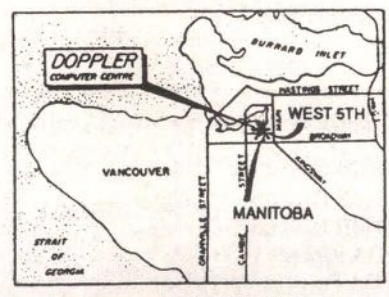
Peripherals



HOT for 89
Roland Raven 9101

- 200 characters per second
- many fonts
- easy paper handling

\$329



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DOPPLER



COMPUTER CENTRE

AT Buyer's Checklist

- MS DOS AT 10 Mhz clone with booklet describing the switch settings.
- Built-in clock calendar.
- 640K conventional RAM memory
- 1 MB of extended RAM memory.
- keyboard with tactile click feel.
- one only 1.2 MB 5.25" floppy disk drive.
- one only 1.44 MB 3.5" floppy disk drive.
- floppy disk controller. Designed to write XT and AT style diskettes.
- one only parallel port for the printer
- one spare serial port COM1: with UART chip, internal & external cables.
- internal 2400 baud modem.
- 3 button bus mouse.
- 40 MB hard disk drive. 40 millisecond average access.
- hard disk drive controller card, and any software and documentation
- TTL monochrome amber monitor (the screen).
- Hercules compatible monochrome CRT controller card or Hercules Plus card.
- parallel dot matrix printer with tractor feed.
- 40 MB formatted mag tape backup unit.
- cable to attach the monitor to the CRT controller card
- Centronics parallel printer cable
- phone cable to attach the modem to the phone jack
- power cable for the computer
- power cable for the monitor
- power cable for the printer
- power bar with 6 to 8 outlets with surge protection
- power cable for the mag tape backup unit
- MS DOS 3.3 with manuals. (If you don't get the manuals, it isn't legitimate.)



as those who made no attempt at all to set the computer up properly.

Hardware Setup

What is involved in setting up a machine properly? This may sound a bit overwhelming. First, you must ensure all DIP switches and jumpers are set correctly. You should optimize the hard disk interleaving and redo the low level formatting (using a program like SpinRite) to ensure it is done with the correct stepping pulse rate, write pre-comp, reduced write cylinder and interleave. Then you perform the FDISK and high level DOS FORMAT. Then you install DOS and customize CONFIG.SYS and AUTOEXEC.BAT.

If you want to avoid trouble later, you should scour the disk with a program like HDTest to search for tiny flaws that do not show up with ordinary testing. You should use a program like the Dysan Interrogator to ensure the floppy disk drives are properly aligned and adjusted.

You should label all cables and connectors inside and out to reduce the danger of unskilled people hooking up the cables incorrectly. You should clean the contacts on all boards and treat them with Cramolin Red, an antioxidant lubricant that cleans metal surfaces and forms a protective layer while maintaining electrical conductivity.

That completes your hardware installation. The only difficult part of this work is learning how to set DIP switches. Every machine and printer is different, so you first need an understanding of the principles of I/O ports, interrupts and interfaces.

Software Installation

Then you need to design a subdirectory structure for your hard disk; install your software; and set up BAT files to access the programs and a simple menu system that continually parks the disk heads. You need to configure presets for the hard disk backup software you have purchased. You may also install a suite of useful Shareware utilities.

If you want to do a very thorough job you could exercise the machines for a week to allow time for most infant mortality problems to show up. Then you could use a defragger like Norton SD to move

all your directories close to the FAT (hard disk file allocation table) and defragment your files for optimum disk speed.

To do software setup, you need skill with DOS commands and a text editor. You can learn this at night school courses or from books on DOS basics.

Parting Advice

Before you buy, make sure you thoroughly test the machine for compatibility. Make sure you look under the hood to judge the quality of the workmanship. Buy (or select) your software first then test it on the exact hardware you plan to buy. Buy from a competent retailer. Find the most knowledgeable unbiased person you know to advise you. Do not buy equipment any fancier than you need to do the job. Make a checklist of every component to avoid paying later for "optional" extras. If you don't know how to properly setup the hardware or software, recruit someone who does.

Grain of Salt

After reading this article, you might get the impression buying a clone is only slightly less daunting than tendering a Space Shuttle. Many people buy clones every day without doing any tests at all. They simply live with the incompatibilities and quirks. Some users run only one program. As long as that one program works, who cares if the machine has incompatibilities that affect other programs?

You need not follow all my advice to succeed in buying a clone, but if you remember only one sentence from this article, let it be this one: **BUY THE SOFTWARE FIRST!**

Roedy Green is the president of Canadian Mind Products, #162 - 1020 Mainland Street, Vancouver BC, V6B 2T4, (604) 684-6529. He and his company write custom software for charities and small businesses. They have also assisted in buying computer hardware from a number of different retailers.

COMPUTER

EXCHANGE

COMPUTER EXCHANGE

Vancouver Office:
1041 West Broadway, Vancouver, B.C.
Richmond Office:
#10 - 4200 No. 3 Road, Richmond, B.C.

733-1535
276-9588

Edmonton Office:
13222 - 118th Ave.,
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- Monochrome Video Card
- 101 Key AT Style Keyboard
- Real Time Clock w/Battery Back-Up
- Hard/Floppy Disk Controller Card
- 8 Full Length Expansion Slots (1x8 BIT/6x16 BIT/1x32 BIT)
- DataTrain 14" Amber Monitor With Tilt/Swivel Base

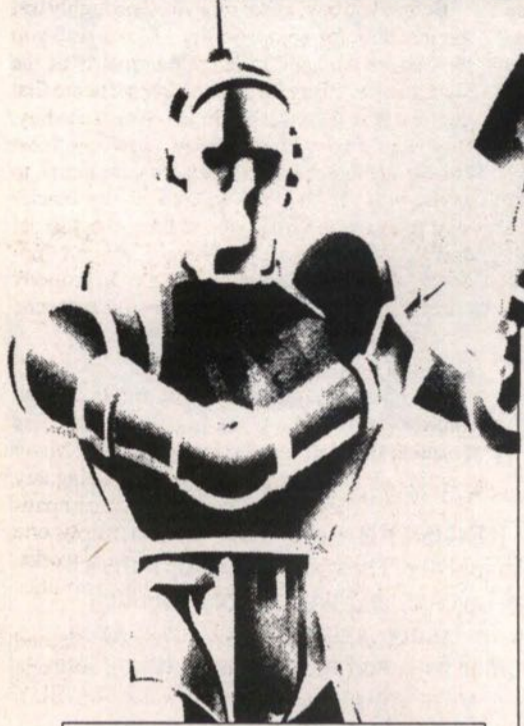
\$3,750
Reg. \$4,195

One-Year Parts & Labour Warranty

COMPUTER-AIDED DESIGN: CAN COMPUTERS HELP?

Logos, illustrations, charts, photographs

Recurring graphics and photographs can be scanned into the computer and stored permanently. These images can be sharpened, focussed, fuzzed, combined, stretched, filled, squeezed, or otherwise altered using graphics manipulation software such as Adobe Illustrator 88 or Letraset ImageStudio. An image can be integrated into any page, in any size needed, with just a few key or mouse strokes.



Creative people tend to focus on the uniquely difficult parts of their work — the parts that drive them crazy, the parts they are anxious about — and they conclude, correctly, that computers can't help with those parts. Nobody and no thing can help.

But more mundane aspects of their work would benefit from help.

— Michael Crichton, *Electronic Life*

Any sufficiently advanced technology is indistinguishable from magic.

— Arthur C. Clarke, 2001 interview, 1969

No, a computer cannot invent design. However, in the hands of an imaginative person, a computer can do much of the drudgery, freeing time and energy to work on the more creative aspects of design. Many changes have occurred in the production of design because of graphics software and personal computers. The basic goals and elements in the process of design remain the same, but a new facility is offered by the electronic innovations.

Concept

Though it is difficult to imagine, the first concept, or sketch, can flow almost directly into proofs. The following two approaches can be set up on page layout software such as Quark XPress: 1.) With finalized copy in hand, the designer can make, early on, a similar-to-final proof. When the original copy is on disk, having been set on a word processor, enormous time savings are made at page makeup, because not a single word will have to be re-keyed, eliminating the potential of errors. The copy, having been inserted into the layout software from the original word processing software, is now on the designer's computer and can be manipulated infinitely. For example, copy can be made larger or smaller in font size or made to fit any size column instantly. 2.) If copy is not available at first, the designer can create a computer sketch, and demonstrate very closely the approximate amount of copy appropriate for the approved design, and chosen typefaces. Whichever stage is arrived at first, the computer layout can also include plans for illustrations or photography. Early on, proofed design can be printed on a laser printer, which is usually sitting next to the computer on the desk. Even at this early stage the layout can be tried on the proposed paper product, affording more critical assessment of the work for both designer and client.

Page makeup

In all computer-aided production, typesetting and layout can be made at the same time. Having experimented until a designer is satisfied, all type can be inserted in a proof position, showing instantly what the final product may look like. Many changes, alternatives and complete rethinking can take place because of the relatively small amount of time necessary for graphics technicalities. In the old paste-up system, restarting at this stage would almost always be impossible, both financially and logistically.

Final layout and printing

In computer-aided design, proofs print out at 300 dots per inch (dpi) on a desk-sized laser printer. If more definition is necessary, a digital photo-typesetting system may be used. The com-

puter disk that contains the final design may be inserted into this high-end system and printed at a higher resolution, with over 2000 dpi on photosensitive paper, film, or even plastic printing plates. These final pages are then pasted in the traditional manner, including paste-up of any non-computer-aided materials, such as photographs.

After checking all colour keys, placement and other normal blue line concerns, the design is ready for printing.

by Tom Graff (874-3975) and Marlon Munro (224-6152), from an original concept by Stephen Herron (873-8878) and Wendy Stephenson (681-4876) Originally printed as part of Vancouver Electronic Publishing Association's The Color of Black Design contest materials.

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SCS #19,209,210 - Q-MODEM SST
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COMPUTER
SCS #11 - COMPUTER TUTOR V4.4 (#1)
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SCS #82,83 - DOS DYNABOOK
Artificial intelligence DOS tutor & help
SCS #166 - BATCH FILE TUTOR
How to write your own batch files

COMPUTER LANGUAGES

SCS #84,85 - C LANGUAGE
2 disk set - Compiler, source, tool library
SCS #86,87,88 - PASCAL
3 disk set - Compiler, Interpreter, Utilities, Tutor
SCS #89,90 - ASSEMBLY/DIS-ASM
2 disk set - Generator, Utilities, Debug
SCS #91 - COBOL & ADA
Cobol & ADA Compilers

DATABASES

SCS #26,27 - FILE EXPRESS V4.22
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SCS #213 - MEGAGOPOLY
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SCS #253 - X-WORD CREATOR
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GENEALOGY

SCS #133,134 - FAMILY HISTORY
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SCS #270,271 - BROTHER'S KEEPER V4.0
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SCS #64 - GRAPHICS #1
Three Libraries of PRINTSHOP Graphics.
SCS #65 - GRAPHICS #2
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SCS #114 - LIGHTNING PRESS (#8)
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Place icons on mailing labels, permits screen capture, list/display icons in library
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SCS #48 - PC-LOTTO V2.10*
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SCS #139 - EDNA'S COOKBOOK
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SCS #247 - CD MASTER V3.0
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SCS #51 - AUTOMENU (#3)
Easy to use menu system for hard disks
SCS #70 - BENCHMARK V4.1
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SCS #205 - EQUAL PARTNERS V3.10
Links laptop and desktop computers
SCS #212 - EASYNET II
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SCS #226 - ON-SIDE
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POINT-OF-SALE

"It has to be easy." Chuck Atkinson



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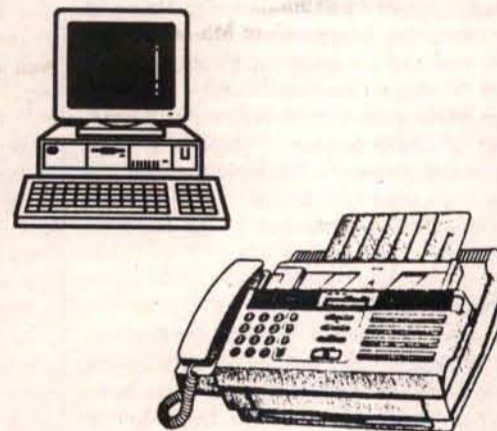
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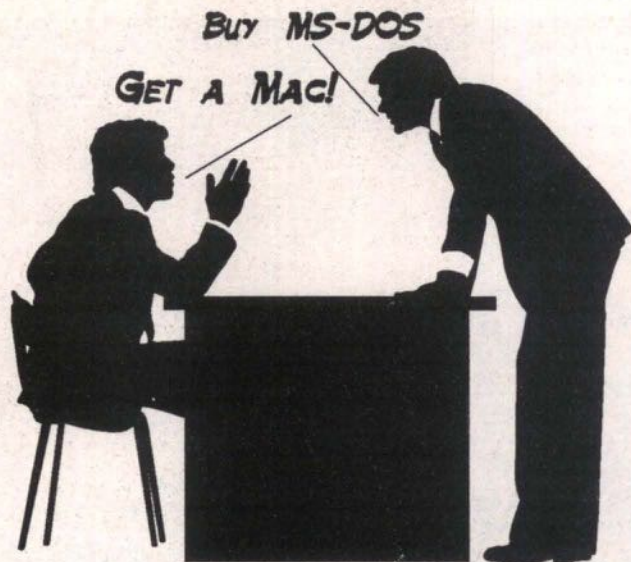
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Macintosh vs. MS-DOS, Which is Best for Desktop Publishing?



Within the next five years, according to some estimates, 70% of the nation's published material - everything from mass market magazines to office newsletters - will be published with desktop publishing (DTP) technology.

Desktop systems are becoming increasingly popular with corporate clients who find that it saves time and money to design, illustrate and print their own in-house material. An outlay of \$12,000 can buy a high quality DTP system, whereas conventional typesetting equipment sells for over \$100,000.

Until fairly recently, serious desktop work was the province of the Macintosh, usually operating with Aldus's sophisticated PageMaker page-layout software and Apple's LaserWriter printer.

Built around its famous graphics chip, the Mac simply outclassed MS-DOS in the variety of high-quality software available and the ease of linking up with a laser printer.

Today, however, the Macintosh no longer has a clear edge over competing MS-DOS products. Certainly, a first-time DTP user should no longer feel obliged to buy a Macintosh or replace existing MS-DOS equipment with the Apple computer.

One way of making an informed decision about choosing between Macintosh or MS-DOS capabilities for electronic publishing is to take a careful look at the user's artistic skills and the level of graphic sophistication needed in the final product.

Broadly speaking, we are dealing with three basic desktop publishing applications.

Object Oriented Graphics

First, we have "object-oriented desktop publishing" where the end product is the computer-assisted illustration of a physical object. In this instance, electronic publishing demands a significant amount of creative graphics imagery: a logo, cartoon, illustration or freehand drawing.

In essence, object-oriented DTP calls for a strong conceptual ability to translate ideas into pictorial representations.

A high level of aesthetic skill and training is indispensable for this type of work, and it is generally conceded that Macintosh systems are best suited for such high-tech, high-creativity assignments. When it comes to freehand drawing, illustration and color separation, the Macintosh software is superior. The gap is closing in this area however with the release or planned release of a number of PC drawing packages such as Designer 2.0, GEM Artline, Arts & Letters Editor, CorelDraw and Adobe's Illustrator for the PC.

Although the Macintosh is likely to remain the computer of choice among graphics professionals, it is increasingly clear that IBM (MS-DOS) environments will handle some of the more demanding applications, particularly those requiring the integration and use of existing data.

A wide variety of DTP software has been written for the Macintosh, less for MS-DOS. The widely used PageMaker program, originally limited to the Mac, has been available for the MS-DOS environment for a over a year. Ventura

Publisher from Xerox, exists only in an MS-DOS version, though there are persistent rumours of a Mac version in the works.

Text Based Publishing

The second broad range of DTP requirements is "text-oriented" with only occasional need for object design.

In the corporate context, these are documents which are consistent in format but are repeatedly generated with minor changes in content. Examples include reports, price lists, proposals, catalogues and manuals.

In extracting text or data from such packages as Lotus and Autocad, MS-DOS can easily accomplish what is often a complex and time-consuming task for the Macintosh system.

Once the style sheet of the document is designed and the "warm links" (path to content data) have been developed, a package like Ventura automatically reproduces an updated version of a document. This reduces error caused by rekeying, not to mention the benefits derived from being able to provide clients and sales staff with current price lists and catalogues.

The Middle Ground

Text-related desktop publishing operates equally well with either system, but the third kind of DTP requirement, a shadowy area which encompasses both text and object oriented graphics, makes it harder to choose between Macintosh and MS-DOS. This is the field of the true desktop publisher. Every job is a new one, versatility is the key. The subject matter may be business forms, brochures, business cards, posters, advertisements and the list goes on.

The primary skill qualification in the last category is an understanding of page layout, typography and the creative choices available in page composition software. In addition, collections of "clip art", pre-drawn graphics for the non-artist, are available for such application as business, forestry and medical sciences. These packages are equally common for both Macintosh and MS-DOS environments although in many cases they may have been originally drawn on the Mac.

Which to Choose?

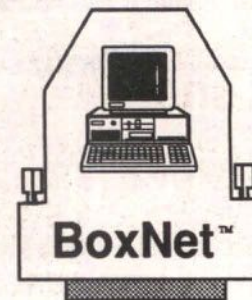
Gone are the days when the PC had minimal DTP programs. The bottom line in this choice often boils down to dollars and sense. PC systems are often priced considerably less than similarly powered Macintoshes and many buyers are willing to undergo a steeper learning curve and a less elegant operating system for some initial upfront savings by going the MS-DOS route. Whichever system you choose, ultimately, you can be a successful desktop publisher with either system.

Lance Bracken is the president of the Vancouver Electronic Publishing Association (682-8372) and sales manager for desktop publishing for Source Data Products. (687-2172)

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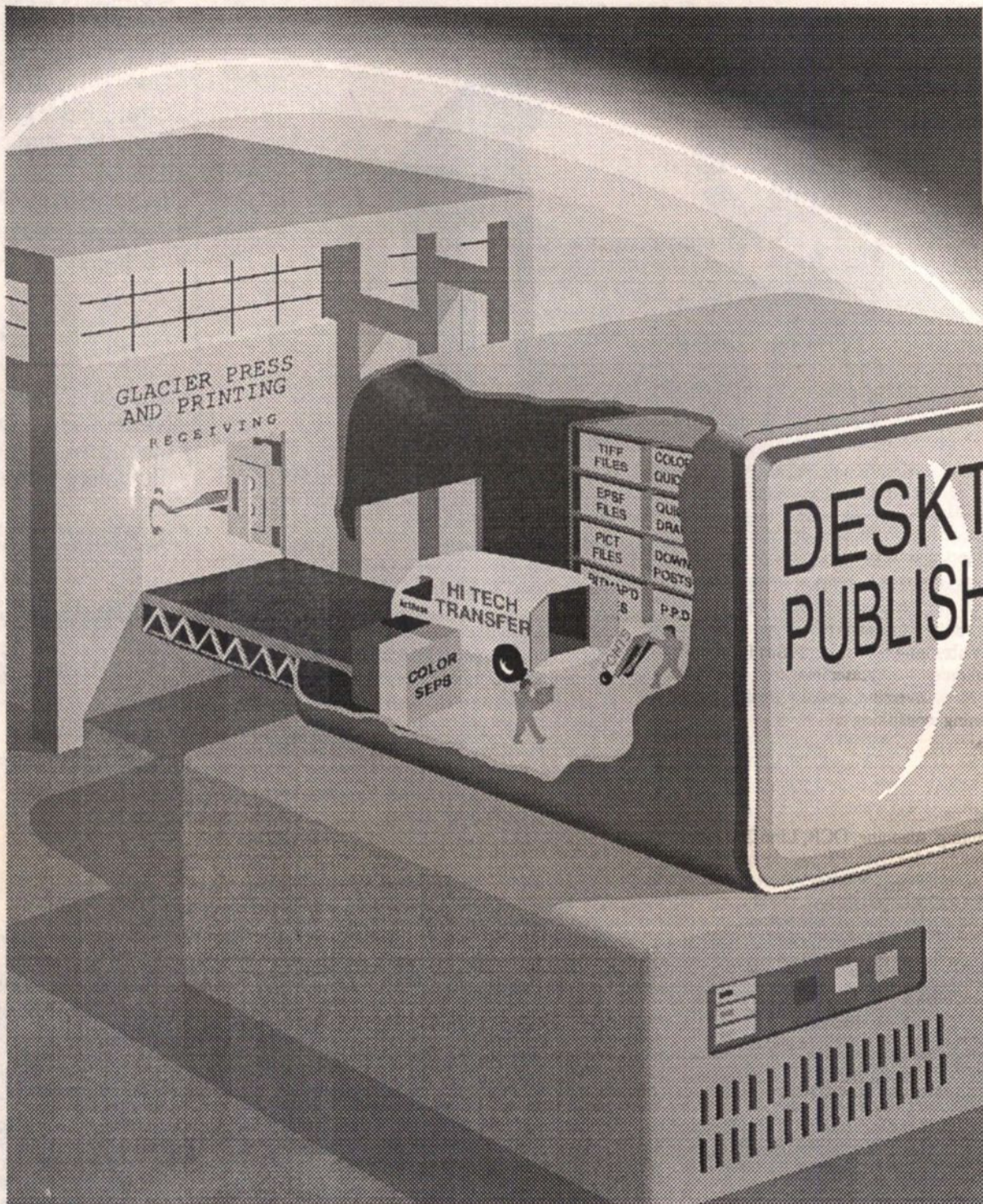
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A Guide to Desktop Publishing Service Bureaus



Desktop publishing service centres are sprouting up throughout B.C. that will let you test-drive systems, ranging anywhere from 15 to 90 thousand dollars while reducing traditional production cost dramatically.

Considering that 90 percent of personal computers are used for word processing, desktop publishing service centres are the next logical step for those wanting their words to look like they just rolled off a professional printing press.

These service bureau's will convert your word processed floppy into money-saving high-quality copy, complete with complimentary graphics and/or photos all on the screen at once to add details or re-design.

For the uninitiated, this article should provide a guide and glossary. Selecting the right centre that has appropriate cost-effective equipment for your job can only be accomplished by getting acquainted with the kind of equipment that's available.

Laser Printers vs. Imagesetters

Laser printers are fine for the inter-office fliers, letters and makeshift throw-aways, but imagesetters turn perishable pages into publishable products. Whereas laser printers typically produce copy at 300 dots per inch (dpi), imagesetters range between 1200 and 2400 dpi.

Renting time on Imagesetters is the main reason for using a service bureau.

Laser Printers vs. Imagesetters

Currently the top-of-the-line imagesetter is the Linotronic, from Linotype. There are four models: Linotronic 100, 300 and 500 and its latest L200. They work on the same principle as typesetters using photo-processed paper, but with many additional capabilities, eliminating any need for paste-up.

Pages produced on the Linotronic 100, at a top resolution, are 1270 lines per inch (lpi); the L200 at 1693 lpi; the L300 at 2540 and L500 at 1693 lpi.

Rates on the Linotronic for 8.5 X 11 inch page cost from \$7 to \$13. Printing projects having gobs of graphic and typeface changes are priced on an hourly rate, \$40 to \$80. The competition in this area is beginning to heat up with the entrance of Compugraphic into the high end PostScript imagesetter market. Watch for these prices to fall as more machines become installed.

Varietyper

Currently, Linotronic's closest contender in the service bureau market is AM Varietyper's VT-600 from Tegra. This is a high-quality bond paper laser imager which uses extremely fine toner, producing a 600 dpi product.

The VT-600 has trouble with screens and tones, requires a great deal of maintenance and doesn't print tabloid size pages. For projects on slick paper stock this system is inadequate. For newspaper, it's more than adequate and the most cost-effective: Service bureau's with this equipment usually charge half the prevailing rate of Linotronic pages.

Scanners

Scanners are those "photodigitizing" devices that "read" photos and graphics onto a floppy disc. Although new/improved scanning systems seem to surface quite regularly on the market, the quality of halftones—photographs screened for printing—produced by desktop publishing budget scanners leave much to be desired.

While some service bureau's make these scanners available, for a fee, quality conscious customers may prefer camera graphic halftones and paste them onto the page later.

Index of Service Bureau's in the Lower Mainland

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Ventura Publisher 2.0: More Than Just An Upgrade

Evolutionary Change

Xerox Ventura Publisher is one of the most popular desktop publishing programs for MS-DOS on the market today. Most users will agree that this popularity is not due to its ease of use, but rather to the incredible power of the program. Xerox recently released a new version of Ventura. While many users expected major changes, Version 2.0 still looks and operates in basically the same way. Most of the changes relate to ease of use and program interaction.

Experienced users of Ventura 1.1 will be pleased to see that most of Ventura menus remain basically the same. Some menu names have changed and Ventura programmers have added 304 Help Screens which will prompt your memory whenever you require it.

Menu Re-organization

Instead of offering its former massive selection of choices, Ventura dialogue boxes now list only the current selections. If you want to see more choices, simply click on the selection and a menu of choices will pop-up. This greatly simplifies selection. Identifying dialogue box information is much easier and faster since less reading is involved.

Ventura 2.0 is just as fast as ever, even on an IBM XT. It can now make use of expanded memory to hold the program while operating and if your computer has up to 2 megabytes of RAM, it will also place your document in memory. This makes it easier to manage extremely long documents. After trying out complex documents (100 pages including graphics) on a computer with 2 megs. of RAM, I found that Ventura managed it quite nicely. Many users had previously been frustrated by creating long documents in Ventura only to find that the program could not manage such complex documents (Remember the message "This document is too complex to completely format" after which Ventura would hang, losing any changes which you hadn't saved.) It also operates quite adequately with only 640 K of RAM.

One of Ventura's most interesting changes is that the program now comes in three versions: Ventura Publisher, the Professional Extension, and Ventura Publisher Network Version. The original program now includes 19 diskettes, five of which are provided by Bitstream Corporation. These include 9 font outlines allowing HP LaserJet users to scale these fonts from 4 to 120 points in size. Both the Network version and the Professional Extension are two-disk additions which allow use of Ventura on up to three networked computers for the former, and give Ventura additional features for the latter. Each of the extensions cost about \$800. The original program costs about \$1300.—prices will vary by up to \$400 depending on where you purchase it.

Packaging and support materials are greatly improved. Ventura now boasts a Reference Manual, Bitstream Font Manual and Order Form, Quick Reference Guide, Training Guide, and a Guide to Creating Layouts with Ventura Publisher. Manual design is more professional and easier to follow. Unfortunately, Ventura's 21 Example Files have not changed since the originals—these leave a lot to be desired since they were originally created to work on dot matrix printers.

New Features

Ventura is not an easy program to learn. Most users feel that since it uses a graphic interface, mouse and menus, it should be a snap to pick up, but that is not quite the case. Such a complex program requires the understanding of some basic concepts before operation can become effective. Once these concepts are understood, program operation becomes very efficient. This new version has several improvements which make operation much simpler than before. You



no longer have to name each chapter as you create it, Ventura will automatically name it after the text file that is placed within it. The converse is also true. If you have already named the chapter, any new text that you enter into Ventura will be automatically named after the chapter.

Ventura now boasts a feature which automatically links text files from different word processors: Load Text at cursor. This makes it easier to join several text files into one. It supports TIFF and grey scale images, can display EPS files if a TIF or Metafile image is included within it—Adobe Illustrator files are displayed while Harvard Graphics files are not. These will also print on HP LaserJets if such is the picture information is included in the EPS format.

Interactive font scaling is now available as is interactive kerning. The 'Show Loose Lines' features which was mostly annoying in version 1.1 is now quite useful in version 2.0 since individual lines can be tightened. With interactive font scaling—in one point increments if they are supported—less Paragraph Styles need to be created. And each dialogue box can be recalled with a quick keyboard command making tabs settings and image scaling much easier and faster. Frames can now be anchored directly to text lines letting you include logos in text with the added benefit of real time reflow with text.

Text can be rotated in 90 degree increments making Ventura the only page layout program with this capability. Fonts can be grey scaled even on HP LaserJet printers. And a new Vertical Alignment feature allows you to align text at the top, middle or bottom of a page, frame or box. Ventura also supports CMYK—Cyan, Magenta, Yellow and Black—for automatic four colour or spot colour separations of up to eight colours.

The Chapter Menu includes typography settings for entire documents, Frames can hold their own typography settings and each paragraph style can have settings which override any defaults. All counters are much easier to use. The best feature here is 'Previous Number + 1' making complex documents even easier to update.

Graphics can be placed anywhere on a page and float untied to any frame. And when working in Graphics Mode, the Addition Button lets you add new frames if you want to create text flow around for your graphics.

Program & Style Sheet Control

A new program feature allows users to set the menus to operate either as drop down—the normal way for Ventura—or pull down. Many past users of Ventura will find this new feature extremely handy since menus will now come out only if requested.

Style sheets can be printed to disk to be output through Ventura. These printouts include font, leading, tab setting and alignment information. Style sheets can also be updated more quickly through a new style management dialogue box.

Professional Extension

The Professional Extension to Ventura includes several additional features. A new Table Formatting tool lets you create tables and directly import Lotus print files into it. Columns can be adjusted interactively through the use of the mouse making the trial and error or creating tables with tabs a thing of the past. This table editing feature is the most unique and useful of any DTP program. I created several complex and simple tables through this feature and was thoroughly impressed.

The Professional Extension also makes more extensive use of extended memory. It includes a massive hyphenation dictionary which requires expanded memory to run. This dictionary is word based rather than rule based and thus operates much more effectively but just as fast. If you create long documents in justified formats, the Professional Extension will give you features unavailable anywhere else.

Disappointments

Ventura still lacks an Undo feature. Users must constantly save and choose 'Abandon' if they don't like their last changes. Screen views still don't move with you while you type text and while the zoom feature lets you expand the screen around the position of the mouse, you must move the screen interactively if you want to see other parts of it.

Chapter creation is simpler than it was before, but Ventura still lacks a chapter deletion feature. Users must still place each part of their document in one directory and use DOS to remove these components from their hard drive after archiving for future use. Since chapters are still as complex as they were before—remember with Ventura, Chapter files only include routing information—file management practices must still be practised.

Despite these failings, Ventura Publisher 2.0 is an absolute must, especially if you already have version 1.1. The upgrade cost is \$150. for most users. This fee is small in comparison to the improvements in the program. And if you're new to publishing, but want to create complex documents on less powerful computer systems, Ventura Publisher is definitely the one to choose.

Nelson Ruest is desktop publishing consultant with ONCOURSE Learning Centres. He can be reached at 640-7201 for further information.

Ventura Tips

Interactive font scaling

To scale fonts interactively, choose the text tool, select the text and press Shift + the up arrow for bigger or Shift + the down arrow for smaller.

Interactive Kerning

Use the same procedure as above but use Shift + the right arrow for looser or Shift + the left arrow for tighter.

Recalling the Last Dialogue Box

To recall the last dialogue box simply press Ctrl + X. This makes trial and error operations much simpler and faster.

Linking Text Files

To link text files, even from different sources, position your text cursor where you want the text to be inserted and Load Text... with the destination specified as the Cursor Position.

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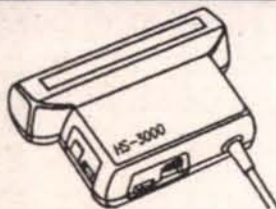
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GEM Artline : a Review



Easy To Learn

If you would like a sophisticated drawing package for the PC that you could learn in an afternoon, Digital Research's *Gem Artline* may be the one for you.

Compatible with *Ventura* and *Pagemaker*, and other programs via the standard .GEM and .EPS formats, it passes the first requirement easily.

Artline is a vector-based program allowing the drawing and correcting of very complex, free-flowing curves. This will send your crude bitmapped painting programs to the back shelf. But if you have relied on scanned images in the past, you can bring these images in and trace them. *Artline* supports .IMG, .PCX and TIFF formats. It will smooth out the bits and transform the image into one that will reprint cleaner and faster. Expanded memory is required (EMS or EEMS) to provide image tracing. A minimum of 512K is recommended.

Lacks Auto-Trace

There is no auto-trace feature in *Artline*, but you can edit your scanned image and combine it with

other objects and text and symbols from the clip art library that come with the program. You can then save this new image in the symbol library for future use or adjustment. The samples and symbol library that comes with *Artline* are not huge. However this clip art is displayed on the screen, which eliminates the need to look up the image number in the separate booklet as is the case with some libraries.

The "Rolling Pin"

There is a good selection of graphic tools which will allow you to move, copy, rotate to any angle, mirror, scale, colour, group and subgroup both objects and text alike. An interesting tool, "the rolling pin", allows you to skew any object. By grabbing one of the handles surrounding the selected object or text, you can distort the image in any direction. There is a snap-to-grid option and rulers can be set in picas, inches or centimetres. Once you've drawn an image you can pick up any aspect of it and rework it. You can import any of your previous drawings from *GEM Draw*, plus their various fill patterns, and use these in *Artline*. Saves

some redrawing time!

Full Text Manipulation Possible

As in all vector-based programs, text is treated like any other object, thus you can perform the same functions on any text. Stretch them. Shadow them. Outline them. There are an infinite number of options for excellent logo design or reproduction. The program includes Nimbus Roman and Nimbus Sans typefaces as well as the Bitstream Fontware Installation Kit which provides the Charter typeface. Of course, more can be purchased from Bitstream.

Artline has some good time-saving features. For one, the screen refresh time is much faster than that of a program operating in *Windows*, especially if the "hide fill" option is on. There are several keyboard shortcuts. Copying an object is a cinch, requiring only a press of the shift key when the object is selected and dragging the image to anywhere on the screen. When you release, the copied object appears.

Artline also allows you to print right to your PostScript output device. It's not necessary to print to an EPS file and then download this. You can specify your halftone screen in lines per inch, allowing for sharper resolutions. The program supports a wide variety of printers, from dot matrix and inkjet to PostScript devices.

Program Suffers From Inexactness

The most disappointing feature is the lack of ability to ensure the exact sizes of any of your lines. In the tool box you find a line width scale that will change the thickness of the line you have selected. But this scale has no measurements on it. Only by running it off on your laser printer can you get an approximate reading and this often isn't an accurate picture of the line thickness that may come out on the Linotronic output.

Digital Research's Nigel Hearne confirmed that custom widths are not available but would be considered in an upgrade.

This lack of mathematical exactness is also felt in the scaling feature. Although you can scale in per-

centages, you cannot ask for a custom size.

What About Colour?

Artline will give you 16 colours, each of which can be increased in 1% increments. It says it does both 4 colour separations and spot colour but not without problems. Professional quality, four colour-process separations are not possible. It does them but does not allow for over printing for exact registration. To date none of the popular page layout programs have this exactness either. In the Mac world only *FreeHand* and *Illustrator* offer this professional quality. So, full colour desktop publishing is not here yet. The other drawback in using the colour options in *Artline* is the lack of automatic registration or crop marks. Registration marks are found in the symbol library and can be applied to your drawing. Hearne said that this was a deliberate move by Digital Research as they felt graphic artists would want the freedom to place these marks wherever they would like. A compromise might have been to have these features automated but with the ability to move them. This would save one from having to access the symbol library for the registration marks when custom placing was not needed.

Road Test

According to André Somov, Publisher and Art Director for *Plus Magazine*, *Artline's* two major flaws—lack of mathematical exactness and inaccurate 4-colour separations—aren't enough to say no to a purchase. André used *Artline* to produce a complex illustration and he found it to be a very powerful drawing tool for the PC. Its \$719 suggested retail price will appeal to both the serious illustrator and those looking for an easy-to-learn and reasonably-priced package to enhance their publications.

Mary Green is President of West Print Communications (988-8747). They produce several newsletters for organizations across the country, as well as brochures and other promotional items.

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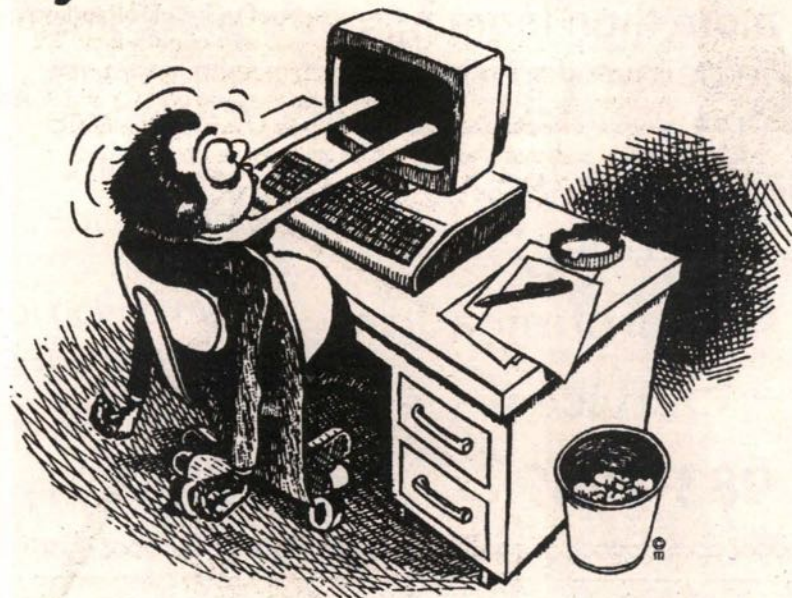
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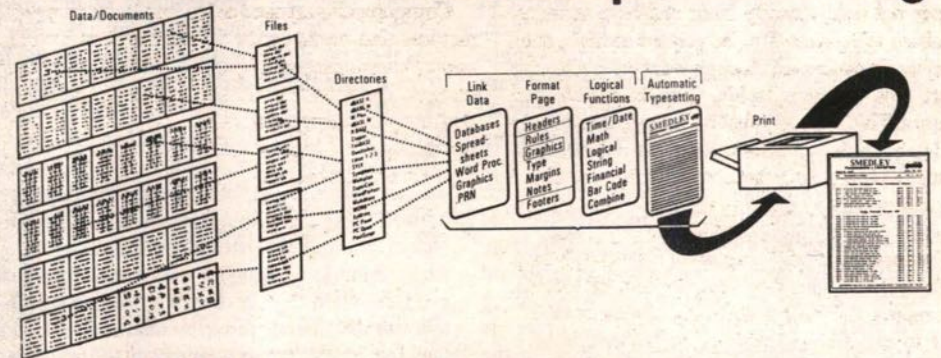
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db Publisher

"Live" Links For Desktop Publishing



Database Publishing

Database publishing has always been one of the most difficult publishing tasks to perform. Taking a simple price list and reproducing it even with today's page layout programs is often more work than it seems worth. Publishers everywhere have felt frustrated and challenged by the need to publish information in tabular format.

Digital Composition Systems (DCS) of Phoenix, Arizona, may have the answer. They recently released a new desktop publishing program specifically aimed at this market: dbPUBLISHER. Priced at \$825., dbPUBLISHER works through a SmallTalk interface—resembling a Windows program, but without the memory overhead—and produces documents directly from database and spreadsheet information. This means that the relationship between the original documents produced by a database or spreadsheet program and the published document is live; i.e., when data changes in the original documents, the published document changes. This seems almost too good to be true.

the necessity to publish tabular information. The first is simply to have the report generator included in the database program produce the report. This has several drawbacks. Database programs often only support dot matrix printers, there is very little control over the design of the product, and even if the report generator can support laser printers, the only typefaces available are, most often, the least effective.

The second option is to simply print out the information and have it reset by a conventional typesetter. This also has several drawbacks. The information must be proofed before delivery to the typesetter, it must be rekeyed in its entirety, and it must be reproofed once typeset.

A third option is to use programs like Page-Maker or Ventura Publisher. Version 3.0 of Page-Maker does make database and spreadsheet publishing much easier since it has special filters to import data from these programs. Though these filters actually allow you to choose selected fields from your database, the result is often ineffective in terms of time and effort. Don't get me wrong; Aldus should be commended for this effort, but their filters have major drawbacks—when import-

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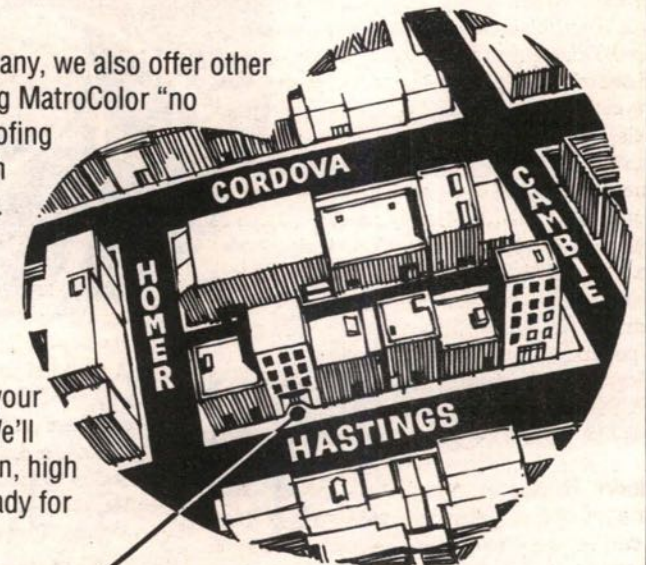
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ing database information, PageMaker has to rebuild a copy of the database. This can take several minutes. Another drawback is that the relationship isn't live—each time information changes, the process must be repeated.

Ventura also has difficulty with database publishing. Though Ventura is famous for its live relationship with source files (change the word processing file and the Ventura document changes), it does not read directly from database formats. Database files must first be printed to disk, then extensively processed through word processors to insert tabs between fields, then imported into Ventura. This process must be repeated each time the database changes. Some software manufacturers such as Corel Software of Ottawa have realized this and produced utilities which perform these steps for you, but these also have their flaws.

The fourth option, using dbPUBLISHER, may be the only real solution. Though dbPUBLISHER is complex and will sometimes appear cumbersome to experienced desktop publishers, it does provide the most efficient means for publishing database information. The key to dbPUBLISHER is its support of relational statements. Using code-based statements, you can tell the program to search specific fields in databases, spreadsheets and word processing files to produce compound documents including parts of each file. dbPUBLISHER also supports 'if' statements within its own structure. For example, you can tell dbPUBLISHER to expand or reduce a specific portion of the final document according to the amount of information available in the source files. You can also tell it to select any of a multitude of typefaces to produce the final report—typefaces which support dot matrix, HP and PostScript printers! The program only ships with fifteen fonts, which sounds like a lot, but is only really a family of Helvetica and Times clones, Courier and an OCR font.

How dbPUBLISHER works

dbPUBLISHER originated from a custom development for AM International, marketed as the Signature Series of document composers. These are based on the TEX typesetting language. When first released, TEX was hailed as the most comprehensive typesetting language available to microcomputers. The only drawback is that it is a very complex language to use thus its lack of success compared to desktop publishing programs. It is this very complexity which gives dbPUBLISHER its strength. Through its Windows or Mac-like interface, dbPUBLISHER lets you build your publication step-by-step. Help is available at all levels of operation. And once a report is complete and set as you like it, reproducing it becomes a breeze. Simply load it and print it.

Conclusion

dbPUBLISHER has some drawbacks. This first version has very slow screen refreshes, operates more like a conventional typesetting system (information is code-based and users must 'preview' to see final results) and building the first report can be very difficult. But its advantages far outweigh these flaws. Imagine the uses such a program will have. Large companies can easily produce current personnel directories by simply linking specific fields from personnel databases with a dbPUBLISHER document. Price lists can be constantly updated through changes in spreadsheets. And parts catalogues can actually include current stock levels.

dbPUBLISHER also supports bar coding, something most major retail stores are actively pursuing and it has literally thousands of typefaces available through its previous Varityper connection. Though it will definitely not replace Ventura Publisher or PageMaker, this program will undoubtedly be a successful new entry into the desktop publishing market.

For more information or for a demonstration of dbPUBLISHER, please contact Kerry Gullins at (604) 734-7667, or ask your local computer dealer.

Nelson Ruost is MicroPage Editor and Manager of ONCOURSE Learning Centres. He can be reached at 640-7201. MicroPage is a newsletter for the Vancouver Electronic Publishing Association. This article previously appeared in the February 1989 issue of MicroPage and is reprinted here with permission.

CLIP-ART

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Computer clip art used to be chunky bit mapped pictures that could easily be identified as having come from a computer by the jagged edges on the images. The growth of the number of people using desktop publishing systems has also meant a growing demand for higher quality computer clip art. There are a number of companies coming out with top quality clip art. We recently received samplings from two such libraries.

Dream Maker Software

The first comes from Dream Maker Software and their product is called Cliptures. They currently offer two volumes which are targeted for those who do desktop publishing either in-house or for clients, and contain illustrations of business people, cartoons, graphics and symbols. Each volume consists of about 150 individual files covering nine separate categories on five separate disks.

All the Cliptures images were created with Adobe's Illustrator program, and can be used as-is with any page layout or graphics software that accepts EPS files. Because of the EPS format, the artwork can be resized without losing detail or sharpness. Cliptures can even be modified with either Illustrator or Aldus' FreeHand program. Printing can be done with any PostScript compatible device.

Currently the company only produces the art in Macintosh format, but plans a release of MS-DOS versions very shortly.

A very useful aspect of these packages is that in the printed directory of images that comes with the package, they include some very good ideas on how to use the images for impact within your own layouts.

Electronic clip art saves many users the time and expense of producing graphics from scratch, and offers a number of advantages over traditional clip art. Primarily the benefits are that it can be re-used, re-sized and easily manipulated with other pieces of clip art to create endless variations and effects. This is a very good set of general business use images.

The Cliptures collections, priced at U.S. \$129.95/volume, are available through Macintosh software dealers, or directly from Dream Maker Software, 4020 Paige Street, Los Angeles, CA 90031. Dream Maker's telephone number is (800) 876-5665.

Metro ImageBase

The second set of clip art came from Metro Creative Graphics, a leading retail graphics company. From Metro's art library of over one million images, ImageBase has "digitized" (electronically re-created) its artwork on diskettes at the highest resolution possible on laser printers (300 dots-per-inch, vs. the usual 72 dpi of most ordinary "clip art"). The result of using the higher resolution has two effects one is that the images are much smoother and better to look at than tradition low resolution clip art, but it also means that the file sizes are much larger. Imagebase deals with the size factor by shipping each set with a utility to stuff the files down. This program performs a kind of packing down operation on the images. When you want to use a new image, it must first be "un-packed" in order to use it. This additional step is fairly minor, but it is an extra step.

The benefit of using this bit mapped style image is a more textured image. The drawings are more detailed than is often the case with EPS or Illustrator style clip art. They give a more traditional feel to a publication as opposed to the more modern clean edges of Cliptures series.

ImageBase art is packaged in volumes of 100 images each, and is categorized for easy selection. Included in the fourteen different volumes available are volumes for Business Graphics, NewsletterMaker, ReportMaker, Travel, Borders & Boxes, Art Deco, Computers & Technology, Nine to Five and People. Each volume of 100 images sells for U.S. \$145. The images are available in both IBM and Macintosh format.

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Desktop Video on The Amiga



What Apple's Macintosh did for desktop publishing a few years ago, Commodore's Amiga is doing for desktop video today.

Desktop video does to video what publishers do to paper: It puts the finishing touches on presentations. That is...adding titles, editing, mixing sound (music and/or voice-over narration) and special effects (such as between scenes animation) onto what is known in the trade as "raw footage".

Cost Savings

Just as the McIntosh reduced the cost of typesetters, titling machines and other print trade tools, Amiga replaces instruments running anywhere from fifty thousand to a million dollars.

The Amiga is the only personal computer that, without costly add on boards, has a semi-dedicated system that allows it to work directly with video's special features. Amiga's system was made to match the 30 frames-per-second characteristic of video. This, coupled with an optional "genlock" unit — the process of superimposing — allows Amiga users to edit disc programming onto video

cassettes, like the Hollywood pros do.

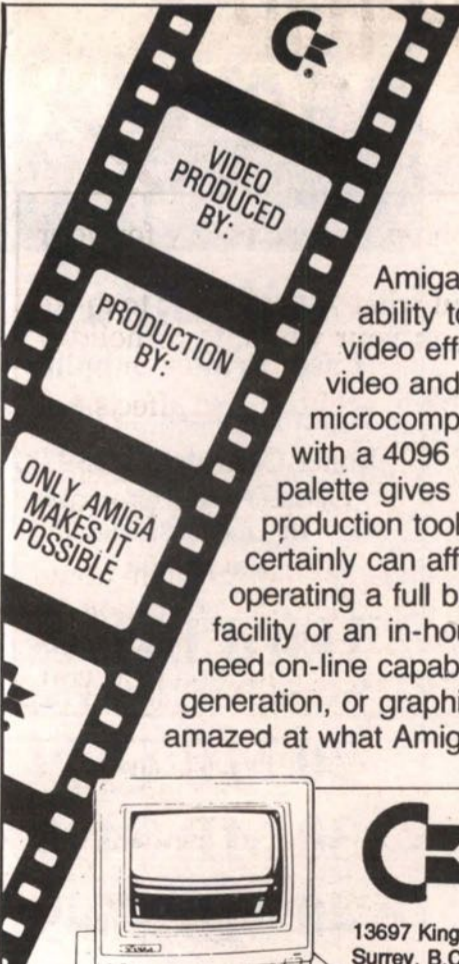
Dazzling Effects

Now, for the first time, consumers can enhance homespun video productions with special effects, like Page Peel for changing scenes; self-styled animated cartoons; dazzling 3-D graphics; spinning logos; scrolling production credits or the cast of characters...just like the stuff on TV. All this and more is displayed in 4096 vibrant colors, including 16 shades of grey, all at one time.

Although the real pros have on-screen colours numbering up to 16 million, these systems are costly. BCTV, for example, has three such machines for editing and mixing video that cost "\$100,000 each," according to BCTV Videotape Supervisor John Dolmat.

Quality Differences


The major difference quality-wise is the Amiga image sometimes has a ragged edge around it and also has a visible flicker. Both can be have work-arounds with new software or technique. "Just reduce the contrast between the screen color and



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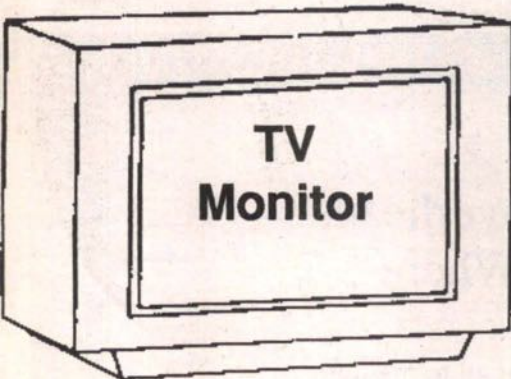
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image color," says Matt Timmerman, Amiga specialist for Conti on Broadway. "There is software to help with that or you can do it by hand." Another approach is to filter the screen with a relatively inexpensive overlay screen.

While this may be a solution to the flicker for the desktop video part of the Amiga, the flicker doesn't begin or end with coordinating colour alone: It has to do with their monitor.



Commodore Chose TV Standard

Amiga opted for a TV-like monitor instead of the standard computer unit. While this makes Amiga more compatible with videos, it makes it less compatible with computer systems. The trade-off was the flicker. It is an obnoxious glitch in the right-hand corner of the screen and drives some users to distraction.

Yet it's Amiga's TV-type monitor that convinced, channel 10 Program Director Martin Truax to buy 6 Amigas this fall for three of his community broadcast stations in the Lower Mainland.

"It's the monitor that allows us to broadcast with Amiga," explains Truax. "Before the Amiga, we had a system called the Kyrion which cost three times as much as the Amiga having no where near the Amiga's performance capabilities.

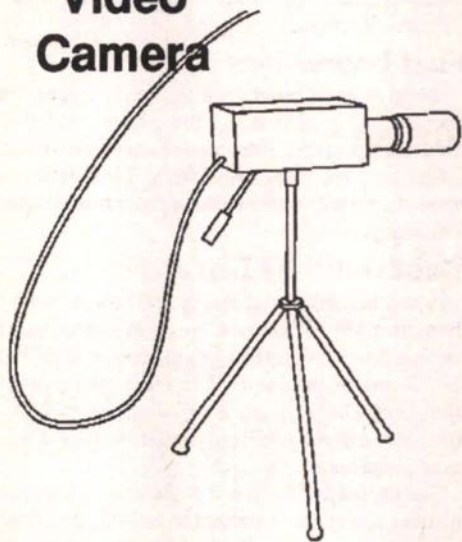
"It would print captions at the bottom of the screen," he explained, "that was it. Not only is the Amiga advanced, but it's friendly. And that's important for us because we work with a lot of volunteers."

The major difference price-wise is that Amigas range from about fifteen hundred to five thousand dollars, including high-res, monitor, keyboard disc drive, mouse, and manual.

Four Amiga Models

There are now four Amigas models: The 1000 was the first. It was considered over priced and didn't get the appropriate consumer response. So Commodore came out with Amiga 500, the smaller model number presumably reflecting price reduction. Then came the Amiga 2000. The latest offering is the Amiga 2500.

Video Camera



IBM and Macintosh Compatible?

The 2000 and the 2500 are the only models that can be made compatible with IBM through the addition of special boards. Another recent development is a software emulator that allows the Amiga to pretend it is a Macintosh. (Ready Soft Macintosh emulator, called Max from Ready Soft P.O. Box 1222, Lewiston, New York — 416-7431-4175.) The program uses the flickering interface mode of the Amiga, so you'll probably want to use Micro-Way's flickerFixer or buy a long-persis-

tence monochrome monitor. Commodore's upcoming Enhanced Chip Set and new color monitor should also steady the screen image.

An Artistic Flair

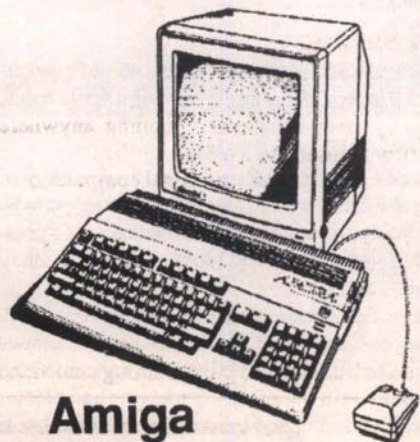
Desktop video is being used more and more in the broadcast and recording arts as an innovative painters pallet for innovative electronic artists.

One such artist, Jorge Calvo, is using the Amiga to tell the life story of Samuel Beckett, the world-acclaimed playwright and Nobel Prize-winning novelist, for the PBS network.

All existing pictures of Samuel Beckett (including a 17-second film clip were) "photodigitized" onto a floppy disc then animated onto videotape, using a digitizer and genlock. Calvo taught himself to synchronize the video output of the computer to mix still shots and drawings with the videotaped material. "I was able to get as close as possible to broadcast graphics without the involved circuitry," Calvo says. "Whereas a broadcast-quality machine can cost almost half a million dollars, the Amiga can come very, very close — at a fraction of the price."

With his digitizer plugged into the Amiga, Calvo connected his Sony Video 8 camera and experimented with various techniques to achieve the effects he was looking for. By moving the camera more quickly across the photos than 20-25 seconds a digitizer requires to "read" them, Calvo found that he could create a mysterious, "otherworldly" effect for the still shots.

Amiga in The Schools



Amiga Computer

Broadcast projects are just part of Amiga's desktop video appeal. In fact Commodore's promotional push is in the area of education. At the recent (Dec. '88) World of Commodore in Toronto, educators were handed video cameras and assigned to make a movie. Back in the conference area, they learned firsthand how to add Amiga graphics to their work.

Educators interested in using the Amiga in the classroom should contact Reg Nordman, Commodore's regional education manager, at 1200 West 73rd Ave., Suite 900, Van. (261-2854).

One such educational enterprise, The Studio at 1110 Seymour Street (687-7907), was co-founded by David ("head honcho") Cooperstone, a McGill graduate involved in teaching and producing films and videos since 1970, and Andrea Zeitz, a Concordia University graduate, holding degrees in Art Education and Media Technology. Today they are part of an equally qualified staff of 10.

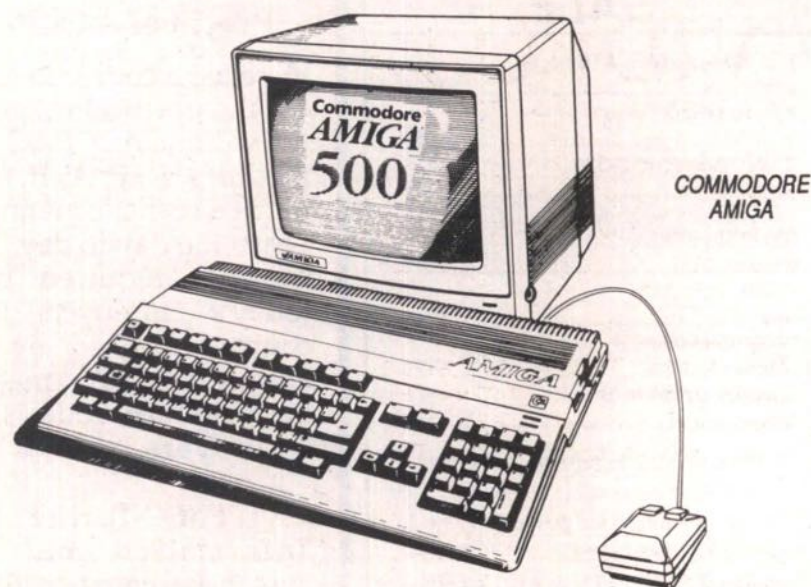
Several of their courses, offered at UBC Con. Ed., VCC Langara, Burnaby Cen. Sec. Sch., and several other accredited locations have workshops at The Studio. Here, the fundamentals of producing professional video presentations, using the Amiga and peripherals, are taught and marketed.

"The Video Entrepreneur," for instance, is a course designed for the individual who is involved, or wishes to be involved, in video production for profit.

According to the course outline this is a practical hands-on course. "Students have the opportunity to produce a video for a client." Courses last for eight to ten sessions. The total cost is anywhere from \$30 (seniors only) to \$130.

Allan Earle is a freelance writer. He also edited the Georgia Straight for a while before it went straight.

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Presentation Graphics on the Mac: Is It Showtime Yet?

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- When you want an informal feel
- When budget doesn't allow for slides
- When audience must take notes
- When you have to present quickly

View from a Luddite

When I went to pick up the evaluation copy of Aldus® Persuasion™ I ran into a gentleman who was simply negative about the prospects of presentation programs. He bluntly said that they wouldn't sell.

I considered mounting a passionate defence of the Apple Corporate Line that Desktop Presentations is the NEXT BIG THING, but I reasoned that it wasn't worth the breath. Except he had planted the seed of doubt, and I didn't have the answer to his question.

Who is Going to Use These?

From a manufacturer's point of view, this is the key question. We are told that everyday thousands of business people sally off to do corporate battle in presentations small and large. These new programs will make the visuals compelling, persuasive, and a positive joy to create. Right, and the Feds will balance the budget too!

For the person who has to make sales or internal presentations these programs have the capability to make creation of the presentation much more efficient and effective. However, you must have the necessary hardware, software, graphics knowledge and yes, time to produce work to rival that of the pros.

Luckily a crop of programs have hit the dealers shelves recently that promise to answer some of the needs the business presenter has. So lets have a look. But before we do, allow me to put forth the one point that I'm convinced of.

For the people who use the overhead projector, these programs are heaven sent, but for the people who want to use the slide projector as their presentation tool, you must still wait for total satisfaction. Attention Software Publishers: You aren't going to ship big units of this stuff until we have a simple, cheap, bozo proof output device, and it isn't here yet.

In the meanwhile, there are some software programs that bear looking at for producing your presentation materials. At the forefront, we have Aldus and Microsoft in what I will refer to as the

The Battle of Seattle: Persuasion vs. PowerPoint 2.01™

These two companies have a history of dominating the software categories that they participate in, so it will be interesting to see which one will win the market share in what should be a reasonable size category. In this article, I will not cover PowerPoint, because I want to wait until I receive the driver software for high resolution slides on the Genigraphics system. Hopefully, we will have a round two in which PowerPoint will take on the

lesser contenders, Cricket Presents™, and More II™. If history is any guide, Cricket will produce some truly scary software and Symantec will make More II the unsung hero of presentation software. The real fun in this category will come when Harvard Presentation Graphics™ gets into the act, as is rumoured, because they have dominated the PC side for several years now.

But even with all the advances made by the presentation packages, I would expect that the lion's share of overheads and slides will be made by PageMaker. People use what they know before diving into something new. So Aldus's biggest competition could be Aldus.

Page Layout Wars on the Screen

For the Desktop Publisher, they have had to deal with competing programs that had different philosophies. Your choice became more than just features and benefits, but rather how best to approach your assignment, and did it feel natural. There were several questions to answer; Swiss Army Knife vs. Specialization, Pasteboard vs. Grid setup. Now for these projects we add a new question to consider; Outline-Oriented vs. Object-Oriented Approach.

First Impressions

To give each program a workout, I read the documentation after doing the tutorial, and then tried using it to do a simulated client presentation. I feel that any Mac user could be creating a presentation with either of these programs in under a morning.

StandOut™ by Letraset®

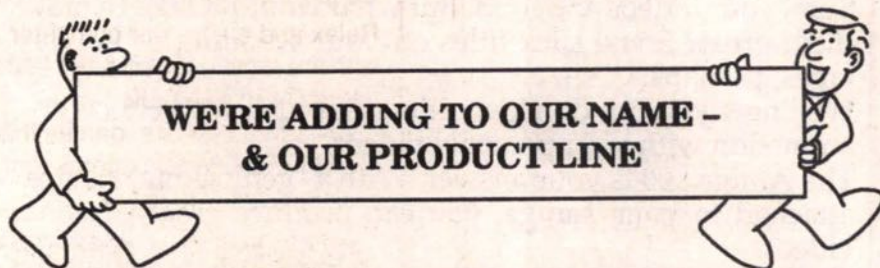
It was first known as ReadySetShow, a name I thought made all kind of sense. A changing of name is tough for any product to prosper after, but this seems to be one of Letraset's methods of operation. The program is based on the grid philosophy, so if you use ReadySetGo now, you will be at home here.

They add a hot feature in Style sheets, because in slides it is more important to have a consistent look than in page layout. More important because slides show very quickly if you don't have the titles in the same place on each one, otherwise they jump around on the screen. On top of that they add the Slide Design System. I must confess I not sure if here's a new concept, or merely a new name? Whatever they call them, users will call them templates.

The documentation that comes with the program is comprehensive. A Design Guide is welcome reference for the user, because the art of creating good, simple visuals is an acquired one. The tutorial is a separate volume which will im-

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prove usage, because people are more likely to read a small manual. Matter of fact, that is probably all they will read, unless forced to.

My gut feeling about this program, is that it will be an also-ran in this software sweepstakes. It offers spell checking, good type control, a high degree of object control, a French dictionary if you need it, and built-in charting. However, so does the competition in many cases, so these don't wow us quite the way they used to.

So what did I like about StandOut?

It has a powerful Find & Replace command, but in using this while doing my tutorial I experienced heavy bombing at this point. Slightly sticky alignment guides are a nice feature.

It is very versatile in the format of what it will receive, including Paint, PICT, PICT 2, EPSF, TIFF and RIFF. So you can use it with almost every image you have on hand. It saves in PICT format, important if you want to use the Montage™ Film Recorder, which is possibly your best slide alternative until PostScript™ film recorders come along. For most users, the Glossary feature allows full word processing treatment with good graphic power.

This is much more of an object oriented program and comes complete with object specification boxes for manipulation, as well as a full complement of all the drawing tools of an entry level draw program. Between the word processor, page layout, charting and drawing packages rolled into StandOut, you do get solid value, but some of us already have most of those capabilities in existing programs.

What didn't I care for in the program?

How do I import or create a presentation from an outline? Many presenters think that way, and Microsoft, Aldus, and Symantec agree, but not Letraset. StandOut's Tabs ruler is a scary thing, unlike any other I've seen. And why would a Letraset product not support Pantone Colours, even if getting them out of a film recorder is difficult? For charting, spreadsheets are provided in the program, but if you use another spreadsheet, like Excel you can't directly import, but have to go through the clipboard. This is slow and somewhat limiting. Anyway you get the picture.

Overall verdict: Nice concepts, poor execution.

Aldus® Persuasion™

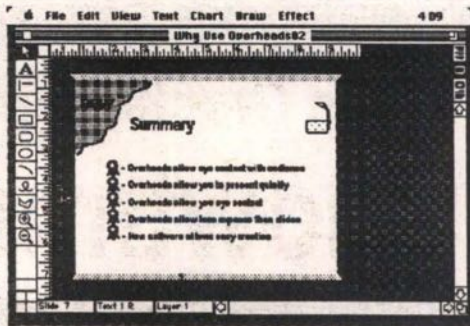
Even before you open up your first icon this is a very impressive package. These people spend for packaging and it shows! Included with the traditionally good Aldus manual are some special materials for this program. Sample slides for colours are included because what shows up on your MacII monitor is not necessarily going to be what comes back on the slide. Matter of fact it almost never will be. They also include a pamphlet called 'Seven secrets to success' in which they cover the simple yet important points about presentations you don't want to have to learn by mistake. I know this is motherhood stuff, but it bears repeating. The Desktop Reference flip book might be all some users ever need to produce their work.

Installation is typically Aldus, meaning good and automated, but you better get your hard disk cleaned up, as you will need 3.2 megs! Included in the install is an On-line help package which will benefit all users. The reason I say that is because you usually don't do presentations every day, so it is easier to get rusty than with a page layout program.

This program is based on the Outline and Template system, if you've used PageMaker you'll feel at home. In addition, these are templates that you would be glad to use, with a good selection of black & white and colour templates, along with tips for each template when you're in a hurry. And isn't that the whole idea behind these packages? Speed and Ease of Use. When you do the tutorial, (and of course, we all do the tutorials, don't we?) you will be surprised at the lack of steps between concept and hard copy. The tutorial is well outlined and covers a variety of features and methods.

So what did I like about Persuasion?

Aside from what I've already mentioned the inclusion of clip art that is well drawn, simply makes all kinds of sense, as most presenters aren't



artists. I can use my choice of outliners, the one inside Persuasion, More, or Acta, and for me this alone is worth the choice of Persuasion. The speed of creation and formatting is considerable and the program feels smoother and faster to respond than in StandOut.

Some of the features rival those in the mature MS-DOS presentation market. Slide Builds are supported, as they are heavily used in Business Presentations. A creative use of pop-up menus at the bottom saves you time for frequently used choices. Duplicating, Grouping and Ungrouping adds layout power beyond PageMaker. For example, for whatever object is selected, Duplicate remembers a sequence, and allows you to build a series of objects quickly with few keystrokes.

Most of the features in this program are useful ones, not merely there to fill up some tech sheet comparison with other programs.

What didn't I care for in the program?

Where do I go to get my slides produced? Because when you phone Aldus, they aren't sure either, although they were courteous and helpful. I've heard about the Mirus FilmPrinter and Aldus even includes some samples with the program to whet my appetite. Can I use a Mirus yet? Not in this city! Another teaser is the card that says they are developing a Chooser Level Driver. More VapourWare! At least PowerPoint's driver is shipping, stay tuned for the results.

Another program and yet another way to specify colour, this time with what is called a colour grid. Please have us learn one method to specify colours! Between Freehand, Illustrator, PageMaker, Quark, et al we have too many! Again on standardizing, the magnifying glass is too coarse. Why can't they standardize on an Illustrator type with its space bar commands.

I would like it if we had ruler guides ala PageMaker. Showing ruler lines is helpful, but a little less useful than ruler guides, especially when in close on something. You can tell when you like a piece of software, when you are reduced to talking about something the program does but you want it to do it differently, because it isn't what you are used to.

Overall verdict: If you are using PageMaker to produce your overheads, this is a major improvement. Persuasion is a solid choice for making transparencies, the slide production is still unproven at this time.

Steps in Using Persuasion

First decide what your presentation needs are, slides, overheads or paper handouts. Don't skip that first step!: You must know this before opening up your new file!

Decide whether to use an AutoTemplate or create your own format. Then enter the outline, and modify the outline. Here is where you change levels, order, level of detail, etc. Now you are ready to assign Master Slides, by using existing masters or by modifying existing masters to create new versions.

From here on you are in control of the look of the presentation by using layering to achieve effects, such as simulated animation with a build sequence in the slide show mode. Now also is the time to add graphic effects by creating text blocks that don't flow back to the outline, or placing existing paint, draw or EPS art.

If this sounds simple, you have the right idea because Aldus has produced a tool that recognizes that you don't have time to be a graphics pro as well as being in all those business meetings.

Summary

It was hard to admit to myself, but the Luddite had a major point. These programs probably won't sell in the quantities that they should. With one caveat, until the LaserWriter of slide producers is made, including full PostScript support, then stand back and watch the slides fly! But if you need overheads, you have to try Persuasion to believe just how easily a presentation can be produced.

Bruce Wright is the president of Business, Pictures & Words a Vancouver company specializing in desktop publishing and presentations. (688-5468)

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It all started with Pagemaker running on the early Macintoshes. Back then, putting out a publication using DTP was an exercise in frustration, compromise and patience; the Macintosh was slow and the program was lacking in many of the features that are considered essential for publishing.

That has changed dramatically in the last several years with, first, the introduction of Pagemaker 2, then with Quark's XPress program, which included many features Pagemaker lacked. Aldus then put Pagemaker 3.0 on the market, and now Quark has replied with QuarkXPress 2.0. The question is: Which is better? Which should you spend your money on?

Before I get into the differences between the two programs, let me first point out the similarities, of which there are many. Firstly, like any DTP program must be, they are both WYSIWYG (What You See Is What You Get), meaning that the arrangement of text, lines, drawings, shading, etc. that is on your screen will be what you get on paper when you send the file to the laser printer.

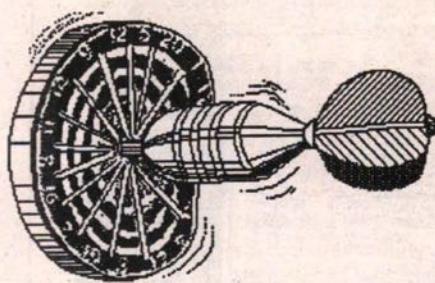
Both programs start out by showing you a blank "piece of paper" on the screen onto which you place your text, lines, etc. You may enter text onto the page either from the keyboard or by "placing" text which was at some earlier time typed into a word processing program such as Microsoft Word, Fullwrite Professional, or Word Perfect.

The text can be placed anywhere on the page and can be moved to a new location on that or other pages at any time. The length of the lines of text can be altered and the text itself can be changed by editing, increasing or decreasing the type size, changing the typeface (or "font"), boldfacing, italicizing, or changing various other formats.

The programs allow multiple page documents and text may be continued from one page to another.

In addition to text, various graphic elements may be created within each program including lines (vertical, horizontal, or at any angle), and boxes (square, rectangular, oval, or circular) which may be given gray or coloured shading. Like text,

Pagemaker 3.0 or Quark 2.0: Which One Hits the Mark For You?



Comparison Table

Features	Pagemaker	Xpress
Maximum page size	17" x 22"	48" x 48"
Type size range from	4 to 127 points	2 to 500 points
Type size increments	One point	.25 point
Horizontal character scaling	None	25% to 400%
Search and replace	None	Both characters & attributes
Superior mode(half-size superscript)	No	Yes
Leader character	Anything on keyboard	Anything on keyboard
Linespacing increments	.5 point leading	.001 point leading
Typesetting leading (baseline to baseline)	No	Yes
Box borders available	9	Unlimited
Line widths	8	.001 point increments
Line patterns	9	16
Box fill shades	8 pre-set	1% increments
Color support: Box and border	Same	Can be different
Irregular text wrap	Manually defined	Automatic irregular text wrap
Automatic to/from page numbers	Yes	No
Item placement	strictly visual	visual or numeric
Pasteboard for temp storage of items	Yes	No
Area fill patterns	8	None
Master guide changes reflected throughout document	Yes	No
Text starts	Anywhere on the page	Top left corner of box
Leading (line spacing)	Character level format	Paragraph level format
Select multiple graphic elements	Yes	No

these elements can be placed anywhere on the page and may be moved anywhere else at any time.

Other types of graphics — simple line drawings, complex, full colour, fully shaded artwork, and even photographs — that have been created with other programs can also be read in and placed on the pages. The graphics can then be re-sized and/or cropped.

When it comes time to print the document, both programs allow output onto all postscript devices. You may print in portrait (smaller width than height) or landscape (greater width than height) format, and both allow you to print "thumbnails", which are tiny representations of the pages printed onto as few sheets of paper as possible. For page sizes which are larger than the size of sheet that is being printed upon, "tiling" is possible, giving several sections or "tiles" of the page which, when pieced together, form the entire page.

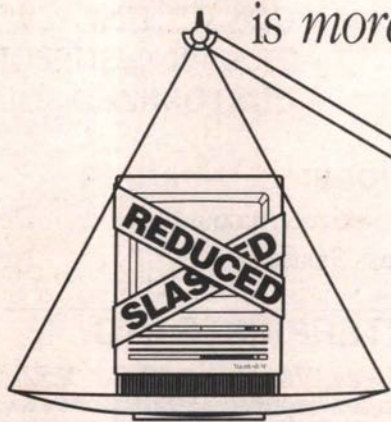
The differences between XPress and Pagemaker are numerous, but with the exception of a few major conceptual clashes, most are in the realm of fine tuning.

The most obvious difference between the two is one that creates a strong polarization between users of the two programs, but which, on close examination, is really quite superficial. In Pagemaker, text is held in "text blocks" which are the same width as the line length of the text, and are completely filled with text; it is like an envelope that clings tightly to the text. The block can be altered in width, which changes the line length of the text, and in height, displaying either more or less of the text depending on where the bottom of the block is in relation to the end of the text.

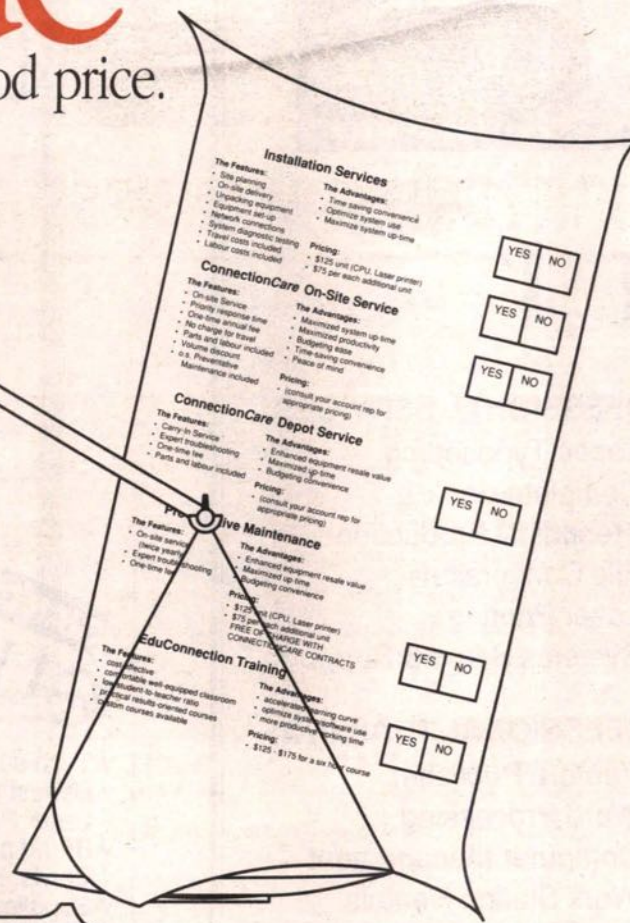
In XPress, on the other hand, text goes into "text boxes" which are of a defined height and width and which may be split up into as many as 10 equal width columns. The width of the box can be altered, thus changing the width of the enclosed columns and the line length of any text in the box, and a change in the height of the box is similar to the change in height of Pagemaker's

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text block, displaying more or less of the text. One significant advantage to the XPress text box is the ease with which the column widths and lengths of large areas of text can be changed. If, for example, you have decided to run an article in two columns across a space that is normally divided into three columns, only one change must be made — the number of columns within the text box. Using Pagemaker, on the other hand, it is a multi-step process involving width and location changes to several text blocks.

Similarly, if it is decided that an article should end one inch higher than originally placed, only one text box need be changed in XPress, while each of the three Pagemaker columns must be changed individually.

Another major difference between the programs is Pagemaker's "pasteboard". Surrounding Pagemaker's on-screen page is blank space. This space can be used to hold text blocks, lines, boxes, illustrations read in from other programs, in short, virtually anything. It is a handy spot to temporarily store elements that are not currently needed but may be wanted in the future on another page, for instance, or on the current page after a particularly tricky bit of design work has been completed.

There is nothing similar in XPress; every element — text boxes, lines, etc. — must be on a page. You can move elements around on a page, but you cannot take them off the page, and the only way to move an element from one page to another is to use cut and paste. But you must know which page it is going to before you can use this method.

Colour is becoming more and more important in the desktop publishing world, and XPress allows you more flexibility in the definition and output of colour.

XPress also allows user-defined frames for text boxes. This is a powerful feature that puts XPress far ahead of Pagemaker for use in a newspaper environment where advertisements are traditionally bordered with a wide variety of styles and border widths. Using a separate program supplied with XPress, it is possible to create an almost infinite variety of simple or complex bor-

ders which can be used at any width to border text or graphics. Pagemaker has nothing to compare.

The rest of the differences between XPress and Pagemaker are more fine tuning than anything else: XPress gives you more choices and therefore more control over how the various elements on the page are supposed to look and where they are to be placed.

For instance, when an irregularly-shaped illustration is placed on a page and the text is supposed to flow or "wrap" around it, XPress will do it automatically. Using Pagemaker, on the other hand, you must manually draw the irregular border around the illustration — it is possible, but it is a time-consuming and error-prone procedure.

When placing elements on a page, it is important to be able to grab the element and place it where it "looks good". Both programs will allow you to do this. But XPress gives you the added flexibility of being able to say that you want a particular text box or line or illustration to start *exactly* 1.375" below the top of the page and *exactly* 2.013" in from the left hand margin of the page. With Pagemaker, you must rely on the accuracy of your eyes. XPress also gives you more typographical control.

Other controls over the look of text are also more sophisticated in XPress. Pagemaker, for instance, will not allow text to be "scaled" (horizontally expanded or contracted). XPress, however, will allow characters to be contracted to 25% of or expanded to 400% of their original width.

XPress also contains more text editing capabilities, including a powerful search and replace function that allows you to search not only for specific characters or groups of characters, but also for text attributes such as typeface, size, boldfacing, etc.

My conclusion is that Pagemaker 3.0 and QuarkXPress 2.0 are very similar and either can be used in place of the other in most circumstances. XPress, however, does give considerably more design and typographical control for those who need or want it.

Cameron Smith owns Concinnital Communication Services, a computer-aided publishing, training and systems design company. (983-2249)

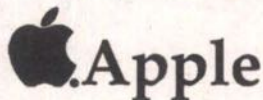
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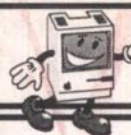
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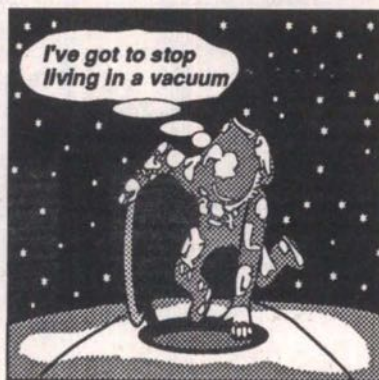


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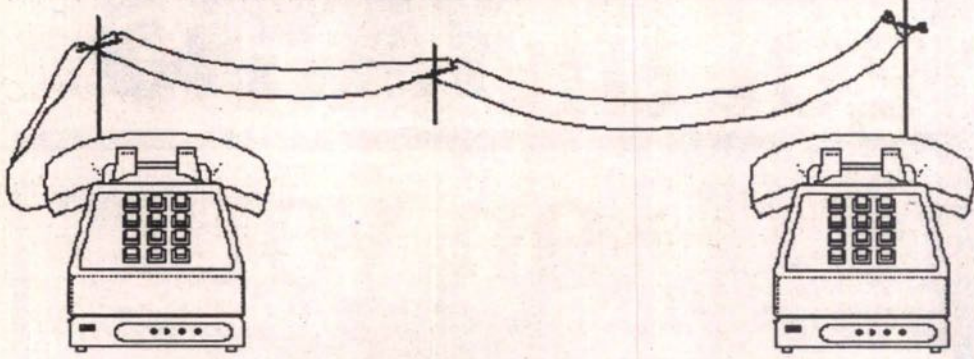
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Setting Up To Telecommunicate

As the deadline for switching to Teleplan II and doing billing on-line approaches for medical doctors in the province of B.C., we thought it would be appropriate to run this article on using a BBS or Bulletin Board System. Anyone with a computer, a modem and a telecommunications software package can access these rapidly growing communications forums.- ed.

by Mel Patrick

I have been running a BBS of one description or another since 1981 which was dedicated to the Radio Shack TRS-80 computer systems. In 1984 I wrote a new BBS which could support 16 separate topics (sections; or think of them as folders) each with their own message and files sections. Since I wrote the BBS before I even owned a Macintosh it should be obvious that it's not even running on a Macintosh. It's actually running on a Radio Shack TRS-80 Model 4. With only 128K, and a 20 meg hard drive it runs 24 hours a day, 7 days a week and allows 300, 1200 or 2400 baud communications.

The focus of this article is on how to use a BBS. Specifically mine. I have one section set up for Macintosh owners exclusively and I will be covering the menus and their related functions. Please note that the same principles will apply whether you are using a Macintosh or MS-DOS compat-

ible computer. My own particular BBS supports only TRS-80's and Macintosh computers, so the files on it may not be of much interest to people with IBM type computers, but the concepts can be applied to a large number of other BBS's. (For a fairly comprehensive list of BBS's in the Lower Mainland see our February issue.-ed.)

What is a BBS?

BBS or Bulletin Board System as the name suggests was primarily intended for interactive communications, i.e. messages from one person to another. The files section was actually just a freebee since most operators (called SYSOPS; SYSTEM OPERATORs) had some free disk space they allowed files to be sent (uploaded) to their systems, or you could receive (download) a file from their system.

The BBS program itself is usually written by someone other than the person who is using it, except in my case, and a version of one form or another exists for just about every computer ever made. From the Timex 1000 to the Macintosh there are BBS programs available. The nice things about these BBS programs is that they have been around for so long that a sort of standard has been established. Most are menu driven so calling a new BBS isn't always like starting over.

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What's In Store After The April Deadline?

As the deadline for electronic claims submission draws closer many (of you) are still beset with various doubts and some confusion in making a decision that is going to have considerable impact on important aspects of your practice.

While complying with M.S.P.'s requirements to have your payments processed, you want to ensure that this area is handled as efficiently and accurately as possible.

Other considerations include just how well your staff can fit a new system of billing into their daily work routine. You may also be thinking of the additional tasks that can be handled by having an in house computer system.

Then there are other billing options - time sharing or service bureau, where your involvement is limited.

Add to all this the dilemma of buying or leasing and wondering if you're making an investment that will last for the long term.

To help you along this difficult path there's a minefield of advice being proffered, some qualified, some from people who have very limited experience within a medical office. There are surveys and reports from various consultants with varying opinions and packages in the marketplace.

New vendors have mushroomed to take advantage of the opportunity. They're competing with the vendors who managed to survive and prosper before practitioners were volunteered for automation. It has been estimated that only 15% of the current vendors will be around in 1990 - so much for the long term. Just as with people, computers and software need a tender loving hand to nurture them, and help them grow to meet new demands.

Bargain basement, furniture store sales tactics abound ... Discounts, free financing, special freebies, free support, color and graphic dependent software, "group" purchases and big showy advertising. Have they located a supply of free labour and office space? That solves a lot of problems when you're trying to stay in business. Caveat Preemptor!

There is a privately owned company located in Vancouver for 4 years which has been quietly working away. More than 450 practitioners have successfully had installed a software program called "The Doctors System". This system is a product of a com-

pany committed to providing software solutions for health care providers - that company is Dialog Medical Systems.

Their philosophy is to provide the kind of solution that will benefit their clients in several ways and balance quality with cost-effectiveness.

The software was developed by people who thoroughly understand the different demands of various practice types - many options are available within the program to tailor it to the individual office. Dialog feels that the program should allow the office staff to carry out their work in a similar way to what they are used to.

In addition to being very flexible in this way, the program runs both under DOS for single user systems as well as XENIX, an operating system that works in a multi user, multi tasking environment. This expansion feature offers to users the option to have their system grow to meet future needs and/or take advantage of potentially possible feats of wizardry such as linking up with hospitals, labs, pharmacies and other health care providers.

To ensure that their clients will get the best measure of value from their system, Dialog has developed a comprehensive and effective support program. It starts with documentation and a training program that sets no limits. Easy to access "Hotline" support is provided by technical staff right in the office and is available for extended hours. A system of "remote diagnostics" was developed to reduce downtime.

The support program also includes ongoing software development and testing. Enhancements and program changes are provided on a regular basis to clients and the programming staff welcome suggestions from their users.

Dialog recently acquired the rights to software which expands their client sites to include 60 retail and hospital pharmacies and 200 dental offices.

Over the past few months there has been a lot of movement within the industry, Dialog has maintained these preset mandates reflecting their commitment and stability. If their ever growing client base is any indication, they would seem most successful.



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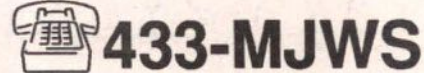
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Why BBS's Look So Dull

Those of you who have called a BBS probably never received any "fancy" graphics or anything. You probably never even thought about it. The simple reason for this is that if graphics were sent, what happens if a different computer without those graphic capabilities calls? Graphics would show up as a string of incomprehensible characters on the screen of a different type of computer. So BBS systems tend to be very general in nature for the most part. IBM systems tend to move slightly away from the normal and make use of their ANSI graphics and cursor positioning. If you have VT100 emulation available on your terminal software select it if you plan on calling an IBM board. While it won't be letter perfect it will work a lot better than without it.

As you can see, what the BBS is running on is really immaterial. For the most part the host computer (the one you are calling) is transparent and something that shouldn't concern you at all. Don't imagine for a second that the largest BBS systems (networks) like Compuserve or GENie use the same type of computer as you are when you call in. Most of these big services run on mainframes in order to deal with the volume of calls.

What You Need to Go Online

To access a BBS you need a modem and if you haven't bought one yet, it would probably be a good idea to purchase a 2400 baud model. A rule of thumb for through-put is the baud rate divided by 10. Therefore a 300 baud modem can effectively send/receive 30 characters per second. On the other hand a 2400 baud modem can transfer 240 characters per second. Note that this is just a rule of thumb and will depend quite heavily on what terminal program you are using and the speed capability of the host, or the BBS in this case. While it may not matter to you at what speed the host runs at, consider for a moment two major networks, Compuserve and GENie. At 1200 baud Compuserve works around the 63-80 characters per second, GENie at the same baud rate works out to about 103. Since cost is about the same on either network at 1200 which one are you going to get your monies worth out of? The whole point of the matter changes when you are being charged for

calling, you want to go with the best software, at the highest baud rate with the fastest host.

So first you need a modem. Preferably a 2400 baud. You don't have to buy a modem from any particular dealer since just about any modem made will work just fine on your computer (with the proper cable). As well, you should get a model which is 100% Hayes compatible (in the event you can't afford a real Hayes). Many modems purport to be 100% Hayes, but they aren't really. A Hayes modem doesn't have dip switch settings (these are little switches usually in a row of 8 or 10 which you use a ballpoint pen to set default power up conditions). USRobotics 2400 falls into this category. It's close but no cigar. You can generally expect to pay around \$200-\$250 range for 2400, \$99-\$180 for 1200 baud. The low 300 baud modem shouldn't even be considered in most cases. The speed is just too slow to be useful.

You also need a cable. Your local computer dealer should be able to supply you with one of these and you can expect prices to vary a great deal so phone around before you plunk down the bucks.

If you got a modem with DIP switches and just can't figure it out, ask your dealer. The manuals are not really meant to be confusing but I haven't seen one yet that outlines it in terms that the average person can understand.

Telecommunications Software

What's left? The software. This is the part that allows the Macintosh to communicate with the modem which in turn "talks" over the phone lines to the host. There are more than enough selections for getting a terminal program. There are a number of shareware options available to get started in this area. Once you see if you are going to become a "power-user" you can spring for the bigger bucks and get a more feature laden program. To start though I usually recommend a simple shareware program.

One note of concern would be if you have B.C. Tel's feature of "Call Alert" on your phone. For the most part you can forget about using a modem unless you get a separate line. Call alert interrupts the call in progress long enough to cause your modem to think it has been disconnected and it will hang up. Which is not desirable if you are

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PATIENT CONTACT							
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trying to receive (download) a 75K file. At present we have no way to disable the "feature" as some of the U.S. phone services do (they can use *70 as a prefix and it will be disabled for the one call) so you should be aware of it.

Software Setup

So now you have all the materials and as the old saying goes, "what do I do now?". Well, hopefully you haven't tried to digest too much of your new modems manual or you'll have probably given up long before now. I am going to use FreeTerm in my article since it is basically very simple and unless you need the more powerful features of the high class commercial software it should work for you very nicely. The principles are the same for most programs.

Make sure the modem is powered up and connected to the phone line. Load your communications program and we'll get started.

The first thing to do is select your terminal options. We will enable some of the most common parameters in use with almost any BBS. Even if you don't have FreeTerm these parameters should be available on your terminal program.

Speed	<input type="radio"/> 300	<input type="radio"/> 1200	<input checked="" type="radio"/> 2400
	<input type="radio"/> 4800	<input type="radio"/> 9600	<input type="radio"/> 19200
	<input type="radio"/> 57600		
Data bits	<input checked="" type="radio"/> 8	<input type="radio"/> 7	
Stop bits	<input checked="" type="radio"/> 1	<input type="radio"/> 2	
Parity	<input checked="" type="radio"/> None	<input type="radio"/> Even	<input type="radio"/> Odd
Duplex	<input checked="" type="radio"/> Full	<input type="radio"/> Half	
Port	<input checked="" type="radio"/> Modem	<input type="radio"/> Printer	
<input type="checkbox"/> Prompt for port at startup			
<input type="checkbox"/> BS -> DEL		<input type="checkbox"/> LF after CR	
<input checked="" type="checkbox"/> Hon/Hoff		<input type="checkbox"/> CRC Hmodem	
<input checked="" type="checkbox"/> MacBinary Hmodem		<input type="checkbox"/> Fast-Track Hmodem	
<input type="button" value="Make Default"/>		<input type="button" value="OK"/>	

The window you will get is shown above. This is pretty much a standard communications window and, as mentioned, almost all the terminal software has these options.

I'll briefly explain the selections. Speed is the not the speed of your modem, but rather the speed of the host/BBS/network you are planning on calling to the maximum limit of your modem. For example to call my BBS if you had a 1200 baud modem, you would select 1200. If you had a 300 baud modem you would select 300 and the same for 2400. However if you were going to call a system which only supported 300 or 1200 you would have select 1200 (or 300 but you normally always select the highest baud rate possible).

Data bits are almost all set at 8 to ensure that binary type files (another name for the files we generate or applications we use every day) can be uploaded (sent) and/or downloaded (received). If you were only working with text, such as with a university computer system, you could use 7 bits (the whole computer alphabet is attainable in 7 bits).

Stop bits, unless you're really into heavy communications this should be set at 1.

Parity is normally NONE. At least in 99.9% of the cases. Compuserve can be used with a setting of 7 Data Bits, 2 Stop bits and Parity Even. However you won't be able to download (receive) any files from them.

Duplex isn't really duplex. It's a misnomer that has managed to hang around long enough so that every one got comfortable with the label and misuse of it. What it really means is ECHO. Normal communications works like this. In FULL Duplex (ECHO OFF) you call a remote BBS (or your friend with another modem) and establish a connection. When you press a key on your keyboard it goes out to the remote, which in turn should echo it back to you. When you receive your character back it is displayed on your screen. Sort of like proof reading while you are typing. If the character displayed wasn't what you typed you know there is an error. Visual feedback. Half Duplex (or ECHO ON) waits 'til you press a key and then sends it out the modem to the remote AND at the same time displays it on your screen. Guess what happens if the remote system sends back your character as well? If you said you got double lleetteerrss (like that) you're 100% correct.

Port is pretty much up to you. Considering the amount of add-ons I have hanging off the back of my Macintosh I need about 5 or 6 ports. I usually use the modem port for the modem (a novel idea). On an IBM or compatible this would refer to your

Comm 1 or Comm 2.

XON/XOFF. These are just about industry standards now. What they really mean in plain English is that when you are downloading (receiving) an ASCII (text) file, your computer can inform the remote that its memory storage area is full by sending an XOFF (transfer off), after which it will write the memory contents to disk and send an XON (transfer on) to inform the host it is ready to accept more information. The two computers will interact like this just fine without your intervention. In computerese we call this "handshaking".

LF after CR. Ah ha, more abbreviations. LF is line feed and CR is carriage return. So what's the difference? A carriage return will home the cursor to the first position on the current line. A line feed will cause the cursor to advance to the next line. Most BBS systems can handle either so setting this is not important. If you find you get information being printed all on the same line when you are typing it in, try checking this box.

CRC Xmodem. This is only used when you are going to upload (send) or download (receive) a file. It provides automatic re-transmission of any blocks (a file is always split into blocks for transfers) in which there are errors detected. This ensures that you will get what was sent.

Fast-Track Xmodem. This is not a designated protocol but a variation on xmodem. In effect it says that you are going to try to go as fast as possible and worry about errors later. Usually if you elect to use this type of transfer any error at all will abort the transfer and you'll have to do it all again. Hence you might as well have done without it in the first place.

Once you have all the items set as shown, use Make Default or save the options and you shouldn't have to set them again.

About now you're either completely confused or just asleep. Don't worry about those settings too much. Once they are made you probably won't have to ever look at them again.

Dialing the Ruddy Thing

Good grief! There's more? Yes, one more minor little item. Since you hopefully bought an auto answer auto dial modem wouldn't it be nice if you get the computer to dial the number for you? In your modem manual there is enough information that you could dial it the hard way, but heck, isn't that what you got a computer for?

Select the Terminal Menu again only this time use the Dial Setup option as shown below.

The phone number shown in the dialog box

Phone Number:	<input type="text" value="15947398"/>
Phone Type:	<input checked="" type="radio"/> Touch-Tone <input type="radio"/> Pulse
<input type="button" value="Make Default"/> <input type="button" value="OK"/>	

(figure 5) is my BBS number (and has been for 9 years). Type in the number you want to call and select OK (or make default if its the main system you call). While other programs will allow more than one number this one is fairly simple and almost everyone should understand it. The last item you have to select is what kind of phone line you have. If you're not sure, you can never go wrong with Pulse. Remember too, if you're calling long distance to get a BBS make sure you prefix the number with a 1. In our example here that would be 15947398.

Some programs will require you to type in the prefix ATDT or ATDP. This is standard Hayes modem talk. It tells the modem "Hey wake up sleepy modem, here comes a phone number and it is for a Tone or Pulse line."

That's it. Well, at least from the terminal standpoint. Considering the amount of information which I've given here is only the barest, and using a simple program to provide illustrations, you can imagine what you would have faced had you gone out and bought one of the commercial programs. I have a friend with VersaTerm Pro and after almost a year he is still trying to figure out what some of the functions do. At this point he does what most of us in that position would do. He doesn't use them.

Me! Patrick is SysOp of his own BBS. He is also on the Executive of the MacWest Computer Society. This article was originally published in the MacWest Memo.

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 PostScript Prog. for DTP, Mar. 4-18 **\$195**
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 Intro to DTP, Mar. 1,13,29
 Pagemaker for IBM, Mar. 3,6
 Pagemaker for IBM Intermed., Mar. 17
 Pagemaker for IBM Newsletter, Mar. 27
 Intro to Ventura, Mar. 21
 VANCOUVER DESKTOP PUB CENT 1150 Homer 681-9161
 Ventura Jr. Lev. March 30 **\$159**
 Ventura Sr. Lev., March 31 **\$159**
 VANCOUVER SCHOOL BOARD 736-7241 Call for dates
 DTP: Ventura or Pagemaker John Oliver **\$135**

VEPA Two presentations concerning the latest computer
 advances to assist Desktop Publishers, March 6, 1989, 6:30 p.m.
 doors open 7 p.m. start, B.C. Club, 750 Pacific St.

GENERAL INTEREST

BUSINESS COMPUTER CENTRE, Ste. 104 - 513 Ahbau St.,
 Prince George V2M 3R8 561-0276.
 Intro to Office Automation
 MS-DOS & Your PC., **\$129**
 OMNI PROF. COLLEGE., 300-905 W. Pender St.682-6664
 Intro to PCs & DOS, Mar. 13,29 **\$160**
 Hard Disk Management, Mar. 20,21
 UBC CONTINUING. ED. 5997 Iona Dr., Van. 222-5276
 Effective Project Planning:
 A Hands-on Workshop
 IBM Education Centre, 701 Georgia **\$375**

THE MEDICAL OFFICE

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 Medical Software Training (call for dates) **\$195**
 MEDICAL SOFTWARE USER GROUP Kevin Brawley 736-
 5039 \$35/year membership:

INTEGRATED SOFTWARE

DRAKE TRAINING 100-1111 Melville 669-8789
 Symphony Spreadsheet **\$175**
 ONCOURSE LEARNING 400-1190 Melville 640-7201
 Using Microsoft Works, March 9,10,30,31

LOCAL AREA NETWORKS

ACCSYS COMPUTER MANAGEMENT. #1500-355 Burrard
 Network Mgmt., **\$130**
 COMPUTER EMPIRE TRAINING, 3031 Main 879-4162.
 Networking Sys Instal. (call for dates) **\$245**
 COMPUTERLAND 1035 W. Pender 640-6900.
 NOVELL NETWORK MAR. 13
 NOVELL SUPERVISOR, MAR. 14,15
 DRAKE TRAINING 100-1111 Melville 669-8789
 Novell Sys Mgr /End User **\$415**

CONVENTIONS AND COMPUTER SHOWS

HYPERMIDIA Two days of interactive information hands on
 MIDI training seminars. March 5-6, BC Enterprise Centre 750
 Pacific Blvd. Contact: Roland270-6626
 VANCOUVER ISLAND COMPUTER & COMMUNICA-
 TIONS SHOW Victoria Feb 28-Mar. 1, Victoria Conference
 Centre 433-5121 Helene Levasseur
 DATA COMM II, Vancouver March 2-3.
 CAREERTRACK MANAGEMENT SKILLS FOR
 TECHNICAL PROFESSIONALS, March 14, Vancouver,
 Ramada Renaissance Hotel, 1733 Comox Street.
 RMS SYSTEMS INC. ACCOUNTING WITH PICTURES,
 Vancouver B.C. #708-1155 W. Pender St. March 14 6 p.m.,
 March 15 9 a.m., March 23 9 a.m.
 IEEE COMPUTER SOCIETY VIDEO LECTURE, March 22,
 Vancouver. "Knowledge Based System Application" Contact
 Chris Scholefield, (604) 278-3411.
 CompuFind, "Doing it Right the First Time." An approach to
 buying a computer, March 14. Contact Angela Rawson 669-5588.

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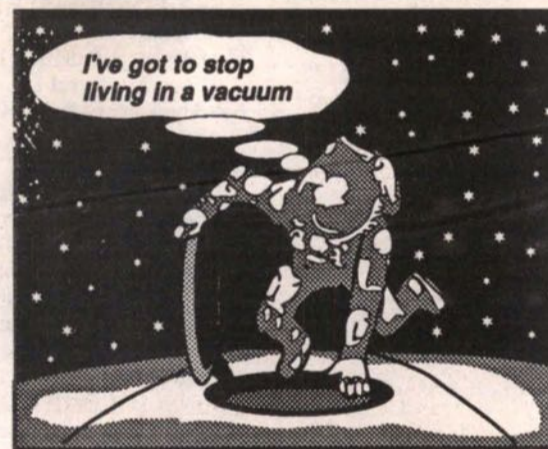


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Basics of Micro-Computers L. II, \$185

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Microsoft Excel with Spreadsheets, Integration of Charts and

Databases with Advanced Spreadsheet Concepts using

Microsoft Excel, Programming in Microsoft Excel with

Macros, Publishing Skills with Aldus PageMaker, Advanced

Publishing Skills with Aldus Pagemaker, Publishing Skills

with Letraset Ready Set Go!, Publishing Skills with Quark

XPress, Mastering Claris MacDraw II, Mastering Adobe

Illustrator, Mastering Aldus Freehand, HyperCard: The

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Macintosh Intro, \$45

ONCOURSE LEARNING 400-1190 Melville 640-7201

SFU, 515 West Hastings St. 291-5100 or 291-5077.

Intro. to Pagemaker (Aldus), Mar. 11,18 \$175

UBC CONTINUING. ED. 5997 Iona Dr., Van. 222-5276

Intro to Macintosh \$145

VAN SCHOOL BD, 1595 W 10th Ave., . 736-7241.

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PROGRAMMING & DEVELOPMENT

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Micro Processing II BASIC I \$48

Data Proc. 2: BASIC \$65

CARIBOO COLLEGE, P.O. Box 3010, Kamloops, 1-828-5000.

Electronics, Intro.

COMPUTER CANADA CORP., 105-3850 Jacombs Rd.,

Richmond, B.C. 278-5115.

Programming, Mar. 21,23

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Microcomputer Electronic Tech. Call for dates

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Computer Controlled Systems Seminar

Interrogator I, Mar. 10-17

Computerized 4-wheel Alignment

Seminar, Mar. 31

Placer Mining Tech. Update, Mar. 2-9

Intro. to Microcomputers, Mar. 6-Apr. 10

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1-2-3 MACRO PROGRAMMING MAR. 31

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Lotus 1-2-3 Level 2, \$160

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Adv. Lotus 1-2-3, Mar. 3

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MS-DOS & Your PC,
CAPILANO COLLEGE 2055 Purcell Way, N. Van 984-4901
Basics of Micros, DOS 1&2 \$185
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CARIBOO COLLEGE, P.O. Box 3010, Kamloops, B.C. (604)
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Computer Syst. Operations & Management
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Computing

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Adv. DOS, March 8

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Intro Microcomp, MS-DOS Essentials \$169
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Comp. Solutions for Small Bus. \$179

COMPUTER PLACE 860 Burrard St, 299-3003
MS/PC-DOS Level I, \$179

COMPUTER STATION 2130 Burrard Vancouver 732-8621
Intro to DOS, \$115

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PC LITERACY, MARCH 28
DOS LEVEL 1, MAR. 1,10,14,23,29
LEVEL 2, MAR. 17

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Intro to IBM PC, \$80
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DRAKE TRAINING 100-1111 Melville 669-8789
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Adv. DOS, Intro to DOS, Novell System Manager,
DOPPLER 101 W. 5th, Vancouver 875-0261
Intro: Micros & DOS Call for dates \$175

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Intro to Computers, DOS Lev 1&2 \$175

GUILDFORD SEC. SCHOOL, 14577-106A Ave., Surrey, B.C.
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Intro. to IBM-PC, \$80
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Intro to Micros
Managing Your Hard Disk, \$75
INTRO TO MS-DOS, Mar. 14-21

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Intro to PCs/DOS, Adv. DOS \$175

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Intro to PCs & DOS, Hard Disks \$100

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Keyboarding,
Using DOS, Mar. 7, 23
Applying DOS, Mar. 15,30

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WordPerfect \$149

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Word, March 16

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Level 2, Mar. 16,27
Microsoft Word-Level 1, Mar. 2,3,15,16
Microsoft Word-Level II, Mar. 23
DisplayWrite-Level 1, Mar. 22
DisplayWrite-Level 2, Mar. 1

MultiMate-Level 1, Mar. 17
MultiMate-Level 2, Mar. 31

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WordPerfect Intro, Mar. 18,15,29
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Using Multimate, Mar. 2,3,13,14,30,31
Advantage II, Mar. 2,3,13,14,30,31
Using MS Word, Mar. 16,17,28,29
Advanced Topics MS Word, Mar. 1,15
Word Perf. Bridge 4.2-5.0, Mar. 13,31

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MS Word Lev. II, Mar. 30
Multimate Lev. II, Mar. 1

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Adv. Wordprocessing, Mar. 21-Apr. 11

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Intro to Wordperfect 4.0, Mar. 7,8,11,13,15,19,27
Intermed. Wordperfect, Mar. 1,10
Intro to MsWord, Mar. 1,15
Intermed. MS Word, Mar. 20
Adv. Ms Word, Mar. 27

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Display Write 4, MSWord 4.0, Multimate, WordPerfect

USER GROUPS:

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Apples BC Computer Society Lorne 467-6062.

Apple II User Group Meeting BC Apple Society, Burnaby
Rugby Club Kiyu Masuda 437-9935

Apple III SIG Monthly Kiyu Masuda 437-9935

Astute — Atari St. 1st Tues. of month 7:30 Hastings Comm.
Centre. Membership \$15. Dave Whalley 942-8301.

Beaver Valley Commodore Club Meets first Tues every month
at Montrose School Library. Call John Vink 367-6426

B.C. Unix User's Group meets 4 times a year. Call George
Pajari 925-2555, 2545 Queens Ave, West Van V7V 2Y9.

Clipper Developers 1st Mon SFU 873-0747

Commodore Club 1st Tues Sunset Comm Cent 738-3311

Computer Aided Ministry Society of Canada. March 2nd —
Camsoc meeting, 7 p.m. at Alta Vista Baptist Church, 7175 Royal
Oak Avenue in Burnaby (one block South of Royal Oak Station.)

Data Processing Management Association, DPMA holds
regular dinner meetings the third Tuesday of each month at the
Stanley Park Pavilion. Next meeting: March 21, 5:30 p.m. For
information call Gail Nichols 873-3411.

Discovery Enterprises Inc. Assessing Industries, Markets,
Segments and Niches, March 23, Discovery Park, main floor
meeting room, 3700 Gilmore Way in Burnaby, 12:15 p.m. to 1:45
p.m. A sandwich lunch will be provided by Discovery Enterprises
Inc. Call Jo-Ann Haywood 430-3533.

Independent Computer Consultants Association Ste. 400,
1190 Melville St. Van., B.C. 682-2747.

Kaypro User Group Vancouver Portable Computer Club 3rd
Monday at Kwantlen College Richmond (MS-DOS & CP/M)
271-1519

Mac User Group Meeting BC Apple Society, WCB Building,
6951 Westminster Hwy 437-9935.

MacWest Computer Society Box 1328, Station A Surrey, BC, V3S
4Y5 574-3813 General monthly meeting, 7:00pm - 2nd Wednesday
each month First Byte meeting, 8:pm - 3rd Wednesday each month
Room# 201 or 203 Kwantlen College Tech. Centre 13468 - 77th Ave
Surrey, BC Contacts: Bill Hall, President - 524-3561 Ron Haidenger,
Programs Director - 574-3813

Maple Ridge Computer User Group
Second Tues of every month M.R. Sr.Secondary School 7:30

PM, John Brohman 463-9318

New Apple Alliance, May Chow 224-9199. Free

NEC APC Users Group Bi-monthly Lee 980-5825

North Am. Amstrad User's Group. 65-13880 - 74th Ave,
Surrey V3W 7E6 597-0881 R. Scott

Novell Netware Users Peter Whitelaw 669-8789

Pacific Information Exchange, P.O. Box 67366, Station O, Vancouver, V5W 3T1.

Port Coq. Computer Club Commodore Amiga & IBM 1st and 3rd Tues 7:30 Poco Rec Cent 2100 Wilson Ave 942-4286

Tandy 1000+ Club Meets 2nd Mon. 7pm Kwantlen College, Newton Campus, Rm 209 or 211. Len Boscoe 574-5419

Sur-Tandy 1000+ Club Kwantlen College, Newton Campus, Room 201, 13468 - 77th Ave. Surrey. Third Tuesday of each month. Next meeting March 21.

The New Apple Alliance May Chow 435-7609 last Saturday of month in Kitsilano Neighbourhood House.

TI Computer Club Texas Instruments Computer Club meets 2nd Wed. of each month, at 11339, 84th Ave., North Delta., Hillside Boys Club, Attn: John Auperly.

Trace (Richmond Atari Club) Thompson Comm. Centre Linus Lane Richmond, 272-5789 1st & 2nd Monday 7:30-9:30

Vancouver Electronic Publ. Assoc. Box 24776, Van 875-0677 First Monday of the month, BC Club, Enterprise Cent, 750 Pacific Blvd S. This month PC Illustrator from Adobe March: Trends & Directions. Mac SIG 683-1599 2nd Wed, 1035 WPender

Vancouver Netware User's Group Les Lebbrant 275-8684. Meets 1st Mon of the month.

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Van. Sinclair Users Group Supports all Timex-Sinclair computers. 2nd Fri. Killarney Comm. Cent., 49th & Rupert president Gerde 931-5509

Vantari P.O. Box 3614 Main Post Office, Vancouver, B.C. V6B 3Y6. Judy Harcus 873-1941; Don Hatch 433-8055; Second Wednesday at Hastings Community Centre, 3096 E. Hastings.

Wang System Users 736-8841 ext 227 J.P. Doiron
99 Users Group Every Thurs. 7-10 pm, Cameron Rec Cent., Bby. Ron:522-2598. 1st Thurs Games, 2nd Thurs General 3rd Thurs Tutorials 4th Thurs Copying Prog.

Newsbytes Continued from Page 19

Sun Dominates Japanese Workstation Market

TOKYO, JAPAN, 1989 JAN 23 (NB) — Seiko Instruments has begun marketing two series and four models of engineering workstations, receiving its OEM, or original equipment manufacturing, supply from U.S.-based Sun Microsystems. Sun's workstations have been sold through its general agent in Japan, C.Itoh Techno Science Co., and a total of seven companies are receiving an OEM supply from Sun, including Toshiba, Fujitsu, Nippon Steel and Fuji Xerox. Seiko Instruments has been receiving a supply of SUN 3-60, 3-260, 4-110 and 4-260, to resell these under the name of SN-3060, SN-3260, SN-4110 and SN-4260 with additional value, such as the graphic display GR series and graphic devices, software, and so on. The price range of these products will be from 1,348,000 yen or \$10,370 to 7,199,000 yen or \$55,377.5. Meanwhile, Seiko Instruments is developing a graphic workstation and a high-end network server, using Sun's SPARC chip technology. (Naoyuki Yazawa/1989124/Contact: Seiko Instruments Inc. 03-682-1111)

Unix International Releases Operating Plans

NEW YORK, NEW YORK, U.S.A., 1989 JAN 31 (NB) — Unix International has released information on its organization and relationship with AT&T. Donald J. Herman, the organizing chairman, explained that the charter and purpose of the organization is to ensure the integrity of Unix System V and help plots its future development.

Unix International is expected to manage the definition process of Unix System V, while AT&T will actually develop the product and strike license agreements with the Unix community. Member firms include Amdahl, AT&T, Concurrent, Control Data, NEC, Phoenix Technologies, Prime Computer, Sun Microsystems, Texas Instruments, Toshiba, and Unisys.

OSF To Open Research Center In Japan

TOKYO, JAPAN, 1989 JAN 27 (NB) — The vice president of the Open Software Foundation [OSF], Donald O'Shea, visited Japan January 26 and announced that the OSF will establish a research center in Japan. OSF has a research center in France and provides funds for corporate research. O'Shea discussed the proposal with top university professors, but details of the discussions are not expected until the end of the summer.

Xerox Joins Two Industry Groups

STAMFORD, CONNECTICUT, U.S.A., 1989 FEB 8 (NB) — Xerox announced that it will become a member of Unix International and the Open Software Foundation [OSF]. The two industry groups were created last year in an effort to promote a unified, compatible Unix operating environment.

The moves are part of the new plan being unveiled by William C. Lowe, executive vice president, Xerox Development and Manufacturing, to try and push the company into the forefront of Unix computing. Lowe was formerly at IBM.

Lowe believes that supporting these Unix industry standards will help the company compete effectively against Unix mainstays like Sun Microsystems and AT&T, and ultimately offer benefits to Xerox customers.

Multuser DOS Server Offered By Coconet

CORAL GABLES, FLORIDA, U.S.A 1989 FEB 6 (NB) — Coconet has announced the first true DOS/Unix server that allows true multiuser and multitasking in a MS-DOS environment.

The product is a plug and play system that is completely transparent to the DOS user, and is NetBIOS compatible. According to the company, this is the first time that DOS users can have true multiuser, multitasking so that several users can access a single file via a single application at the same time. The Unix shell that runs the system provides all data security for the DOS users, the company explained.

Unix International And X/Open To Cooperate

TOKYO, JAPAN, 1989 FEB 8 (NB) — Unix International has won the support of X/Open in its fight against the Open Software Foundation to standardize the Unix operating system.

According to Unix International Chairman Donald J. Herman in Tokyo, Unix International will closely cooperate with X/Open and has agreed to develop an operating system which is fully-compatible with both X/Open's Common Application Environment and AT&T's Unix System Version 4.0.

Herman also announced that Unix International will establish an Asian-Pacific headquarters in Tokyo by April. Eleven Japanese companies, Fujitsu, Toshiba, Oki, NEC, Fuji Xerox, Richo, Omron, Nihon Unisys, Nihon Sun Microsystems, NCR Japan and Prime Computer Japan, are collaborating to establish the headquarters.

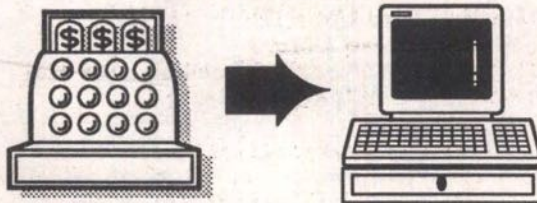
Computer Associates

Introduces Software Architecture

NEW YORK, NEW YORK, U.S.A, 1989 FEB 15 (NB) — Computer Associates has introduced the CA Application Construction Environment, or CA-ACE, a software architecture, that the company claims will provide a framework for applications development in the next decade.

CA-ACE spans hardware platforms, operating systems, and application types, and is designed as a strategic development architecture that will safeguard customer investments in current technology while providing portability to new platforms and industry standards.

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Venerable Shareware Word Processor Gets An Upgrade

PC-WRITE Version 3.01

PC-Write has probably been the most popular SHAREWARE program of all time. The latest release by Quicksoft, Inc. will definitely enable them to maintain this status, and undoubtedly add to their huge following. PC-Write is a very easy word processor to learn and use, and comes complete with spell-checker, on-line help, and many powerful commands for the experienced user. PC-Write stores files in ASCII, and therefore makes an attractive text processor for programmers.

The newest release, version 3.01, comes with all of PC-Write's simplicity in commands and adds many of the features required for today's word processors. PC-Write has increased size limitations from 64K to DOS memory. Version 3.01 has added column formats and features such as 'box' marking, move, copy, and delete for columns. The improved status line now indicates line and page number. New integration with print modules improves the printing procedures.

PC-Write supports over 500 printers, and up to 22 fonts, as well as cartridge and soft fonts on laser printers. Proportional fonts can be aligned and microjustified. Dot commands enhance print-out and templates. Index creation, footnotes and endnotes are all available. If DOS memory is inadequate for your needs (i.e. 1500 page novel or manual), simply write chapters, and link them for printing, spell-checking, or search and replace. Mail merging capabilities are a must, and PC-

Write hasn't forgot them either. You can personalize letters by adding lines as required during printing.

Tandy 1000, PCjr, and PS/2 keyboards are supported. Most Wordstar control keys are supported, macros, foreign characters, line drawing, box frame, and bookmarks are all found in PC-Write V3.0. The spelling checker can be customized to suit your particular requirements, and will check as-you-type or complete check when you are done. Words not found in the supplied dictionary can be added, or PC-Write will supply 'sounds-like' for you to choose from.

PC-Write V3.01 is available from SHAREWARE outlets, but be sure to ask for version 3.01. Some suppliers may still be distributing version 2.x. Some SHAREWARE outlets may distribute 'Registered' software saving you the hassles of ordering direct from Quicksoft, Inc., 219 First Ave. N #224, Seattle, Wa 98109. SHAREWARE prices will vary by distributor (up to \$25.00 for the three disks). Quicksoft Registration price is \$89.00 US for disks, manual, support for one year, and two free updates.

Gord Simmonds is the owner of SIM-COM Services (585-2326), a company in Surrey specializing in the distribution of SHAREWARE products.

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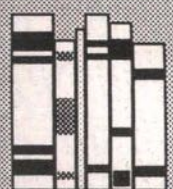
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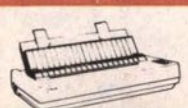
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