THE MAGAZINE FOR PC BEGINNERS • \$4.50

WING COMMANDER

3-D Space Combat Simulat

April 1991

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LIGHTSPEED 400P A4 HAND SCANNER (right)

The LIGHTSPEED A4 scanner is a hand held or document feed unit that can easily scan the full width of an A4 page. It is dot selectable, from 100 to 400 D.P.I. in increments of 10 D.P.I. It handles line art and graphics with ease as it has four selectable dither patterns plus a black and white line art mode. Pop the LIGHTSPEED on top of the motorised 10 page document feeder, and it is no longer a hand scanner. The document feeder allows you to stack up to ten pages at a time, and it will scan these through at a consistent pace for incredible accuracy. It is supplied complete with Lightpaint image editing software and Readlt! O.C.R. software for converting your scanned images into pages of text without

LIGHTSCAN 200H MINI HAND SCANNER

re-typing! The 400P can also be supplied with Omnipage.

FROM

There has never been a neater, more economical way to move into the exciting world of scanners than the LIGHTSCAN 200H. It can scan both grey patterned and line art diagrams at 200 dots per inch. It is supplied complete with Lightpaint image editing software. Can also be supplied with ReadIt! O.C.R. software.

LIGHTSCAN 400J HAND SCANNER

The LIGHTSCAN 400J hand scanner is a unit that can scan a full 105mm width. It is dot selectable, from 100 to 400 D.P.I. in increments of 10 D.P.I. It handles line art and graphics with ease as it has four selectable dither patterns plus a black and white line art mode. It is supplied complete with Lightpaint image editing software and ReadIt! O.C.R. software.

ADARA AHS-405C COLOUR SCANNER

A hand held scanner for the PC that captures images IN FULL COLOUR! It will run on mono, EGA and VGA systems. Imagination is your only limit! The package comprises an interface card (8 bit or 16 bit), the scanner unit, comprehensive manuals and LA PALETTE and IPHOTO scanning and image editing software. IPHOTO can convert from colour to grey to black and white, soften, sharpen, rescale, resize, ANYTHING!!! If you're into graphics then you MUST HAVE IPHOTO! The AHS-405C can also be supplied with ReadIt! O.C.R. software.

GUIS 321 PAGE SCANNER

The GUIS 321 A4 page scanner is the price breakthrough of the decade. The unit is a dedicated scanner that can handle a full A4 page at 200 D.P.I. Simply place the page into the top of the motorised page feeder, and select SCAN from the software. Average scanning times are around 12 seconds for a full page! The supplied software (WINNER) is Windows based, and includes a run time version that will work on all PCs. The software allows you to select a full page, a tiny portion or any area in between. The WINNER software does more than just control the scanner though, it's a full page composition package, ideal for newsletter, brochures, flyers etc. It is supplied with Read-It! O.C.A. software.

LIGHTSCAN 320F FLATBED SCANNER

A high speed, high resolution (300 D.P.I.) black and white, and dither pattern flatbed scanner. In 10 seconds, you can have an accurate reproduction of a complete A4 page in your computer ready for manipulation! The 320F is bundled complete with MICROART scanning and graphics package giving you total control over the scanned images. It supports 51 levels of brightness, 51 levels of contrast and 15 different dither patterns to ensure you get the exact image you're after. Whilst being great with graphics, the 320F scanner is also wonderful with words. The scanner is supplied with OmniPage O.C.R. (386 based PC required). This package gives exceptionally accurate text recognition, saving you hours of re-typing. OmniPage is supplied complete with a run-time version of Windows.

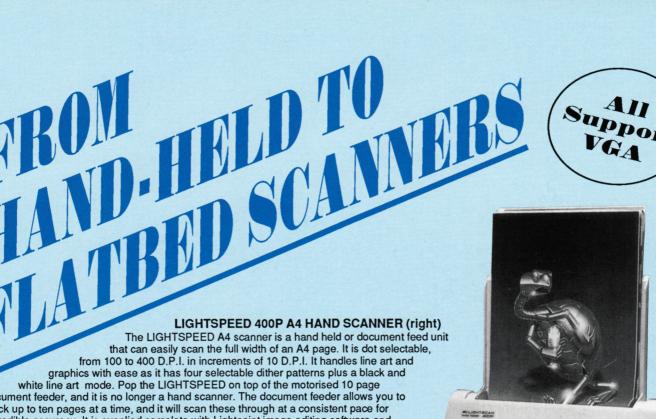
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"FAR SUPERIOR to any other guide, cheat sheet, or the original documentation. Excellent guide for all users. Highly recommended." John C. Dvorak, PC Magazine



indicates a change in any of the following: orientation, initial presence (must type G (Go) from Printer Control screen to begin printing), neet feeder bin/manual feed/continuous feed, and page

Computer Shop

WordPerfect uses this type to find an appropriate form (in the selected printer definition) that contains necessary bin, paper feeding method, page offset, an

NOTES:

Select a different paper type as many times

as you need in a document. For a



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Colour your World

Chris Collins splashes some paint around and goes green with the latest Shareware and Public Domain software

All enquiries and contacts concerning this Publication should be made in the first instance by writing to The PC Mag, 641 High Street Road, Mount Waverley, Victoria 3149, Australia. Urgent matters can be telephoned through on (03) 803 9661.

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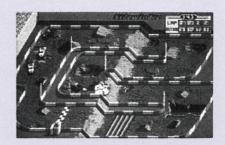
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• Screen shot from new enhanced version of Mixed Up Mother Goose. The inside story on Page 20



• Screen shot from Jones in the Fast Lane which we should have reviewed this month. Watch next month!

NEWSNEWSNEWS

The latest information from the PC arena.

WORDPERFECT RANGE FROM DATAFLOW

WordPerfect Pacific has appointed Dataflow to distribute its entire range of software. This includes not only the world's largest selling word processing software WordPerfect, but also the programs DataPerfect, PlanPerfect, DrawPerfect, WordPerfect Executive, LetterPerfect, Repeat Performance and the highly acclaimed WordPerfect Office. Educational MS-DOS single unit versions of any of the WordPerfect suite are also available for \$255. Enquiries to Dataflow (02) 331 6153 or The PC Mag (03) 803 9661.

RACE WITH ANDRETTI

Electronic Arts are shortly to release a new PC driving/racing simulation called **Mario Andretti's Racing Challenge** inspired by the racing career of the man himself. The game spans six professional racing circuits with a complete racing schedule in each. In addition, you have to manage resources by gaining sponsors and win cash to buy better cars and in turn, increase sponsorship. Racing begins in the dirt bull rings with Sprint cars and moves through Modifieds, Stock Cars, Sport Prototypes, Formula One and Championship Cars. The game allows you to either practice or race against the pack and provides an instant replay of your best manoeuvres or most devastating crashes.

PACIOLI 2000 FOR AUSTRALIA

Raul Isip, Vice President of M-USA Business Systems Inc. recently announced the introduction of **Pacioli 2000** into the Australian market. Named as PC World's "Best Buy" (Dec '90) and given Compute's Choice Award for "Best Financial Software, 1991", Pacioli 2000 became the most talked about LAN accounting software ever introduced in the United States.

The package is suitable for single-user or networking environments and consists of eight modules in one single system: General Ledger, Debtors, Creditors, Inventory Control, Purchasing, Budgeting, Billing and Auditing. It comes with a sample chart of accounts with up to 36 open on-line periods and five different costing systems including FIFO and LIFO. It supports an unlimited number of users and provides multi-level password protection, file and record locking.

Pacioli 2000 is distributed by Rediform (a subsidiary of Moore Business Systems) through their dealer network which includes more than 2500 distributors and will cost \$299. Specially designed stationery will also be available through Rediform outlets.

Enquiries to Rediform (03) 888 8299 or The PC Mag (03) 803 9661.

JUST FOR KIDS

My Paint (\$69.95) is a painting program designed especially for children. No reading skills are required and a friendly manual for parents is included. There is even an 'Oops' feature if a mistake is made. It has colourful animated icons for all tools, 'fill-emup' and mirror modes, multiple brush sizes and full printing capabilities. It also has a brush which paint in multiple colours. The pack comes with a built-in colouring book containing 28 drawings and 28 picture-enhancing sounds. Additional books are available at \$29.95 each.



Easy As ABC (\$59.95) teaches alphabet recognition, sequence and upper and lower case letters. Multiple skill levels allow children to learn at their own pace. Early Games for Young Children (\$54.95) is a collection of nine games to help children recognise letters and shapes, learn addition and subtraction, draw pictures creatively and type and spell their own names. Alphabet Zoo (\$49.95) teaches the relationship of letters and sounds and teaches children how to spell in a fun way. Stickers

NEWSNEWSNEWSNEWS

(\$54.95) allows students to create sticker pictures by selecting stickers, then colouring, rotating and dropping them into matching shapes. **Newsroom** (39.95) is a great desktop publishing program that is popular with both school and home users. It's an easy to use package, yet powerful, and an ideal introduction for novices who want professional results.

VIRUS BUSTER v3.6 ATTACKS STEALTH

Leprechaun Software has achieved a major breakthrough in the fight against Stealth computer viruses. Stealth viruses are among the most recent types, concealing themselves from computer operating systems and most virus scanning packages, copying themselves from program to program. The breed includes some of the most deadly viruses to date and many are capable of destroying data across entire computer systems. Virus Buster v3.6 builds on the package's already comprehensive suite of virus detection and removal programs, countering both known viruses as well as a host of security utilities. It includes a range of new features including VBSaver and VBShield as well as interface and performance enhancements. Enquiries to Leprechaun Software (07) 252 4037 or The PC Mag (03) 803 9661.

NEW 10PPM FACIT LASER PRINTER

The Facit P8100 is a fast, compact laser printer from Sweden featuring several paper handling options, a large number of fonts and the possibility to utilise customised font cards. These features make the printer highly suitable for applications ranging from basic word processing to graphics and desktop publishing in stand-alone or network environments.

According to distributor, AWA Distribution, Facit can also design fonts, forms, logotypes, signatures etc. in line with customer specifications. It can handle various types of paper qualities, formats and envelopes as well as OH-film and sticky labels.

The printer has a workload capacity of 20,000 pages per month and print speed of 10 pages per minute with both HP Laserjet II emulation as well as IBM PPDS and PostScript support provided. *Enquiries to AWA Distribution (02) 888 9000*

CARMEN EN FRANCAIS

Scarcely have the people of Paris awoken when they realise that the antenna from the Eiffel Tower has been stolen! A little later news comes through that the Statue of Liberty in New York has gone too. It can only be the wicked band of Carmen Sandiego who are responsible and you have been asked by the mayor to conduct the enquiry.

Carmen is twice as much fun in French and perfect for Francophiles and Francophones of all ages.





Nice and Easy

Mike Turner tries out the Easy Start software package from SPC, designed to make using your home computer child's play.

Www.hen most people put a computer to work, they require more than one sort of software program to fulfil their needs. Word processors look after the writing of letters and the like, while spreadsheets handle the family budget and databases keep the Christmas card mailing list in order and so on... Wouldn't it be nice to be able to buy one program that does the lot? Well, this is where so called integrated software comes into things.

There have been various integrated software packages around for some time now. Things like Mini Office Personal, MicroSoft Works, Alpha Works and others have all attacked the problem of producing an all purpose program in differing ways. I have always been a bit sceptical of these "do everything" packages, as often they have to sacrifice quite a lot of features and power to provide a total package at a reasonable cost. It is also true to say that the individual modules of such a package are never as fully featured or powerful as their stand alone counterparts. Where they do score is in the area of interchanging of data. Users of integrated software can rest easy in the knowledge that their word processor will understand the records in their mailing list and the figures in their balance sheet without the need to go through some form of conversion process between two entirely different programs.

Users of MicroSoft Windows will be familiar with a thing called DDE or Dynamic Data Exchange. This is a process whereby data used by one module of your total system is automatically utilised by others. As examples of a truly integrated system; altering a figure in one of your spreadsheets would automatically change that same figure in say a business letter to a client, saving you the effort of re-typing the information. Changes to a monthly balance sheet would automatically be reflected in the annual profit and loss sheet, and so on.....

However the software involved in this type of system tends to be both complex and is starting to get expensive. Hence the growing market for these other integrated packages. There is also a real need for integrated packages that are simple enough to be used by all members of the family. Enter PFS Easy Start. It comes from SPC the Software Publishing Corporation, the same people that produced such excellent packages as Harvard Graphics, Harvard Total Project Manager, PFS First Publisher and so on. Having used several of these programs and being familiar with their quality, I entered the review of this package with an open mind; prepared to put my misgivings about integrated packages on the back burner.

Having done so, I was pleasantly surprised with this package. For your dollars, you get quite a good word processor complete with spelling checker and the ability to do mail merging and label printing. You also get a simple to use yet quite good quality spreadsheet for all those financial record keeping tasks; a database, (curiously called a File Manager), for storing all those names and addresses; and you get a communications package which allows you to exchange files with other computers.

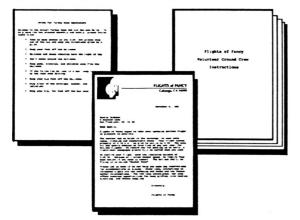
As the name implies, the whole design philosophy behind this package is to provide the easiest possible entry into the world of computing. The packaging boldly claims, that Easy Start can be used by all the family and that any member can be taught how to use the program in less than an hour! And they're not kidding! I will look briefly at the various modules that make up the package and explain how well or otherwise they work.

6

REVIEW

THE WORD PROCESSOR

For all those sceptics out there, let me first tell you what you won't get with this particular text editor. It won't handle multi column printing or integration of graphics with text. Nor does it come with a thesaurus and fancy generation of Tables of Contents or Indices, but that's about all it won't do. As basic word processors go this one is a little gem. It is almost ridiculously easy to use, as is the whole package for that matter. All the major functions required to work the thing are controlled by either function keys, causing drop down menus to appear, things called speed keys or by using a mouse.

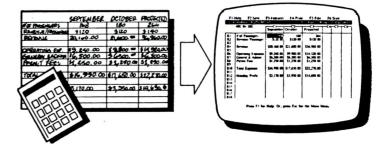


A document is anything you create using the word processor

Typing documents of all kinds is a relatively simple matter. You can quickly and easily lay out your text in any way you choose. Things like headers, footers and page numbering are all achieved at the touch of a few keys. As with other modules in the package, context sensitive on screen help is readily available. This help is so good as to almost make the manual unnecessary except as a reference for more complex tasks. This is a great word processor for kids, and as such I can see uses for this package in schools.

THE SPREADSHEET

For those people who have been put off spreadsheets because they fear the complexity of them, think again. These programs are not just for use in offices or large corporations. A decent spreadsheet program can be used just as effectively in the home to keep a track of the family budget or for keeping taxation records and the like. The uses to which you can put a spreadsheet are many; however these programs can sometimes be a bit hard to learn. Thankfully, the spreadsheet portion of this package follows the same easy to use philosophy as the rest of the modules. Again, as in the word processor, the major functions are accessed by drop down menus with plenty of help available to get you through most problems. It is worth mentioning at this point that the tutorial that comes with the package is extremely good. It makes sense of the various concepts used in number crunching with spreadsheets; but more on that later. Whilst lacking some of the complex charting and reporting options of a dedicated spreadsheet program like MicroSoft Excel, this little spreadsheet impressed me with the number of its features and its ease of use.



Automate your financial paperwork and you can quickly analyse results.

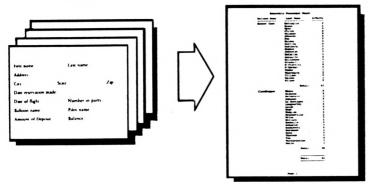
It is full of pleasant little time saving surprises, like the "quick entry" function. Say you are preparing an annual balance sheet for your club. You type the word "June" as a heading for a column. By then selecting "Start quick entry" from the features menu the other months are inserted as column headings automatically; just by pressing the TAB key. Once you have gone through the tutorial, you will have enough knowledge about this part of the program to start typing in your family budget or whatever. In fact you can even modify some of the supplied spreadsheet files that come with the program to suit your purposes. They are well designed and easy to understand.

THE DATABASE

The terminology used in this portion of the package is unique to Easy Start. If you have heard the terms database, record, field, index and so on used in connection with data storage, you may be slightly confused at first; but this will quickly disappear. The database is called a File Manager for fairly obvious reasons. You create folders into which you place all your files. Individual records in your files are stored on things called forms. These can be likened to the cards in an old fashioned card index filing system. The forms or record cards are easy to design and use. In fact this filing system is capable of handling fairly complex tasks such as inventories and stock control as well as the usual names and addresses. One curious thing is the way the filer handles dates. Dates must be input in a YY/MM/DD format if you wish to sort your records into date



order. This is a little clumsy and foreign to the way most people are used to entering dates, but it works.



Produce reports that sort records to help you summarize information quickly and efficiently

Unlike some more powerful and often harder to use databases, there is no easy way of indexing or sorting records whilst working within the file manager. New records are simply tacked onto the end of the others. Luckily there is a very quick search function which allows you to quickly locate any given record. In fact this search routine allows for partial matches for the data you input. So if I wanted to find every record with the word Hart in them I would specify ... Hart ... when inputting the search criteria. Logical operations and relative matches are also possible. So inputting/John will find all records that don't have the name John in them, and so on. The sorting side of things comes at the reporting stage. The supplied report generator allows you to quickly design and print all sorts of lists and summaries of your records; sorted by name, date or anything else you care to use. You can even handle calculations totalling up figures in the reports.

COMMUNICATIONS

Not owning a modem, I was unable to try out completely the communications part of this package. However, the menus and on line help make this part of the program as easy to use as the rest. Simply buying a modem doesn't guarantee that you will instantly be able to communicate with the rest of the civilised world via your computer. You will require the correct software to enable you to transfer data between machines. Many communications packages I have used have tended to be a bit confusing to say the least. This one is definitely not confusing.

It comes pre-configured to allow user to access such bulletin boards and services as CompuServe, The Source, Dow Jones News and others. There are also user definable options on the service menu to allow Australian users to tap into Viatel and other uniquely Australian services. You may also add additional services to this menu at a later stage. Whether you use this part of the package to connect to bulletin boards or just to make two remote computers talk to one another and swap files around, you will find the communications module will handle the task.

For those who wish to enter the world of electronic banking or shopping from home or even for students wishing to access the computer resources of their university from home; this is a great little program to get you started. About the only other thing you will have to worry about is the size of the phone bill you may run up. For those in capital cities being charged at local call rates this won't be a problem. For country users, look for services that offer 008 numbers. However computer communications open up heaps of possibilities for all sorts of people. Even if you have no immediate use for this part of the entire package, it is still a handy thing to have in your software arsenal for the future.

SUMMARY

Overall, I was very impressed with this package. I can see definite possibilities for its use both in the home or in educational institutions and small business. The quality of the accompanying documentation is excellent. It is clearly and concisely written in plain English with plenty of diagrams for even better explanation of some tasks. The Quick Tour tutorial and the context sensitive on-screen help make the whole package a breeze to use, even for children.

Easy Start scores on price. It costs just \$99.00 compared with around \$325.00 for MicroSoft Works. Whilst 'Works' is more sophisticated with extra features, small users will no doubt prefer the less complex Easy Start package and benefit from the major costs savings too.

The Australian distributors for this package are Micro Australia and Dataflow Computer Services Pty. Ltd. of Sydney. The latter are one of the largest suppliers of educational and productivity software in the country and were responible for supplying the review copy.

If you or your family are new to computers and want to get started quickly, then PFS Easy Start is definitely worth looking at.

Specifications: Requires 384K MS-DOS (>2.0) compatibles, two 5.25" floppy drives or hard disk. Supports monochrome or colour monitors, Intel maths co-processor and MS compatible mouse. Also supports over 60 printers and 30 modems. Supplied in dual format: 1 x 3.5" disk and 2 x 5.25" disks. RRP \$99.00



\$59.95 + postage

from Strategy Publications 1/641 High Street Road, Mt Waverley, Vic 3149 or phone 803 9661

Supports: CGA, EGA, VGA with 384k - 5.25"

GAME PLAY

DAS BOOT PINBALL MAGIC SUPER OFF-ROAD WING COMMANDER MORTVILLE MANOR MAYDAY SQUAD HEROES

VERDICTS

Outstanding Above average Average Fair Waste of money

DAS BOOT

- Published by Artech Digital Distributed by ECP/Electronic Arts
- Supplied on 5.25" Price \$69.95
- Requires 512k EGA, CGA, Hercules, or 640k for VGA/MCGA or Tandy
- Supports Ad-Lib, Game Blaster and Tandy 3-Voice

Simulation games are always something to look forward to as they provide an alternative to the never ending stream of "shoot 'em ups" that pour out of the software houses throughout the year. They however, seem to follow a rule that determines that while we can spend months without seeing a new one, as soon as a new one is released. several of the same sort immediately follow (whether this is purely coincidence or not is beyond me, your simple good old software reviewer). As a result it was little surprise to me that after the appearance of "Wolfpack" and "Silent Service II" another submarine game would surface in our midst.

360 Software appear to have decided to take on the old quard of simulation producers and have recently begun to release several different packages, the latest of which is Das Boot. It is a simulation of the "Type VII" (J-Boat class that was the backbone of the German submarine arm during the Second World War. The game seems to have been inspired by the movie of the same name (as we know it, "The Boat" has been screened several times on TV), but unlike the movie which told of one particular voyage the game allows you to conduct missions in several of the different theatres of operations where U-boats were stationed in WW2. These mission areas are: Fiord - Norway campaign, Arctic mission, Gibraltar, North Atlantic patrols and Bay of Biscay mission as well as a Baltic training mission.

One of the main points that I

found very useful in this package was the Baltic training mission. This allows you to practice the weapons systems and some of the main new features presented by this game. It allows you to practice every day submarine warfare such as anti aircraft and deck gunnery and surface and submerged torpedo runs but it also allows you to try your hand at surface and submerged minefield navigation, and sub vs. sub warfare. The latter underwater action is conducted by means of an exterior camera that shows your submarine and the surrounding area through the murky water. This aspect I found hard to master, the objective is to find the opposing sub by rotating the camera and then to adjust your depth and heading so as to fire off a successful torpedo salvo. The minefield navigation works upon similar principles.

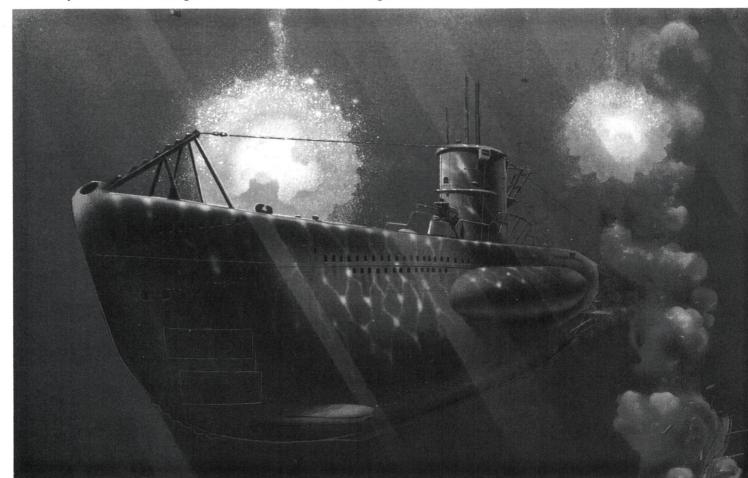
While the game does introduce some clearly new thinking and an innovative approach to some aspects never before considered it does fail badly in some other aspects, the main one is that of gunnery, it provides no gun sights and as a result you have to aim as best as you can and judge your range by where the last shell has fallen. This basically results in a waste of ammo as the depth of field aspect of the playing screen is guite poor and therefore it makes it quite hard to tell if they fall in front of or behind the taraet.

The game does present an historically accurate simulation though. Available are all the different types of primitive radar, and other equipment that served on these ships. One fine example is the enigma coding machine, which you can use to code, and decoded messages received and sent and where you can attempt to decode intercepted enemy messages. Included in the manual is a brief history of the type VII craft including full specs and a brief insight into the operations and some trivia about the German submarine arm. The game is quite well presented and some very nice artwork has gone when trying to approach a contact I found that whenever I turned, the contacts positions would also change drastically, this gave me the feeling that I was chasing my own tail. On another occasion I approached a lone ship, it looked like a freighter but as it came closer it became a destroyer from which two planes appeared to lift off (as far as I know no destroyer has ever been able to launch aircraft).

I also found some bugs and

waves the ships appear to spin out beneath a column of rolling smoke as if they were cars and the ocean was the Indy 500.

Overall the game presents some new and unusual ideas but fails in some of the more traditional aspects of submarine gaming, the mouse interface is helpful but it could have been applied to greater extent as there is still a great emphasis placed upon key combinations to get some of the sub functions to



into the ships interiors and displays. However there is some room for improvement, the outside artwork is still squarish and I feel that the programmers may not have taken full advantage of the graphics and colour now available.

I also had some trouble with navigation, in one certain case

unexplained events during the game. One was in the map screen where occasionally the cursor would leave a blue trail when dragged over some icons and another one was in the demo. The unusual event was the result observed when a ship was sunk, instead of slowing to a halt and slowly sinking beneath the operate (mainly Alt + <key>). However this is all documented in the quick reference guide resulting in a playable combination. An added bonus is the original novel, The Boat, which is included with the package.

VERDICT 🔳 🔳 🛚



PINBALL MAGIC

- Published by Loriciel Distributed in Australia by Pactronics
- Supplied on 5.25" format only Price \$59.95
- Requires 512k and new version supports CGA, EGA or VGA screens

0000

Remember the days before video games, when a trip to the milk bar enabled you to put a few 'bob' through the 'pinnies'. Now the old pinball machine looks dated when you compare it to the new wave of video arcade games that are available. Although the arcade machine offers visual splendour, the old pinball

machine required skill and patience to enable you to get the best from the machine, without 'tilting'. Well, now's your chance to

relive those youthful days of the pinball parlour, on your own home computer. Loriciel of France has launched Pinball Magic and as a reproduction of the original machines it's not at all bad.

Pinball Magic is, put simply, a pinball game on the computer. It's all there, the flippers that are used to knock the ball around, the bumpers, the sounds and the lights. There are eight different tables to play on, but to proceed to a higher level you have to hit all the targets on the first table, which opens a gate at the top of your screen, then knock the ball through the gate (and this is perhaps the hardest bit of the game). Each screen is different, with more targets required to be knocked down on each higher level. On the first level, the game table is like a conventional pinball machine, with the ball being launched

manually using either the 'RETURN' key or the right 'SHIFT' key. On higher levels, however, the ball is launched automatically whenever it drops off the table. The flippers are controlled by using the left and right 'SHIFT' keys and the function keys are used to start the game, to pause the game and

to set the number of credits that

you start with (a maximum of five

is available). You get five balls to

clear each level, and your score

right of the screen. If you use all

revert to the level one screen, no

before. Once you've used all your

is displayed in a panel on the

your shots, you automatically

matter what level you were on

Pinball Magic caters for all

graphic modes, with their now

familiar black, green, red and

graphics are good, while VGA are

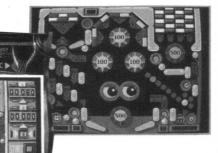
very crisp and clear. The speed

yellow mix for CGA. EGA

credits, it's back to the start

again.

of the game is not affected by use of the higher standard graphics, as the ball really shoots around the table at a good rate of speed. Sound is functional, with all the 'bonks' 'brings' and 'bleeps' that you would expect from a pinball machine. There is no mention whether add-on sound cards are supported by the program, and at a guess I would say that they are not. The instructions cover English, French and German, and are brief, to say the least. It seems that Loriciel haven't yet mastered how to produce good game instructions, and this detracts a little from the



quality of the overall product. Some of the options listed for the PC in both the manual and the addendum don't appear to work. The

game disc will only run from Drive A, so if your main drive isn't the same size as the game disc (the copy I've reviewed was on a 5.25" disk) you'll have to swap drives. Loriciel have provided a utility on the disc called 'SWAPAB', but I

found that I had to consult my PC manual, as the utility didn't work. But by using the 'DEVICE SETFD +S/B' in DOS I found I had no trouble running in the game.

Pinball Magic is a well programmed, well produced game which captures the atmosphere of the old game machines well. The only negative aspect is the sketchy manual.

The game has a simple concept and is definitely worth more than a casual glance. It's a game that should appeal to all ages, and produce hours of fun.



GAMES

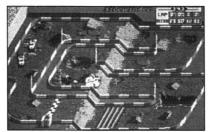
SUPER OFF-ROAD

- Published by Virgin Games Distributed in Australia by Mindscape
- Supplied in dual disk packs Price \$59.95
- Requires 512k and supports CGA or EGA screens and Ad-Lib sound

Arcade games are very popular amongst young people, and so are computer conversions of the best arcade offerings. Something else that is popular in the USA at present is off road racing, with drivers competing in trucks over rough courses, both in stadiums and cross-country. According to the game manual one of the most famous off road racers goes by the name of Ivan "Ironman" Stewart, who drives for the Toyota Factory Team and is supposed to be pretty good (never heard of him myself). Well, it seems that the Leland Corporation (I thought they made cars?) decided to make an arcade game of this type of racing, and enlisted the "Ironman's" help to produce the game. Now the arcade game hits the computer screen, courtesy of Virgin/Mastertronic and Graftgold, and the result is something to see.

At the beginning of each racing series, you are prompted to enter vour initials, date of birth, and select the country you want to represent. The aim of Super Off-Road is simple. Four trucks, up to three of which can be controlled by humans, are raced around one of eight tracks. As these can be raced either clockwise or anti-clock-wise, this give you 16 possible race tracks to race on. Each race consists of four laps (five times past the finish line) and all you have to do to keep on racing is to win, because every time you lose, one of your three initial credits is used up. Everybody in the race picks up prize money, and there are extra cash and nitros (these

make you go faster, for a while) to be picked up off the track. At the end of each race you visit the Speed shop, where you can upgrade your truck with better



tyres, shocks, acceleration, speed and nitro fuel units, if you have enough cash. Then, its on to the next track to start all over again.

As stated, up to three humans can play the game at once, and the remaining vehicles being controlled by the computer. Once you're out of the race, your money earnings are stored in the list of Ironmen (high score table) and it's back to the start of the start again.

Super Off-Road supports all graphics modes, except Hercules. Graphics are great in VGA and



lvan "Ironman" Stewart

from all reports, almost identical to the arcade original. Speed in the higher graphic modes is fast, but for some reason in CGA the game plays very slowly, which is a bit of a surprise. The still graphics, while not picture quality are very clear, and add to the appeal of the game. Animation is good, with the trucks moving smoothly around the track, leaping and bouncing guite convincingly. Added touches of animation come in the form of the flag waving by the official and the movement of the marker flag when hit, and these extras add to the feel of the game. Sound on a standard PC is simply thuds and squeals from the trucks, but the program supports an Ad-Lib card, so the music that is standard in the CPC version could also be there in this version. This is a great conversion of the arcade original, (so I've read) and a great, fun game to play. Control is by keyboard (for player 1 and 3) and joystick (for player 2). Although the choice of keys seem strange, they're at opposite ends of the keyboard so you won't keep getting in each others way.

Virgin/Mastertronic have selected a winner by choosing to convert Super Off-Road to the home computer. It's in the same spirit as Super-Spring (Electronic Dreams) and Rally cross (Anco), but much, much better. I've never been a big fan of this style of racing game, but this one has won me. It's easy to play, simple to control, it looks good and above all else, great fun. If you want a fun racing game for your PC, then Super Off-Road is the game to look for. It's a must for vour software shelf.

It's well worth the dollars you'll have to part with to get a copy.

VERDICT 🔳 🔳 🔳

WING COMMANDER

- Published by Origin
 Distributed in Australia by Dataflow
- Supplied with high density 5.25" disks Price \$84.95
- Supports Sound Cards Requires 640k with dual floppies or Hard Disk
- Supports 256 colour VGA/MCGA, EGA/Tandy 12 Mhz or higher

The PC never has been an incredibly good games platform, with relatively poor graphics till VGA and even then this wasn't well applied. And then there's the question of sound - the el cheapo \$1.50 speaker sound most of us experience could hardly be drive, how to make backup copies and also posters of a couple of the Terran Confederate (Human) fighters.

To install the game to the hard drive, you run the install program on the first disk and you select where you want the game



described as exhilarating. Things are changing though and Wing Commander from Origin is a good example of this.

The story is one of intergalactic conflict between the humans and a race of aliens called the Kilrathi and is explained in a little detail in the documentation. The game comes in a sturdy cardboard box - not the type that collapses after you take the insides out of it - and contains 3×1.2 Megabyte 5.25" diskettes, and a copy of "Claw Marks", which is the magazine of the carrier from which you fly. Also included are sheets on how to install the program to a hard installed, which graphics mode to run the game in - EGA, VGA or Tandy, which if any music card is installed in your machine - either the Sound Blaster. AdLib or Roland and which install mode you require. As this is a very large game for a simulator, it has been compressed into a format where it can still be run with the loss of loading speed. Therefore, if you have around 5.2 megabytes on your hard disk as opposed to 3.6 in compressed mode, you can have the program uncompressed onto your hard disk. This takes around 10-20 minutes to decompress. In addition to this, if you have EGA

or Tandy graphics, the program converts the graphics from their native VGA mode, taking more time again - around 15-25 minutes.

Once this is complete, you can go to the directory where the game is installed, load the program, wait for anywhere between 15 and 30 seconds, and then a screen with an orchestra on it appears. They begin playing, drop off the bottom of the screen and a title comes up for the Origin sound and graphics system. This fades away and the opening sequence appears for the game. Three enemy fighters are fleeing away from three Human fighters. One of the human fighters blows off about 6 rounds of the lasers and BOOM! The enemy fighter is blown into a million pieces. The credits appear and title music goes on for a minute or two. You can listen to it all or just skip it and go on.

Then you can start a campaign, continue on if you have already finished and saved one after the first mission, or play the secret missions. These do not come with the Wing Commander as standard, and it tells you to ring a 800 number in the States to order. Too bad for us over here in Australia as you cannot ring American 800 numbers from Australia. (A "Secret Missions" add-on disk has just been released in Australia for \$39.95 - Ed).

You'll find yourself in a bar and can talk to the barman and people sitting around, fly a training mission on the videogame/simulator in the corner, go to the barracks, or look at the kill scoreboard which reports the number of sorties flown and number of kills of all the prominent pilots. In the barracks you can look at your medals, save or load a previously saved campaign (there are sleeping pilots in the beds occupied with savegames) or go to a real mission. Once you have selected a mission, the music used in the barracks changes to the piece used for the briefing, and the program loads for a short while.

A briefing room appears, and you are told about what is to happen in the mission (missions include escort of transport, patrol, combat and attack of enemy capital ships). An animated sequence where you go running to your fighter appears, with music for that section, and then you are launched from inside the carrier and you see the view from inside the carrier as you speed outside.

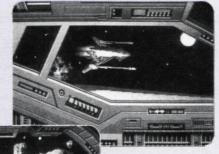
Once in the simulation, you have standard simulator controls but with a difference. The left and right keys do not bank, only turn more like a

rudder in a conventional aeroplane. Roll control is achieved with the insert and delete keys below the keypad. You can turn the afterburners on to speed you up to around 1100 kilometres a second! The cockpit layout of each of the four ships you can fly is different, but they all contain essentially the same components. Weapons differ between ships as well. There are four types of missiles including Dumb-Fire rocket like missiles, Heat-seeking missiles, Image-**Recognition Missiles and missiles** which identify their target by friend or foe identification. The lasers in each ship vary and on later ships you can have two different pairs of lasers.

The action is very fast and does a good job of getting the feeling of space-to-space combat across. There are five different enemy fighters which you encounter, all of them with a range of weapons, shield and armour capability. The graphics of the enemy ships are "raytraced 3-D" graphics, and look very good although being bitmaps they do get very chunky when you get close to a target. The music changes through the mission, from normal travel music to combat music to combat-when-you're-about-to-die music, and it changes at set waypoints in the music, not just anytime, to create quite an interesting effect. The only glitch you do get is that sometimes the computer gets a touch confused in what music to use, and

are superb. They use the full 256 colours all the way through the game and it is obvious Origin have done their work on the graphics. In respect of sound through the internal PC speaker it is functional, only supporting sound effects - no music. On the Sound Blaster or AdLib it is very good, and on the Roland MT-32 although around \$1000 - it sounds superb. It requires a full 640k to run and likes extra memory - EMS - so that it can add in extra goodies during the game. 530k of EMS are required for a full goodies level.

Your progress is monitored during the 21 missions, and you



can be given bravery and skill medals, as well as being promoted through the ranks to Major. The game is also much like a movie, with "Meanwhile..."

sequences after some missions planting the progress of the war.

Origin have really created a masterpiece here. It is simple to get into, with the manual being quite short but not too short, and having the diversity and change in the missions and events during the game. The graphics and sound are great.

I have just one gripe which gets me annoyed from time to time. When playing a mission on the keyboard, and having pulled through a loop or a turn into a line of vision where you can see a big ship, the game stops your turn motion as it loads the big ship graphic. This can be a pain when you are turning to get back behind an enemy. Everything considered though, Wing Commander is a very playable, exciting and fun game.

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switches between the two constantly! If you die or eject, there are animated sequences for both, and a funeral for you (or your wingman) if you die. If you make it back, there is an animated landing sequence, and a debriefing in which your CO goes over the mission and how many kills you scored, etc. As a nice touch, the music is a suitably triumphant piece if you completed your mission well, but a less than triumphant piece if you did not do so.

The graphics are good in EGA, being a dither of the VGA graphics, but the VGA graphics

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MORTVILLE MANOR

- Published by Lankhor Distributed in Australia by Pactronics
- Supplied in 5.25" or 3.5" disk format Price \$39.95
- Requires 512k and CGA or EGA screens

Your name is Jerome Lange. It's February, 1951. Winter in Paris and snow dominates the landscape. Your business, as a private investigator is as frozen as the landscape outside. As you sit and read your newspaper, a letter is slipped under your door. It's from Julia, someone you haven't seen for years. Thus starts your return to Mortville Manor, and the mystery that lurks from within its walls awaits.

Mortville Manor is a menu driven adventure, which takes place in an old manor in the snowy French countryside. As you arrive, in answer to Julia's letter, you are informed by Max, the butler, that Julia has died and the family is gathered. Because of a worsening storm, you will have to stay in the manor, and Max briefs you on the meal arrangements. From there, you're on your own, and you can tour the manor, searching every nook and cranny for evidence that will allow you to solve the mystery of Mortville Manor. And what is the mystery? Well, nobody's talking about that, but probing questions to the eight people currently in the manor throws doubt on the cause of death of Julia, so you must determine "who-done-it".

The playing screen for Mortville Manor is divided into a number of windows. There is a large picture window; one at the top displaying the menu titles; one on the right which shows you the time, who is with you and the mood of the people in the manor towards you, and two at the bottom of the screen for text. All input results from access to the menus, and control is by either mouse of keyboard. You move around by choosing locations from the Movement Menu, and to open, close and search locations you access the Action Menu, which contains a long list of verbs which allow you to do things such as open and close doors etc. Other menu's are the Inventory menu, a menu called Self (which allows you to examine and search objects currently being held, and to hide if in danger of being found somewhere you shouldn't be), a Discussion menu (which allows you to talk with anyone in the same room), and the Load/Save game menu. Being completely menu driven, there are times when the actions available to you are restricted, and this can cause some frustration. In general, however, there are a sufficient number of actions to enable you to move through the various locations in the game, and to interact with the objects and people you encounter along the way.

Mortville Manor caters for most graphic modes, with the exception of VGA (of interest is a specific graphics setting for the Amstrad PC1512). Graphics are good and add to the atmosphere of the game, and whenever you find an object during a search, you are presented with its graphic representation to study. The adventure also features digitised sound and voice. The sounds include music, owls, and more which all help to add to the atmosphere of the game. You hear the speech whenever you question one of the people in the manor. The voices all have very heavy French accents, and this also adds to the games atmosphere. If you get sick of the

sound effects they can be turned off, and this speeds up the game to a marked degree.

Mortville Manor was written and first released in France in 1987, with the PC version being produced in either 1988 or 1989. The translation of the game into English has generally been well done, but some errors are present (for example, once around the back of the manor, you can go over and search the "weel" rather than the well), however these errors don't detract from the game. It's a well written program, with good graphics and loads of puzzles to solve. The effects are well done, although some seem to appear out of place at times. The use of menus is well done, and it makes the game easier and quicker than having to enter the text manually. The only big disappointment in the game is the instruction sheet, which is very brief and not very helpful.

Mortville Manor is a good adventure, which will keep you occupied for quite some time. The menu system is quite unique, although it appears that Magnetic Scrolls have used a similar system for their new release Wonderland. This system may be adopted for more adventures in the future, because it does make playing the game a bit easier. Seasoned adventurers will find Mortville Manor a challenge, while novices like me will find it very easy to get involved in the story. It's definitely a game that's worth more than a casual glance.

(An interesting point for Amstrad CPC owners is that one of the screen shots on the rear of the pack is from a CPC version of the game. If enough CPC owners write to Pactronics, perhaps they can be persuaded to import this version).



MAYDAY SQUAD HEROES

- Published by MicroValue
 Distributed in Australia by Pactronics
- Supplied in 5.25" disk format
 Price \$39.95
- Requires 512k and CGA or EGA screens

Terrorists have seized the Lutonian Embassy and murdered a number of members of the embassy staff, depositing the bodies on the lawn in front of the building. The terrorists, known as The Red Legion have presented a list of 143 non-negotiable demands that they say must be satisfied, or else. As the United Nations edict on dealing with terrorists leaves no room for negotiation, it is decided to send a three man squad of soldiers in to 'deal' with the terrorists. But there is an added problem; the Ambassador's daughter was in the embassy at the time of the terrorist attack and we don't know where she is. Your mission is to rescue the girl and 'deal' with the terrorists. The clock is ticking, so don't hang about!

Your first task in Mayday Squad Heroes (MSH) is to choose the difficulty level of play (including the number of hits you can take and the number of grenades you carry). Next, you pick your squad, consisting of a commander, a communications expert and a demolitions expert (there are three of each to choose from). Then it's into the embassy and you immediately come into contact with the terrorists. The game screen is divided into three sections, with the centre section containing the game action. Your view is from behind the squad, gaining their full perspective. The left section contains the movement icons, which are used to move the squad. Positioning the cursor over the highlighted icon and pressing fire moves the squad in that direction. The left section contains the action icons, which consist of a communicator, a gun and explosives. The communicator allows you to enter the Communications Menu, where you can use a lock-pick, listening device, communicator, computer or put-on/take-off the Infra Red goggles you need for operating in dark areas. The explosives give you the Demolitions Menu, where you can throw grenades, plant explosives/booby traps and search for traps. The gun icon lets you reload your individual weapon to allow you to 'deal' with more terrorists. At the top of the screen, the time and status information is displayed. Your squad proceeds through the three levels of the embassy, looking for terrorists (and the girl), examining rooms on the way.

MSH is not a very active game. Animation is limited to the occasional explosion and falling dead terrorists. The movement of the squad is flip-screen, and after a while the control system gets to be a bit of a drag. Control can be either by keyboard or joystick. but the movement of the cursor across the screen is still slow either way. Graphically, MSH only supports EGA graphics, and, although functional, are not very inspiring. Sound is also functional, consisting of explosions, firing of individual weapons and the last screams of the terrorists. Functional it is, inspiring it is not.

MSH is actually a re-release of a game, produced in 1989 by Tynesoft, called Mayday Squad. As the loading screen displays this original name, it is a real wonder to me why Microvalue has gone to the trouble of, apparently, renaming the games packaging. The documentation contained with the game is sketchy to say the least; not really up to the standard of some of the other games that are being released at present. All in all MSH is a simple game which promises much (the packaging proclaims that "Mayday Squad Heroes" is probably the most exciting and challenging hostage rescue game ever written) but fails to deliver anything. There is no excitement, not much challenge and little to hold the interest beyond the first curious look.

VERDICT 🔳 🔳

In the last three issues of The PC Mag we have reviewed over \$1500 worth of games!

A-10 Tank Killer All Dogs go to Heaven ATF 2 Atomix Bill & Ted's Excellent Adventure Cardinal of the Kremlin Hidden Agenda King's Quest 5 Lemmings Life and Death 2 Mind Games Monty Python's Flying Circus Octadial Oil's Well PGA Golf Quest for Glory 2 Railroad Tycoon Sherman M-4 Sim Earth Silent Service 2 Stellar 7

It could be a costly mistake if you missed any!

Introducing DOS - 4

Getting lost in the bowels of MS-DOS' tree structure is not uncommon. Shane Kelly and Tony Blakemore show you the route out.

t the end of last month's article, we touched on the need to format a floppy disk to, apart from other things, make space for the main Directory. DOS has another way of organising information on our diskettes. If you consider that a floppy disk contains only a small amount of information but that a hard disk drive is capable of holding a huge amount of files, you will see that one directory area will be fine for most floppy disks, but totally unmanageable for hard disks. So DOS provides a thing called a 'Subdirectory' and as you have probably guessed, it is a directory that sits under another directory.

TREE STRUCTURE

Now all this could become confusing (if it is not already) but DOS has a solution. Each subdirectory is totally invisible to all other subdirectories. This means that to access any subdirectory you must go through its parent directory. If you visualise a large oak tree with its trunk reaching up into the vast spread of branches and then picture it upside down, you will begin to get the idea of this structure. The root of the tree is the parent of all directories. Below this we have a number of branches (or subdirectories) leading to smaller and smaller branches.

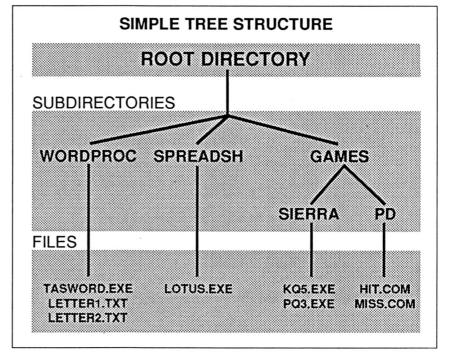
So a branch on the left side of the tree is separate from the branches on the right side of the tree. To get across to the right side there is only one path. Back up to the root and then down and across.

This sort of structure in jargon is known as a tree structure or hierarchical file system. The illustration below might help here.

Suppose you use your computer for three main functions - word processing, spreadsheets and games. Suppose on your hard disk you have only one directory - the parent (or root) directory.

As you add to your software collection through games and data files that your word processing and spreadsheets produce, you will have an everincreasing number of files in the root directory.

This quickly becomes unmanageable as you scroll through page after page of



filenames looking for the one you want. But, if you had a subdirectory for your word processing program and another for your spreadsheet and yet another for your games, you have narrowed your search for that file considerably. Now if you had another subdirectory in your word processing subdirectory for all your document files you have narrowed your search even more. Same goes for your spreadsheet and your games. You may even have files with the same name in your different subdirectories.

For instance, in your games subdirectory, you may have two games with the same filename eg GAME.EXE. Now normally these can't co-exist in the same directory because DOS does not allow it. But if you make a subdirectory in your games subdirectory for each game, these files will happily co-exist, each one ignorant of the others existence. DOS will also be happy because it "knows" that GAME.EXE in subdirectory GAME1 is different to GAME.EXE in subdirectory GAME2. The name of a subdirectory conforms to the rules for filenames EXCEPT that no extension is required. So a subdirectory name is a name consisting of up to 8 characters with no extension.

TIME FOR A RECAP

DOS manages files by means of filenames, extensions and directories. The top-level directory is called the root directory and it is the parent of all subdirectories.

All paths through the tree structure go through the root directory. All disks have a root directory. You don't need to create it, it is already there when you format the disk. Files may reside in any subdirectory and it is possible to have files with the same filename in different subdirectories. You may even have the same file in many different subdirectories, but this is wasteful of disk space.

MOVING ABOUT

If a subdirectory can only be changed via the root directory, doesn't this slow things down as we trace a path through all these subdirectories to get to the one we want? The answer is yes, it would, if DOS did not provide a way of getting around our tree structure that is, in effect, a shortcut.

DOS has a particular name for the root directory and this is \ (the backslash). So, wherever we are in the tree, we can go directly to the root directory by a DOS command CHDIR (CHange DIRectory) or CD for short. Supposing we are in our games directory, deep down, say four levels into our subdirectories, to get back to the root directory we simply type:

C:>cd\

and press the enter key and Hey Presto, we are in the root directory. Suppose we wanted to go from deep down in our GAMES directory to a subdirectory in our word processing directory.

Would we need to go to the root directory then into the word processing directory then into the needed subdirectory? No, we can specify which subdirectory we want to go to by stating its PATH from the root directory. So we could say:

C:>CD\WORDPRO\SUBDIR1\SUBDIR2

and we are there. Notice that each different subdirectory listed in the above path statement is separated by the backslash character (\). This lets DOS know that we are talking about subdirectories. Notice also that the last subdirectory in the command (SUBDIR2) is not terminated with a backslash.

You may have as many subdirectories as you like under the root directory and as many subdirectories as you like under each subdirectory, down to the level where it becomes impossible to manage at all. A general idea to keep in mind is that if another subdirectory would make things more comprehensible on the whole, then use one. However, if it would just serve to confuse the issue. look at some other way of organising your files - perhaps by grouping like files under the same extension in a subdirectory?

ANOTHER RECAP

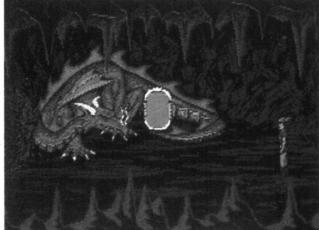
OK, lets tie all this together now. DOS provides a tree structure for organising your files into groups called directories. The parent directory is called the ROOT directory and this is automatically created when you format a disk. Subdirectories are created under the root directory and more subdirectories can be created under these subdirectories ad infinitum. To get to a subdirectory we must tell DOS to CHange DIRectory (CD for short) and specify the PATH of the subdirectory we want to go to by listing its PATH from the root directory. Directory names are separated in PATH statements by the backslash (\) character. The name of the ROOT directory is, confusingly, the backslash. Remember, to get to the root directory from any subdirectory we type CD\ and enter.

You may wonder why we have stopped to recap a couple of times in this article. It really is important to understand the structure or layout of your disks before you embark upon moving things around. The knowledge will also stand you in good stead for the upcoming explanation of the DOS commands.

Classics Revisited

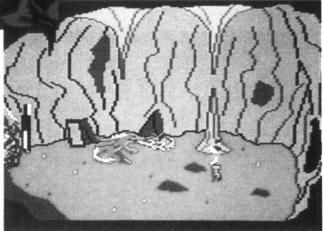
If you've recently bought, or are thinking of buying, a VGA screen the following inside story on upgrading Sierra games is timely.

W ith the technological wizardry available these days, one could argue that the products now being released by Sierra



make their older games look very dated. While the animated blocky characters and backgrounds synchronised with text were considered quite amazing when they were first released (indeed, I remember being fascinated by the "paddle and ball" games which now seem so crude, but were really the start of computer video age), the demanding public seeks better and more sophisticated software pushing computers to the limit.

After some soul-searching, Sierra made the decision to update some of their older games starting with their adventure hit King's Quest 1 and and the pre-school educational



UPGRADES

King's Quest 1 –

New and Old!

SIERRA

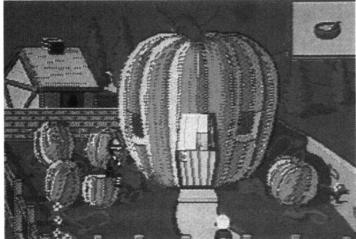
game Mixed-Up Mother Goose. It's a sensible business move and unlikely to upset purists.

Josh Mandel, who was entrusted with the job of producing the new versions is sure that he can satisfy both the devotees who don't want to see the classics retouched and those who want to see the upgrades. "What our new technology (SCI, our third-generation in-house programming language) allows us to do is to go back and retell the stories we've told before, but to retell them more vividly.

Music plays a most important role as well; it provides atmosphere and can reflect emotions that are better insinuated with sound than baldly described. Hearing the tense, agitated music from Psycho is infinitely more effective than seeing a text box reading, 'You are now terrified'".

Although the new SCI versions are palpably a major improvement on the originals, the story line and puzzles have not been changed. Sierra's aim is to convert all the early games keeping them looking and sounding as good as technically possible.

So if you see 'SCI' after a Sierra title in the future, you'll know what it means!



If you own the old versions of King's Quest 1 and/or Mixed Up Mother Goose, unfortunately Ozisoft (the Australian importers) will not be making upgrades available. However, you can get an upgrade directly from Sierra by sending either Disk #1 or the front cover of your documentation (don't worry new documentation will be sent to you), a note telling Sierra whether you need 5.25" or 3.5" and authority to charge your credit card number (Visa, or American Mastercard Express).

The cost will be \$US20.00 for King's Quest 1 or \$US15.00 for Mixed-Up Mother Goose plus shipping and handling costs and (when necessary) a small fee for customs stickers and insurance. Sierra's address for the above is:

Sierra On-Line, Attn: Fufillment, PO Box 485, Coarsegold, CA 93644, USA.

Mixed-Up Mother Goose -

New and Old!



PD/SHAREWARE_

Colour your world

Chris Collins splashes some paint around and goes green with the latest Shareware and Public Domain software.

This is Compatible's Corner for the month of April 1991, and I am your host for the evening. My name is Chris Collins and it is my job to expound to you some of the virtues of Public Domain and Shareware software. Hopefully, I can show you how to enjoy the software provided, and let you know WHEN you should register your software.

Probably the best time to describe WHEN (not IF) you should register your Public Domain or Shareware software is when one of the following events occurs;

...you hit the correct keys necessary to get you through the opening screens, before they are even displayed.

...a shareware program is called from your config.sys or autoexec.bat files when you boot your computer. ...you make back-up copies of your Shareware and Public Domain software, and keep them locked up.

... you have nightmares about not getting work done because your Shareware program is corrupted. ...you brag to your friends about the greatest little time saver you've found. ...you optimise your hard disk drive without removing any of the Shareware of Public Domain programs. ...the money you've saved using the program exceeds the registration fee.

If any of the above have ever happened to you, IT IS TIME TO REGISTER THAT PIECE OF SOFTWARE! My thanks go to Shareware magazine for those guide-lines.

Save the Planet

Being green is an environmentally conscious thing to do. This is not quite the same as saying that being green is right. It is necessary, if you are trying to change peoples opinions, to know what the heck you are talking about. With this is mind, some authors in the USA have released a program called SAVE THE PLANET.

Save The Planet is a new Shareware program from Roger and Kathy Cox. The registration fee is US\$10 per individual, and US\$25 for corporations. It only occupies one 360k diskette, but really requires either EGA or VGA to get the best effects. It will work in CGA, but only in high resolution monochrome mode.

As I said before, to be green correctly you must know what you are talking about. Save The Planet sets out to inform you of the problems associated with global warming. It does this from a northern hemisphere viewpoint, but the majority of the information applies no matter where you live.

Save The Planet is made up of five parts that include the following;

1. Tutorial: This will help you to understand the problems that are caused to this Earth of ours by greenhouse gases and ozone depletion.

2. Action: This section explains to you how you personally can help to minimise the problems of greenhouse gases and ozone depletion.

3. Bibliography: This section gives you further reference material and reading matter to pursue.

 Write: Is a handy built in word processor to assist you in writing to your elected officials. It is designed for writing to officials in Washington, but the main points listed will also apply to us.
 Global Roulette: This is a simulation that you can experiment with to show you the effects of global warming.

Save The Planet is an educational tool and should be treated as such. It does not attempt to be the EXPERT, but merely attempts to inform you. It is up to you to take things further!

PC Write Macros, Volume 2

Another diskette of macros for the PC Write users of this world. This diskette (Registration fee: US\$10) is another collection of macros from Simple Productions. These are the same people that provided PC Write Macros, so those of you using the first series will undoubtedly want the second.

Some of the macros in this second collection include: *Sticky Shifts:* Make SHIFT, CONTROL and ALT stick down when you press them. You need to press them again to release them.

Notepad: A pop-up notepad for use when editing any document. Unlike other notepads that you could pop-up over PC Write, this one uses all of the normal PC Write commands, so there is no need to learn a second set of commands.

Envelope Notepad: Pop-up envelope notepad for sending business addresses and return addresses to the printer. Move Screen and Move Cursor: Used to move the screen around the document, and also to give you diagonal cursor movement. Pivot Macros: Used to transpose series of words, characters, lines, sentences and paragraphs. Page format - Elite: One the first diskette, most of the enhancement macros were set up to use the stand PICA page (10cpi). This collection has all of the same macros, but set for the standard ELITE page (12cpi). Letterhead: Insertion of a letterhead into a document for an ELITE page. Also reset page numbering.

Alternate Keys: Modifies some of the keys to produce different effects. Some of the effects include triple spacing, unbreakable dash and hyphenate and reformat. Special Character Macros: Give access to fractions, international characters, Greek, mathematical and science characters when using a Laserjet with a Y cartride or an IBM printer.

Dvorak Keyboard: When typewriters were first invented, the designers found that the mechanism was easily jammed. So they designed the keyboard in such a way as to minimise this problem, by spreading the keys apart. Dvorak decided that it was better to keep the most used keys together, and a great increase in speed and accuracy was gained. This macro set lets you have a Dvorak style keyboard.

Text Conversion Macros: These macros allow for the following changes to your text; reverse case (from upper to lower and vice versa), CAPS/Capitalise (as explained by the name), strip spaces and paragraph page break (keep page breaks in between paragraphs).

Word processor conversions: Allows you to convert your PC Write documents to simple ASCII as well as WordPerfect or Word. You will then be able to import your documents into most word processing programs.

This has just been a quick rundown of some of the macros in this new version of PC Write macros. For all of you PC Write users out there who are using PC Write Macros, this is another good update to make your life easier.

FormGen

FormGen is a form designing program that is reasonably difficult to use, but once learnt can provide you with a very powerful tool for designing your paper forms. It allows all of the normal drawing and writing components needed to produce good looking forms.

FormGen is from FormGen

PD/SHAREWARE

Corporation (Now isn't that common sense) and cost US\$35.00 to register. It occupies only one 360k diskette and comes complete with 13 ready made forms. Well, 13 if you count the IBM logo as a form.

FormGen uses a non standard help key (F10), which I found to be a bit of a hassle. Nothing used in the program is mnemonic, but the keys are grouped into like sets to make life easier. There are also a collection of the ready made forms with the various key combinations that you can print out to make your life easier.

No documentation at all comes with the program, but the author does promise pre-printed documentation when you register.

The FormGen Collections

These are two diskettes of ready made forms to go with FormGen. One is a collection of forms for the home called, funnily enough The Home Collection. The second is for the business user of FormGen and is called The **Business** Collection. The Home Collection includes the following useful forms; a golfsheet, a family tree, a shopping list, a car expenses sheet, a meal planner and much much more. Some of these forms don't make a lot of sense to us due to the American way of life. but most are useful, and all can be adjusted to suit yourself. The Business Collection contain the following forms; cash advance, cash-book, cheque requisition, photocopying lists, credit application, daily summaries, invoices of different styles, fax cover sheets and many more.

There is nothing on either of the collections diskettes to suggest that you must pay for this form, so I must assume that they are public domain, and free of charge. For all you FormGen users, these two 360k diskettes will make your life much easier.

EGA Mouse Paint

EGA Mouse Paint is probably the first program of it's type that I have come across. It is a colouring book for the computer. It works in either EGA or VGA and requires a mouse. Registration is US\$20, and it comes from a mob called Flying Mouse Software.

EGA Mouse Paint has 15 already drawn pictures for you to colour and the facility to use the program as an etch-a-sketch to draw more pictures. The author promises extra pictures when you register.

EGA Mouse Paint has 14 solid colours for you to choose from, as well as another 28 different fills and patterns to choose from. Whilst you can create your own pictures, there doesn't appear to be any way to create new colours or fills.

EGA Mouse Paint is fun to play with, and for the younger children who are not good at drawing, but want to colour in, this would be perfect. The only fault that I could find is that the program won't let you import pictures in any format. You must draw them all using the etch-a-sketch. This does limit the quality of the pictures, but for the younger children this is probably not a problem, I would like to see this facility added at a later stage, at least the ability to import both PCX and GIF pictures.

All of that aside, I enjoyed playing with EGA Mouse Paint, and my young nieces and nephews are now having a ball with it. Oh yeah, it also has a timer facility so that you can stop a person playing after a period of up to 45 minutes!

EGA Colouring Book

EGA Colouring Book is another program like EGA Mouse Paint. This is amazing, you can't find any program of this type, then two come along in the same month, EGA Colouring Book is from a gentleman named David C. Swope and has a registration fee of US\$16. It occupies only one 360k diskette and does have some documentation included.

This one I feel is slightly better than EGA Mouse Paint as it offers a lot more colours and fill patterns, as well as a full size screen to colour in. Again it does have some of the problems of EGA Mouse Paint, namely that it uses a specific picture format, not a generic one. It also has some problems in colour in small areas due to the design of the pointer.

EGA Colouring Book has a keyboard mouse simulator for people who don't have a mouse handy, and also allows you the option of having the palette box remove itself from the screen after you have selected a colour. Pressing the right mouse button will return it to the screen.

These pictures (all five of them) are rather simple but are fun to colour in. They are a lot better quality of picture than is included with EGA Mouse Paint, because they haven't been drawn with an etch-a-sketch, but with a proper painting program.

The author is promising to release collections of pictures (15 to a collection) at a cost of US\$10 per collection. When you register, he offers you a set of ten (10) new pictures and the latest version of the program. The greatest plus to EGA Colouring Book is the number of colours and fills available to you for use. We are talking somewhere in the region of 500 colours available! This is a great improvement on EGA Mouse Paint, but EGA Mouse Paint scores with its facility to draw new pictures. Both authors should look at allowing the import of perhaps PCX and GIF files to their programs, so that the customer does not have to rely on the author to supply them.

I think that the time has come to stop here for the moment. All of this writing and testing can get hard on your hands. All of the diskettes that have been mentioned this month, and the ones previously mentioned, are always available for \$7.50 per 360k 5 1/4" diskette, or \$15.00 per 3 1/2" diskette (YOU must select 2 programs). Please send you orders to me at the following address:

MacroDisk Unit 2, 47 Vernon Street South Kingsville Victoria 3015

Please allow 14 days for me to get your diskettes back to you. Also could I please ask that people PRINT their names and addresses, as some of them lately seem to be getting very hard to read. Until next month, please enjoy your computers and most of all HAVE FUN!

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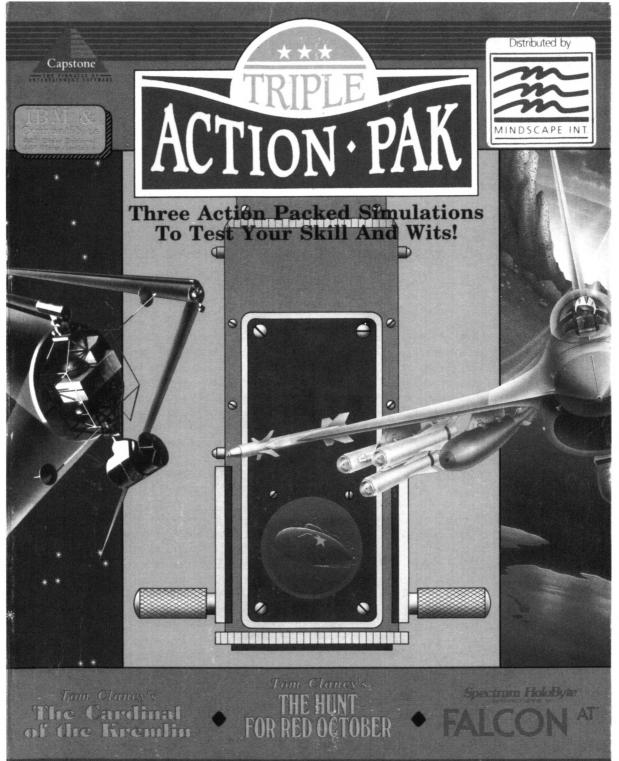
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With reference to...

In his search for the ultimate information management system, Joseph Elkhorne has discovered two packages to help him keep ahead of a growing reference problem.

R ecently I ran across a thorny problem and have investigated several solutions which I will share with you this month. In the course of writing a science fiction novel, my background research notes were growing quite massive.

After you've accumulated thirty references to Sir John Eccles, on a variety of topics, trying to retrieve the one you want can be a daunting task. Sure, you can use the DOS FIND command - it might help a bit, but I realised I needed something much more flexible.

Even the Search function of a word processing program is a better option, though not as versatile as what I had in mind. Accordingly, I started asking on various bulletin boards if other users had some expertise in this area. What I needed, I said, was a database program of some sort that was highly flexible - virtually unstructured and free-form.

Within a couple of days, I had three different styles of programs to play with; 3BY5, Memory Mate and Zoomracks.

I'd also perused the massive PC Magazine DOS Power Tools reference manual and found some batch file techniques that would help on simple things. What I needed for efficient free-lance writing use would have to be more sophisticated.

3BY5

Thinking back to old-fashioned (slow but efficacious) technology, the humble system card

had a lot going for it. So, as things went, the first product I began to examine was an electronic version of the system card: 3BY5.

This is a quick, simple and versatile information management approach. A BBS buddy uploaded it to one board and I retrieved it the following day in a .ZIP file format. (Thanks, GaWdy)! The .EXE program was there, along with a couple of sample files and a very large .DOC file. I had a (very) quick browse and simply leapt into the thing; that's one way to see how easy a new program is to work with. The key to a program like this is not only how easy it is to enter the information, but how readily one can access it afterward.

3BY5 is a stand-alone program which loads into memory and then allows you to use 'the' disk drive for data files. There are actually two associated files, a .3X5 extension and a .MAP one - data and index in function. The program has a simple integrated word processor which allows overtyping modes, as well as insert and delete functions; it provides word wrap, automatic alignment of text, cursor commands, and block copy/move/erase commands.

CAUTION: once you delete a block of text, you cannot restore the original text.

3BY5 has the ability to copy from one record to another or even export data to an ASCII file. Using it is rather easy; the electronic manual (.DOC file) will answer any tricky questions. It is one of the best pieces of documentation I've come across.

When you run the program, a title screen is displayed, waiting for any key press to continue. Then a Main Command Menu appears at the top of the screen.

Files: Search Window Modify >Files< Print Exit Open Info Dir Path Copy Move

Generally speaking the top menu manipulates files, and a second menu - at the bottom - is used to handle records within the files. One can have three files open simultaneously, and in addition, open a fourth file for export data!

On the top line, files you have opened will be shown. The second line contains the commands that may be executed. The third line (Auto Help Line) is highlighted on one of the possible functions within that menu selection. Use the cursor keys and Enter to choose. The sample files provided will help you to learn how to use the program efficiently. Do take the time to at least scan through the documentation. This is a very clever program.

Now, there are some limitations: one being that the record size is fixed, though it is configurable by the user. The size can vary from 32 characters to 4800 - a spread wide enough to copy with cataloguing video titles or storing letter-sized documents.

The editor allows you to enter up to 60 lines of text per record, regardless of the number of bytes per record. If you enter more characters than the record will hold, the program places an asterisk (*) to the right of the character count. An additional lurk to watch out for is that this version of the program can only search the first 1024 bytes of a large record. Once you specify the size for a file, all records in the file will have a maximum number of characters equal to the number you enter.

Without really delving into the fine points, I was eager to try and fiddle my background notes and made an effort to import the PC-Write file immediately. To my dismay, I discovered each line of the text had been treated as a separate record.

A quick inspection using DEB(JG showed that the 3BY5 record separator was the OD(hex) character, i.e. carriage return, and OA was the line separator within the record. It was a simple matter for use the word processor to search-and-replace all the hard carriage returns, and re-format appropriately so that contiguous chunks of text would be accepted as records.

As I said earlier, retrieving the information is the

test of the practicality of an information manager program. 3BY5 is really a delight to use. Searching files is fast, because of an unique indexing method called signature screening. Any combination of 3 to 60 characters will find the first and all subsequent occurrences in your file. When the key is found, it is displayed in the context of the record in which it appears. At each instance, you have the option of continuing the search, editing the record, printing the information, transferring records from one file to another, or quitting. You may search for partial keys: 'psych' would yield all occurrences of 'psychiatry', 'psychology' and if such a record exists, whether you want it or not - 'Psychotronic Cindy', as well!

Thankfully, the key is not case sensitive. Further logical combinations can be developed. The "and" (symbol = "&") or "or" (symbol = "!") exist. For example, "basic&cobol&ibmlpascal&compaq"will locate records which contain the words "Basic", "Cobol" and "IBM" or the words "Pascal" and "Compaq". You could have 500 records in the file and extract only the ones you want and perhaps write those to an Output file. The program will then ask you for the name of the file:

Files: P[sample1.3x5] Enter the name of the output file: Press <Enter> for sample1.out

The Auto Help Line informs you that pressing <Enter> alone will assign the name of the first opened 3BY5 file to the output file, but will give it the extension OUT. Said OUT file in ASCII form could then be manipulated in a word processor, BASIC data file or other program. If you already had an output file called SAMPLE1.OUT and wanted to add (append) records to it, you would press [A]. If the file SAMPLE1.OUT existed, but you wanted to start over, you would press [D] to delete any old records in the file.

You may open and search a standard ASCII text file or a WordStar or WordPerfect file, though these cannot be edited within 3BY5. If the program opens the file and finds that it is not a standard 3BY5 file, it will attempt to open an index file for the file. If you have previously indexed the file, the program will open both files and return you to the File Command Menu. If the file has not been indexed the program will ask whether you want it indexed:

"Index file? (Y/N)"

If you press [N], the program will allow you to search the file, but the searches will be slow.

It's possible to have two windows on screen, with

ORGANISING

a file in each, assigned by the user. Options exist to clear the screen for each new record - page mode or scroll the displays. You don't have to use search keys, however. There's a Browse option which will allow you to look at records sequentially. The Forward Command moves you Forward one record each time you press [F]. The Backward command moves you back one record at a time - but does not allow you to move backward in a non-3BY5 file.

The Exit Command is used to end a 3BY5 session and exit to the operating system. If any files are opened, it is important to always Exit when you are finished since Exiting automatically closes all files.

Overall, I'm quite pleased with this acquisition. The documentation implies it is public domain, in that it can 'freely' be copied and distributed in its original form. There is a registration page, but no mention of a registration fee is suggested therein. Guess I'll learn more when I write to Softshell Corporation, P.O Box 18522, Baltimore, MD 21237.

I could write more about this program, but I can imagine some readers would object at its main limitation - that of being a stand -alone item.

MEMORYMATE

The second product I got to evaluate from my mate Graeme is MemoryMate. Graeme had upgraded to the latest version - which I'm anxious to evaluate and let me have his old package: original disk, manual and quick reference card, as well.

MemoryMate is a different kettle of fish. It's a "memory resident" program - always there when you need it. If you want it to be. It can be loaded as a stand alone program too. Although the .EXE file is about 50K, it reserves about 82K all up when installed. I did find the 512 memory didn't quite stretch when I had MemoryMate resident, and tried to run the Silver Express off-line mail reader. SX loaded and accessed the mail for reading but would not allow the loading of the SX binary editor when requested.

Whilst writing this column (using PC-Write 2.41), I had MM installed and accessing records of 3BY5 I'd transferred from the .DOC file. When I wanted to double-check some fine point, I merely hit Alt-Z and had a look. I could even "cut-and-paste' from MemoryMate into the PC-Write file. But I'm getting ahead of myself.

MemoryMate is, of course, a commercial program. It's from Broderbund, and was developed from an earlier shareware product called Instant Recall by Precept. The release I have is copyright 1987 according to the printed manual.

Unlike 3BY5, MM does not access external data files, but keeps everything you put in it in one

massive 'internal' file. I found this a bit dismaying at first, but soon found ways and means to improve my usage of the program. Reading the manual helped, too....

I'm told it is possible to have more than one data file if they're in different subdirectories, though I have not as yet experimented with this possibility. This is not really a problem, if you periodically browse through the data file. Otherwise, you could have obsolete information cluttering up the disk needlessly. The one shortcoming I found with MM was the lack of an on-screen report of the total number of records. Even this can be overcome with a search done in a rather strange way: looking for all the records created after a silly date, like 1/1/1 for instance.

MM is a free-form data storage, even more flexible than 3BY5, as record size does not need to be specified. As you enter data with the built-in editor, words are automatically indexed.

My one real grip about MM is that search keys must be precise and entire - it will not find occurrences that match a partial key. But, I'm told, the latest release has fixed this. As for this earlier version, if you look for 'widget', you will not find 'widgets'. Fortunately though, the search key is not case sensitive.

In addition to searching text, you can also search on the date records were created, modified or on a Reminder date. The latter is an option for record creation and appropriate entries will automatically warn you when MemoryMate is loaded.

I opted not to load MM from my autoexec file but instead wrote a batch file, so that I can (a) use the INSTALL utility from the DOS Power Tools suite, (b) make MemoryMate resident and (c) subsequently use the companion REMOVE utility. That way I don't have to warm boot the machine to get rid of the TSR when I need the extra memory.

When MM pops up, you have two windows at the top - the left hand one holds the various options available to the user. The right window will initialise with the information F1 for Help and Working Record.

The user commands are accessible by holding the Control key and hitting the initial letter of the desired command. These are: Find, Narrow, Reject, Cut, Ditto, Paste, Jump and on a second line: Save, View, type, In, Out, Zap, Undo and Exit.

Find does a search of the file by entered keyword combination of words or specified date. The first record that matches will be displayed and the right hand window then tells you how many records were retrieved. They sequence in chronological order, oldest first. One can then browse forward and backward using the minus and plus keys of the numeric keypad. Should you discover an horrendous number of records retrieved, you can Narrow the search with a further keyword.

MemoryMate reserves five words which the user cannot search for. They are: and, or, created, modified, reminder. These are used by the program for more precise searches. The two logical operators speak for themselves. 'And' is evaluated before 'or' and parentheses can be used to avoid conflicts. Symbolic logical operators can modify date searches. Thus, the user can find anything created after, or before, or indeed between dates.

Entering information into records is similar to most built-in editor operations. Once again, the user finds wordwrap, cursor movements, and tabs. By a curious coincidence, the record limit of MM is 60 lines.

Yet again, importing and exporting ASCII data is a breeze. In and Out commands allows the transfer of large amounts of data from and to external files.

The greatest elegance of MemoryMate by far, however, is the clipboard function - the user can transfer data with MM, select text and shift it to another program in operation, or even the reverse. The View function allows you to, for instance, position a screen with wanted data, use Alt-Z to pop up MemoryMate, then the selection of Ctrl-V presents the other program's screen. Now you can set block markers with Ctrl-D (ditto), return to MM and paste the text into your desired record. One can either Cut information from MM and transfer it to the external program or Ditto it. In the first case, you remove it from the MM record - the latter copies it, leaving the data in the record.

There's a Zap command to remove information from MemoryMate which is particularly clever. It deletes a record but does not immediately erase it. Instead, there's a buffer of ten MM records held. When you Zap an eleventh record, the oldest is then lost forever.

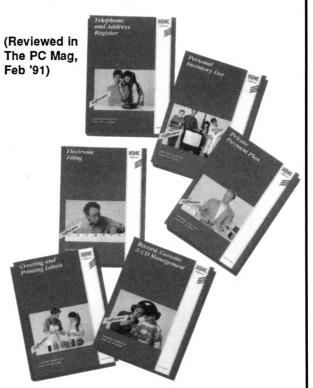
Should you decide on reversing a Zap, you have an Undo command. How idiot-proof can you get? Hard copy can also be generated by MemoryMate and includes a screen print function, additionally.

Although I've seen one recent advert. for MemoryMate at \$119, I'm told careful shopping can get you a copy for under the hundred dollar mark. It's money well spent, if you need this sort of capability.

I've also started to evaluate yet another program titled Instant Recall (just to confuse things!), though this is a commercial offering from Chronologic Corp. in Tucsan, Arizona. And I've had a bit of a play with a blockbuster standalone called Zoomracks, which has some intriguing features. Until next month, keep yourself organised!

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Generic Generatrix

A report on the release of a new CAD package.

omputer Aided Design (CAD) is a term that until the advent of AutoSketch was intimidating to all but designers of tall buildings and large aircraft. One not only needed to be a qualified engineer or architect but a computer boffin to boot.

AutoDesk, the makers of Autocad and the fifth largest software company in the world, brought out an easy to use yet powerful two dimensional CAD package called AutoSketch. This was a move to make us casual computer users aware of the fact that CAD was as easy, if not easier than using a pencil and paper and that it could be used for jobs from working out the best way to lay out office furniture to designing your dream home complete with wiring, plumbing and colour and all for only \$299. This article is not however about AutoSketch, but rather Generic version 5.

You see, Autodesk sell their world beating package Autocad for more than \$5000. It really is capable of designing 3 dimensional drawings of the largest and most complex constructions in the world and at that price it would want to be! Then along came a company called Generic Inc. with their Generic V5 and Generic 3D. These products are billed as 80% as powerful as Autocad at 20% of the price. Seeing the potential, Autodesk bought the company. So much for competition!

Generic V5 is so easy to use and requires no more than a PC XT with a Math Co-Processor and a VGA screen. Of course, you'll need a printer - a 24 pin Dot matrix printer, a laser printer or, if you are really into it, a plotter.

So where does Generic V5 differ from AutoSketch? For a start AutoSketch is for casual users who have applications outside of their normal working day, more like a personal drawing tool. Generic is for those who make their living out of the use of it. High volume drafting springs to mind. Then there's the fact that Generic V5 has a 3 Dimensional "bolt-on" pack which literally turns your design into 3D. You can then "walk" through your design complete with colours and shades and even light source. You can even give that light source a quality such as fluorescent, spot or natural to see how it effects the overall lighting within a certain design.

Currently the most important users of Generic V5 are those already using Autocad (the \$5000 job). This may sound strange but the fact of the matter is that Generic is bidirectionally compatible with Autocad. This means that the main project can be undertaken using Autocad by the project leader and smaller components of the main project can be designed using Generic V5 and imported into or exported from Autocad. This further means that the company in question need only buy one copy of Autocad and for the same price up to 7 copies of Generic V5. You can imagine how much faster and how much cheaper a project can be completed with 8 people working on it at the same time.

I realise this is starting to get into the realms of high powered computer use, but if you are a draftsperson, an architect, engineer, plumber or anybody who makes a living from design Generic is easy to learn and smooth to use and very, very powerful. Take a look at the features list on the next page and you'll see what I mean.

As with AutoSketch, Generic V5.0 and Generic 3D is distributed by Reckon Software who have been selecting dealers throughout Australia to carry these products at all times. Autodesk themselves will handle support. Generic V5 retails for \$695.00 and Generic 3D for a further \$465.00. More details can be obtained from Reckon on (02) 550 2666, Autodesk on (03) 429 9888 or The PC Mag on (03) 803 9661.

System Requirements: IBM PC/XT/AT, PS/1, PS/2 or compatible with 640K RAM memory and DOS 3.0 or higher. One hard drive and one floppy drive, Graphics card: Hercules colour or monochrome, CGA, EGA, VGA, PGA and others. Minimum of EGA for colour. Recommended options: Math coprocessor, Expanded Memory Support (EMS), mouse or digitiser, dot matrix, laser printer or pen plotter.

Features of Generic Version 5

DRAWING TOOLS

• Draw Points, Lines, Rectangles, Circles, Arcs, Polygons, Ellipses, Spline Curves, Bezier Curves. All with dynamic visual feedback.

LINES

• Choose from 256 different widths and 10 basic line types, including dashed, double-lines and dotted lines.

• Specify different line colours numerically and match the numbers to your pen plotter for output consistency.

GEOMETRIC SNAPS

Use snaps to begin lines or elements in the exact location. Fully interactive with other commands.

• Snap to grid points, construction points, nearest points, intersections, nearest object, midpoint, perpendicular, parallel, tangent, percentages, arc centre or snap orthogonal.

• Visual feedback lets you see a snap as it is performed.

• Relocatable grid origin for snap-to-grid feature.

• Snap orthogonal angle is user-definable, making isometric drawing easier.

TRIMS

Clean up drawings by automatically trimming line intersections for precision and corner detailing. Trim several lines at once with multi-trim.

• Simple and smart single and double line trimming and entity trimming, plus automatic fillets and chamfers.

Dynamic intersection trims.

EDITING TOOLS

Easily change or modify drawings using Generic CADD's excellent editing features, including:

• 25 Level Undo/Redo/Change Layer, Erase Layer, Selection and Deselection filters allow you to select a group of objects all at once.

• Copy, Radial Copy, Rotate, Move, Break, Rescale, Erase, Change, Mirror, Break Object, Explode (to reduce components to their basic construction).

COMPONENTS

Create your own custom library of frequently used symbols for use in future drawings.

• Change, resize, or rotate components during placement.

ATTRIBUTES

• Link non-graphic information, such as

part numbers and descriptions, to specific drawing components.

• Import linked data into spreadsheets or databases to produce bill of material reports, bids and inventory records.

GRIDS

Improve drawing accuracy with graph paper-like overlay on the screen. Grid spacing can be any unit of measure and of virtually unlimited size.

TEXT HANDLING

Eliminate time-consuming hand-lettering on your drawings.

- Load ASCII text files for use with CADD
- Eight font styles in variable sizes.

• Capable of different justifications (right, centre, left), proportional spacing, rotation to any angle

• Control spacing between letters and lines.

• Globally change fonts or match existing text settings with a few keystrokes.

HATCHES AND COLOUR FILLS

Add hatch patterns and colour fills to distinguish between drawing elements.

• Choose from 18 hatch patterns or create new hatch patterns with a simple word processor or text editor.

AUTOMATED DIMENSIONING

Use Automated Dimensioning to speed up the most tedious aspect of manual drafting.

• Pick and place dimensions on the fly. Change a dimensioned element, and its associated dimension will update automatically.

• Choose between 5 different dimension types, to suit industry standards, including linear, angular, radial, diameter and leader.

• Choose between 3 different modes: including single, partitioned (chained) and cumulative (stacked).

• Choose from 7 arrow types and define text placement as centred/not centred, in line, above line.

UNITS OF MEASURE

Draw to real-world scale for accurate design using a variety of measurement units.

• Choose from measurements in inches, feet and inches, feet, millimetres, centimetres, metres, decimal degrees, and deg:min:sec.

LAYERS

Organise your drawings by placing

different types of details on up to 256 different layers. Use layers as overlays that can be viewed separately or together to get different views of your drawings.

• Name layers to logically organise drawings.

• Display, hide, edit or print any combination of layers.

VIEWS

Look at your drawing from any scale by zooming in for close-up detail, moving back for a complete view, or panning across the drawing. Zoom while executing other drawing or editing functions.

• Fit drawing to screen, Zoom in or out, Zoom to a pre-defined view (Named Views) or a user-defined value, Pan.

SHELL OUT

• Temporarily escape to DOS or another software program while still running Generic CADD. Then return to CADD where you left off.

VIRTUAL DISK

• Create and revise large drawings, up to 10mbs by using your hard disk as extra memory.

MEASUREMENT FEATURES

Define precise locations in drawings by typing in specific values. Measure angles, areas and distances.

• Find and measure cursor locations using Absolute, Polar or Delta (Relative) coordinates. Change co-ordinate displays as needed.

• Measure distances in your drawing with simple two-key commands.

FILE CONVERSIONS

• Supports EPS, HP-GL and other graphic formats for use in word processing and desktop publishing software.

• Generic Software's optional AutoConvert module gives CADD drawings full compatibility with the Autodesk standard DXF format for easy file transfer between CADD 5.0 and Autocad.

OUTPUT CAPABILITIES

• Page Preview capabilities. Support for multiple copy output. Print or plot to disk.

- Output to specific scale or paper size.
 Supports most popular pen plotters, dot-
- matrix printers and laser printers.
- Supports all Postscript devices (including colour).

Here's a list of our top selling products for IBM and other PC compatible range of computers.

Our full list, containing over 1400 products, is available on request (by mail or ringing 03 - 803 9661) or by reference to the March 1991 issue of this magazine.

H Drife Please remember that this list is prepared many weeks before you see it and stock or prices can fluctuate. It is prudent to provide an alternative choice if possible.

Postage should be added to your remittance as follows: Order value under \$20 - \$1.00 (Overseas - \$2.50); Order value from \$20 to \$60 - \$3.50 (Overseas \$7.00); Order value over \$60 - \$5.50 (Overseas \$12.00).

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Battlechess 2 /dual	69.95
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CEVH/512	
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CEVH/512	
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CE/384	
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CEVH/512	
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CEV/512	
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+ course design /5.25 (S)	79.95
For golf fanatics	
CEVM/512	
Jet Set Pack /5.25	69.95

LEGEND

To assist you in selecting the right software for your computer we have identified, where known, the environments supported by each package. For example:

Lord of the Rings /3.5 or 5.25 59.95 Tolkien's epic adventure CEMTV/640 - 286 and above

means that Lord of the Rings is available in either 3.5" or 5.25" disk format (dual means both formats are supplied) at a cost of \$59.95. It is suitable for faster computers (286s and above), supports CGA (C), EGA (E), MCGA (M), Tandy (T) or VGA (V) screens and needs 640k of memory.

Other codes: (S) means a sound card is supported; D means a hard disk is required and H means that Hercules is supported.

The information is supplied as a guide only, and is subject to change without notice. With the best will in the world, we cannot guarantee that any particular package is suitable for all IBM PCs or compatibles.

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TECMV/640

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CEVM/512	
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	79.95
Quest for Glory 1 /dual (S) [formerly Hero's Quest]	79.95
Sierra 3-D role playing adventur	e
CEVH/512	70.05
Quest for Glory 2 -	79.95
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Sierra 3-D role playing adventur	е
[1.2mb 5.25" disks supplied]	
CEVHT/640	
Railroad Tycoon /dual	89.95
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CEVMH/640 - no graphics on (CGA
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Discussing Disks - 4

PIP is primarily used for copying files from one disk to another but, as you will discover, can do much more.

e have already spoken about transient commands and programs. The 'Peripheral Interchange Program', or PIP for short, can be used as either. It resides as PIP.COM on the CP/ M master disk. Most people use the utility to copy files from one disk to another, however, you can choose to output to, say, an RS232 port or printer.

PIP AS A COMMAND

Like other transient commands, PIP (or PIP.COM to be precise) must be available on either the disk *from* which a copy is being taken (the source), or the disk *to* which to which the copy being made (the destination). Another thing to remember is that the command to copy, say, a file from one disk to another is not in a "from-to" format but rather "tofrom". So, if we wanted to copy a file called "MYFILE.DOC" from drive A to drive B the command will read at the A> prompt

PIP B:MYFILE.DOC=A:MYFILE.DOC

The destination (to) is described first and the source (from) after the equals sign. Too many people have found out to their cost the perils of putting these around the wrong way.

If you always make sure that the 'write-protect' tabs are set on the disk from which you are copying, you cannot overwrite it and so protect it from mistakes. Naturally, you cannot copy games (it's illegal anyway) which are normally heavily protected to avoid piracy. Nevertheless, many try, get the command the wrong way round and wreck their games disk.

The previous example will copy a single file and can be shortened to

as PIP will take the same filename if not specified on the destination disk. PIP will also allow the use of 'wildcards'. For example, to copy all your .DOC files from drive A to B the command would be

where *.DOC means any file on the disk with an extension of .DOC. Similarly, all files could be copied by using

If you have only one disk drive, you will remember from last month that, if you are using CP/M Plus, you can still specify drive B and the program will tell you to change disks when needed. PIP will not copy an entire disk as it cannot copy CP/M system files (you need to use DISCKIT or DISCKIT3 for this depending upon whether you are using a PCW or a 6128).

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PIP AS A PROGRAM

You will probably find this method more appealing and less of a nuisance. As a program, PIP is loaded by merely typing PIP and hitting return. If it loads successfully, the A> prompt turns to an asterisk (*). PIP does not have to be present on the disks after it has been loaded.

The program is used in the same way as a command described above except that it is not necessary to include the "PIP" word at the start of each instruction. So to copy all files from A drive to B drive would need (at the * prompt) just

B:=A:*.*

To end the PIP program it is only necessary to hit the return key at the * prompt. Hitting almost any key during a copy will also abort the copy.

PIP OPTIONS

There are many options you can add to the end of a PIP instruction to make it perform a certain function when copying. The options (or extensions) should be put in square brackets after the source file information. Note that some are specific to the PCW range.

- [A] Only copies files which have changed since their last copy.
- [C] Asks for confirmation before copying each file.
- [E] The transfer is echoed (displayed) to the screen at the same time. (Beware, unless the file is straight ASCII you may get some funny looking characters on the screen).
- [F] All form feed embedded in the source file are removed.
- [Gn] The file is identified as belonging to user number n.
- [K] Kill display of file specification on screen.
- [L] Convert all uppercase letters to lowercase.
- [N] Add line number to the destination file.
- [O] Make sure whole file is transferred. (PIP may interpret non-printable characters as end of file markers and not complete the copy).
- [Pn] The number of lines per page in the destination file is set to n.
- [R] Read and copy the SYS files.
- [U] Convert all lowercase letter to uppercase. (See [L])
- [V] Check the destination file with the source file to see that the copy has been accurate.
- [W] Allow the copy to overwrite a read-only file with the same name.
- [Z] Set the parity bit of each data byte in the destination file to zero.

Using [V] is not essential, but prudent. Long binary files (like program or data files from DR Draw for example) can be corrupted by PIP - it's an unfixed bug. The disadvantage of using [V] is that it will take much longer to copy the file or files.

OUTPUT ELSEWHERE

Instead of specifying a disk drive as the output, you can output the file or files to other devices such as the printer or screen. In much the same way as you would type TYPE MYFILE.DOC at the A> prompt and get a display of the file on the screen, you can achieve the same result by using PIP. (All example now assume that PIP is being used as a program).

where CON is the old-fashioned term 'console' these days meaning the screen (or even keyboard). The full list of other devices is:

CON: screen (or keyboard) AUX: any auxiliary I/O device (like an RS232) LST: printer PRN: printer

Alternatively, you can specify a device as the input. For example, the command to accept data entered through a keyboard into a file called MYFILE.DOC would be

MYFILE.DOC=CON:

PCW owners can find some useful features in PIP, especially when it comes to combining files. In fact, reference to their manual will describe that the command to combine the contents of the files SECT1.TX, SECT2.TX and SECT3.TX into a single file which is stored as a file called CHAP1.TAX then lists this new file out on the printer starting a new page every 50 lines is:

```
CHAP1.TEX=SECT1.TX.SECT2.TX,SECT3.TX
LST:=CHAP1.TEX[P50]
```

If you haven't used PIP very much you'll find it surprisingly helpful. As always - experiment as much as you like, but please don't forget to protect the disks you can't afford to overwrite!

Next month we'll cover some of the rules to which you and your system must adhere.

Let your fingers do the typing

A smorgasbord of type-ins for CPC users, including a snazzy number to reveal the real age of your favourite movie or TV program.

f the three type-ins supplied this month for your entertainment and regular exercise of finger muscles, the first is probably the most useful.

How often have you wondered what all those Ms and Cs and Ls etc. which appear at the end of video credits/films/TV programs. The answer of course is that they represent the year of release, and is perhaps the entertainment industry's way of trying to keep us, the viewing public, from instantly knowing the real age of what we have just seen.

Enter 'ROMTODEC', a program to convert Roman Numerals to Decimal (and vice-versa). It's very simple to use; merely type either the year or Roman numerals (the program will know what you have entered) and the relevant conversion will be printed.

Please remember, all three program listings are from working and tested versions, so if you get an error it will be due to incorrect typing.



ROMTODEC

```
1 'Roman-Decimal Conversion
2 'The PC Mag/TAU April 91
3 'Clive Blackmore
110 BORDER 24: INK 8,24: INK 1,2: MODE 1
120 DIM x(16):WINDOW #1,16,40,18,25
130 LOCATE 8,1:PRINT"ROMAN NUMERALS TO DECIMAL":LOCATE 19,
3: PRINT "or": LOCATE 8,5: PRINT"DECIMAL TO ROMAN NUMERALS":
PRINT:PRINT:PRINT* To convert a Roman numeral to Decimal
  or a Decimal number to Roman numerals, enter the number
                         ROMAN NUMERALS are: M=1000
140 PRINT: PRINT: PRINT"
                                                      D=50
C":PRINT:PRINT"
                   C=100 L=50 X=10 V=5 I=1"
150 INPUT #1," ",n$
160 IF VAL(n$)>0 60T0 350
170 n$=UPPER$ (n$):n=0
180 c=1
190 IF MID$(n$,c,1)="M" THEN x(c)=1000:60T0 270
200 IF MID$(n$,c,1)="D" THEN x(c)=500:60T0 270
210 IF MID$(n$,c,1)="C" THEN x(c)=100:60T0 270
220 IF MID$(n$,c,1)="L" THEN x(c)=50:GOTO 270
230 IF MID$(n$,c,1)="X" THEN x(c)=10:60T0 270
240 IF MID$(n$,c,1)="V" THEN x(c)=5:00T0 270
250 IF MID$(n$,c,1)="I" THEN x(c)=1:GOTO 270
260 PRINT #1:PRINT #1, "INCORRECT ENTRY":PRINT #1:GOTO 150
270 c=c+1:IF c<=LEN(n$) GOTO 190
280 FOR r=1 TO LEN(n$)-1
290 n=n+x (r) *SGN(1+x(r)-x(r+1))
```

CPC TYPE-INS

300 NEXT 310 n=n+x(r) 320 PRINT #1,n 330 PRINT #1 340 GOTO 150 350 n=0 360 FOR d=1 TO LEN(n\$) 370 n=n*10+VAL(MID\$(n\$,d,1)) 380 NEXT 390 m=n\1000:n=n-m*1000 400 FOR s=1 TO m 410 PRINT #1, "M"; 420 NEXT 430 IF n>499 AND n<900 THEN PRINT #1,"D";:n=n-500 440 IF n>899 THEN PRINT #1, "CM";:n=n-900 450 c=n\100:IF c<4 THEN FOR s=1 TO c:PRINT #1,"C";:NEXT:n= n-c*100 460 IF c>3 THEN PRINT #1, "CD";:n=n-400 470 IF n>49 AND n<90 THEN PRINT #1,"L";:n=n-50 480 IF n>89 THEN PRINT #1,"XC";:n=n-90 490 x=n\10:IF x<4 THEN FOR s=1 TO x:PRINT #1,"X";:NEXT:n=n 60 'CTRL - change XS,YS -x*10 500 IF x>3 THEN PRINT #1,"XL";:n=n-40 510 IF n>4 AND n<9 THEN PRINT #1,"V";:n=n-5 520 IF n=9 THEN PRINT #1,"IX";:n=0 530 IF n=4 THEN PRINT #1,"IV":n=0 540 FOR s=1 TO n:PRINT #1,"I";:NEXT 550 PRINT #1:PRINT #1 560 GOTO 150

RANDSQRS

A clever little program which draws squares all over your screen in random colours and positions.

1 'Random Squares 2 'The PC Mag/TAU April 91 3 'by Clive Blackmore 7 ENT 1,4,1,1,8,-1,1,4,1,1 10 MODE 0: INK 0,0:BORDER 0:c=1:INK 14,24:INK 15,2 20 FOR i=1 TO 13 30 INK i,i*2 40 NEXT 50 RANDOMIZE TIME 55 v=INT(RND*3) 60 x1=INT(RND*50)*4 70 x2=INT (RND+50)+4 80 IF ABS(x1-x2)<20 60T0 70 85 d%=x2-x1:ENV 1.15.-1.ABS(d%)/20 90 x3%=INT(RND*(160-ABS(d%)/4))*4 100 y%=INT(RND*(100-ABS(d%)/4))*4 105 PRINT CHR\$ (23); CHR\$ (0) 107 SOUND 1,64+ABS(d%),ABS(d%)/1.4,15,1,1

110 PLOT x3%+ABS(d%)/2-(d%)/2,y%+ABS(d%)/2-(d%)/2,14-c:DRA WR 0,d%,14-c:DRAWR d%,0,14-c:DRAWR 0,-d%,14-c:DRAWR -d%,0, 14-c 115 PRINT CHR\$ (23) : CHR\$ (v) : 120 FOR I=4*SGN(d%) TO d%-4*SGN(d%) STEP 4*SGN(d%) 130 MOVE x3%+I+ABS(d%)/2-(d%)/2,y%+2*SGN(d%)+ABS(d%)/2-(d%)/2:DRAWR 0,d%-4*SGN(d%),c 140 NEXT 150 c=c+1: IF c=14 THEN c=1 160 GOTO 50

DISYMM

A symmetrical pattern generator.

1 'Di-Symmetry 2 'The PC Mag/TAU April 91 3 'by J Valentine 50 'SHIFT - change colours 70 'SPACE - re-run 80 'Try - A:4 B:3 C:22 X5, Y5:8,11 90 ' 100 MEMORY &7FFF 110 INK 0,0:BORDER 0 120 INK 1,2: INK 2,6: INK 3,18 130 MODE 1:PLOT 0,32:DRAWR 640,0,1 140 ORIGIN 320,216,0,640,36,400:a\$="" 150 WINDOW 1,40,24,25:PAPER 1:PEN 0:CLS 160 PRINT" RANDOM? (Y/N)":WHILE a\$="":a\$=INKEY\$:WEND:CLS 170 a\$=UPPER\$(a\$):IF a\$<>"Y" THEN fi=1:GOTO 190 ELSE fi=0 180 p=ROUND((RND*5)^2,4):q=ROUND((RND*5)^2,4):r=ROUND((RND +5)^2.4) 190 IF f1=1 THEN INPUT "A:",p:CLS:INPUT "B:",q:CLS:INPUT " C:",r 200 f1=0:GOSUB 210:INPUT "X,Y:",x5,y5:CLS 210 CLS:PRINT USING "A:##.#####";p:LOCATE 16,1: PRINT USING "B:##.#####";q:LOCATE 32,1:PRINT USING "C:##.#####";r; 220 IF f1=0 THEN f1=1:RETURN 230 LOCATE 1,2:PRINT USING "SCALE X:##.#";xs:LOCATE 16,2:P RINT USING "Y:##.#";ys;:PRINT" DISYMMETRY": 240 c=1:CLG 0 250 t=1/SQR(2):a\$="" 260 WHILE a\$="":a\$=INKEY\$ 270 x1=y-SGN(x)*SQR(ABS(q*x-r)) 280 y=p-x:x=x1:w=t*x+t*y 290 v=-t*x+t*y:s=s+1:IF s=300 THEN s=0:c=c+1:IF c=4 THEN c =1 300 PLOT xs*w,ys*v,c 310 IF INKEY(21)>-1 THEN bc=26-bc:INK 0,bc:BORDER bc 320 IF INKEY(23)>-1 THEN f1=1:x=0:y=0:GOTO 200 340 WEND: RUN

AMSTRAD CPC

Guide to Machine Code - 4

In Alex Aird's guide for absolute beginners, he searches for the logical answers to the right questions.

Programs constantly search for an answer, but if you want to write programs, what is the question? Knowing the right question and how to ask it is the answer! Logical? It's intended to be. After all, programs and computers revolve around logic. Either a switch is on or off, one or zero, nothing in between, no maybe's.

Machine code programs perform tests using flags. Either a flag is on (set) giving 1 or off (reset) giving 0. There are six flags inside the z80 chip and all can be tested, they are either 1 or 0. Two flags, carry and zero, are used more often than the others.

THE CARRY FLAG

Think of simple arithmetic.

9 9	+	
18		

Go through the process step by

step. 9 + 9 write down 8, *carry* 1. q Subtraction is similar...

question.

18 9	-		
9			

8 - 9 won't go so *borrow* 1. The carry flag is set to 1 whenever a carry or borrow occurs.

THE ZERO FLAG

is set.

Simple arithmetic again.

9 - ⁶ 9 0

The result is zero so the zero flag

An example of the use of this logic is given in the following

Basic program which ask the user

to answer yes or no to a

10 INPUT"(Y)es or(N)o";yn\$ 20 IF yn\$="Y" OR yn\$="y" THEN 100

30 IF yn\$="N" or yn\$="n" THEN 200

40 GOTO 10

The machine code equivalent of this is: -

```
.input
call &BBO6
cp "Y"
jp z,accept
cp "y"
jp z,accept
cp "N"
jp z,refuse
cp "n"
jp z,refuse
jp input
```

Lets just look at the first three lines of this and decode them into

38

plain English.

Get a character from the keyboard. Is it equal to "Y" If it is then jump to the routine labelled accept if not then go on to line four. If the program reaches the last line then none of the four specified keys have been pressed so go back and do it again.

The firmware routine call &BB06 stops a program and waits for input, just like the Basic INPUT routine. The character value of the key pressed is placed in register 'A'.

The next line cp "Y" decodes to ComPare the following number (Y=&59) with the number in register 'A'.

The next line cp "Y" decodes to ComPare the following number (Y=&59) with the number in register 'A'. The compare is done by performing a dummy subtraction. If the key pressed was actually an upper case Y then &59-&59 = 0 so the zero flag would be set. Any other keypress would load the 'A' register with a different number so the zero flag would not be set, it would be reset instead.

So on to line three, jp z,accept. This means JumP if the Zero flag is set to the routine labelled accept. If the zero flag is reset then no jump will occur and the program moves on to line 4 where a further comparison is made.

There are many other ways to write this short program. The various ways of doing things are perhaps why newcomers to machine code programming are perhaps a little confused. To start with I used the firmware routine &BB06. There are others routines to read the keyboard &BB09, &BB18, &BB1B, & BB1E and for reading the state of joysticks use &BB24. In all there are 27 firmware routines on a 464/664 (31 on a 6128) to do with the keyboard. If you can get hold of the firmware manual for more detailed explanations all the better, but alas they are like hen's teeth in Australia so you may have to source a copy directly from the UK.

Assembler conventions are another thing; cp "Y" could be written as cp&59 or cp 89, Maxam happily accepts cp "Z"-1. Labels have their conventions as well; '.input' is the Maxam convention but if you are using Devpac then write 'input:' instead.

The line 'jp z,accept' could perhaps be written as jr z,accept, where jr means Jump Relative. Although relative jumps are limited to how far away the destination can be (127 bytes forwards or backwards from the current position) they only take two bytes of memory whereas jp z,accept takes three bytes. Likewise jp input would be better written as jr input.

To finish this month a little routine to scroll the screen and have pretty coloured bands flashing at you. The firmware routine used is called SCR HW ROLL its action is to roll the screen by one character line using the hardware. The new line which appears is cleared to the encoded ink held in register 'A'.

ENTRY CONDITIONS

To scroll the screen down register 'B' must contain zero; To scroll the screen up register 'B' must contain anything but zero;

Ida,0 call&BCOE Idc,&ff .label Ida,c Idb,&ff

PROGRAMMING

call &BC4D dec c ld a,0 cp c jr nz,label ret

'dec c' stands for DECrement register 'C'. 'jr nz, label' means JumP Relative if Not Zero. This time we are comparing the contents of register 'C' with the contents of register 'A' and as a=0 the program will jump unless register 'C' is also zero.

The call to SBC0E I shall leave for you to work out. One hint though try loading register 'A' with either 1 or 2. You can try other numbers if you like but remember masking. eg a=99:a=a AND &X00000011:PRINT a

Play around with the program. Try stopping it before it has looped 255 times, there are two ways to do it. Try using the carry flag instead of the zero flag, should you use 'jr nc, label' or 'jr c,label' and will the program loop the same number of times?

You will notice that the coloured bands are striped. This is because inks should be encoded before calling SCR HW SCROLL. SCR INK ENCODE (&BC2C) is the one to use, but more of that next time.

Next month: A more meaningful program further demonstrating scrolling, and a peek into 'push' and 'pop'.

HARDWARE

A vintage port problem

device which transfers the left and right action of a joystick to left and right foot pedals, rather like rudder controls in a plane.

John has asked for details of both the joystick and monitor connectors (what's the other project John?) and apparently does not have a CPC manual because all this information can be found in that very book. The JOY information relates to JOY(1) or JOY(2) - either of two joysticks - which can be read by Basic.

1	=	RED
2	=	GREEN
3	=	BLUE
4	=	SYNC
5	=	GND
6	=	LUM

We've had a run of queries on an old problem concerning blank printing lines.

and happens with several differ-

ent makes of printer. It is caused

by the Autofeed signal being held

low, hence an extra line feed is

sent with each carriage return.

To solve it, pin 14 of the printer port must be discon-

nected, either by cutting the wire

in the printer cable which goes to

that connection, flattening the pin

so that it does not make contact,

or simply masking the pin with a

ports (the non-alcoholic kind of

intends developing a special

course), John Adams of Waterloo

While we are on the subject of

small piece of sellotape.

here must be an awful lot of CPC owners who have just bought a printer and not read our magazine before. We arrive at this stunning conclusion because this particular problem has been answered before (many times) yet over the past few weeks a number of letters have been received from anxious users. So once again, to put those unfortunates out of their misery, we repeat the answer to the problem of printers connected to CPCs leaving a blank line between each row of text.

The fault is peculiar to CPCs

0	ne		$\overline{)}$	_															_	
		17	16	13	14	13	12	11	10	9	8	7	6	5	4	3	2		1)
	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19		

CPC & PCW PUBLIC DOMAIN DISKS

The following discs contain compilations of public domain programs which have been tested under CP/M Plus. Unless otherwise stated, programs will run on the PCW, 6128 and 464/664 with extra memory and CP/M Plus. Programs for the 464/664 are on the CP/M 2.2 Collection. The discs are supplied in Data format and contain documentation files to help the user get started and provide instructions on running the programs.

But remember, as Public Domain programs they are supplied on an as-is basis.

CP/M 2.2 COLLECTION

For 464/664 disc drive users with CP/M 2.2. Contains File Manager, Compare, Find, Disc sector editor, Key definer, Bad sector eliminator, Grep, Full Screen text editor, Easy lister, File transfer utility, Unerase erased files, erased files catalogue and many more. CPC Ref: #430

FULL SCREEN TEXT EDITOR

This machine code editor offers full screen editing, full block operations, windowing, automatic horizontal scroll (line length up to 255 characters), macro functions, word-wrap and formatting, pagination, find/replace, undelete and many user options.

The editor, which is less than 10k in size, is fast because it edits a file entirely in memory. It produces ASCII text files and has enough features to be used as a word processor. A comprehensive on-disc manual is included together with keyboard configuration files for the CPC and PCW. CPC Ref: #601 PCW Ref: #801

DATABASE

A small relational database suitable for storing simple data and producing reports and forms letters from the data. Offers free format query language with macros and commands plus on-line help. The disc also contains an Inventory Database. Whilst these databases provide a useful introduction and you can use them to set up a full operational database system they are not meant to replace commercial packages for professional or business use.

CPC Ref: #602 PCW Ref: #802

COMMUNICATIONS

Programs to allow data transfer between computers (local and remote), access databases and bulletin boards. UKModem7, New Kermit, MEX and various communications utilities. The disc also contains software for Prestel (Viatel) emulation (PCW only).

CPC Ref: #603 PCW Ref: #803

VIDEO CLERK

Keep track of your video collection. With four Sort options and Forms Management system for printing out the data in order of title number, video number, global alphabetic or unique. Includes extensive on-disc documentation. CPC Rei: #604 PCW Ref: #804

FIXED ASSETS LOG

Allows you to keep a record of all your assets and their value. For example, at home, you may wish to keep a record of how much money you are spending on your computer or the value of a stamp collection etc. In business you can use it to keep a record of how much money you have tied up in land, buildings, office equipment, cars etc. It can also be used as a stocktaking program.

CPC Ref: #605 PCW Ref: #805

COMPLETE UTILITIES

• Newsweep - one key erase, copy, rename and print, plus many other features. Ideal for sorting out your disc collection quickly and efficiently • Superzap - disc sector editor - edit by track/sector of filename. Fully menu-driven with cursor key SETKEYS file • DisckitA - multi-choice disc formatter, offers 178k data format for PCW discs and 5.25" second drive formatting • Unerase erased files • Read/write PCW discs on a CPC • CP/M v2.2 emulator • Make - allows you to copy files across user areas • Cleanup - useful for speedy file deletion • Lookat - speedily lists any file in Hex and ASCII • Screen Dump (CPC only) • Password • Easy Lister • Password Protection • File • Scrambler • File Splitter • Directory check CPC Ref: #606 PCW Ref: #806

TEXT PROCESSING UTILITIES

 Sideways - prints text file sideways on an Epson-compatible printer. Ideal for those wide spreadsheets · Sort any ASCII list into alphabetical order · Word count · can be used on any ASCII file · WSClean - removes higher order bits from a text file and converts it to straight ASCII · Calendar Generatorprints out calendar for any year · Simple Spell Checker - with starter dictionary and dictionary editor · Scoring card generator · Banner printers · Typewriter emulator CPC Rei: #607 PCW Ref: #807

DISC ORGANISATION

Catalogue your disc collection and produce a printed index. Useful for speedy location of files and for keeping your discs in order. Library utilities for archiving and saving disc space. File dating system. Squeeze and unsqueeze for saving up to 40% disc space. Menu system - allows menu-driven access to programs on a disc. Completely and easily user-definable. **CPC Ref: #608 PCW Ref: #808**

Z80 PROGRAMMER

A complete Z80 Assembler which is capable of converting an ASCII assembler file into a fully executable machine code .COM program. Plus Z80 Disassembler, Z80 Debugger, Z80 Library, 8080 Disassembler, Z80 to 8080 Translator and associated utilities.

CPC Ref: #609 PCW Ref: #809

'C' PROGRAMMER

The Small 'C' Compiler by Mike Bernson. Includes source code and 25k of documentation. Produces executable .COM programs.

CPC Ref: #610 PCW Ref: #810

C' TOOLBOX

A disc full of 'C' source code examples together with the corresponding executable .COM programs. Useful to those wishing to see some practical examples of 'C'. As a bonus, the programs are quite useful too. The 'C' source was written for a variety of compilers and may need modifying to compile on MIX or Small 'C'.

CPC Ref: #611 PCW Ref: #811

FORTH, STOIC AND 'C' INTERPRETER

For experimenters interested in using these languages. Documentation is included on disc. CPC Ref: #612 PCW Ref: #612

GAMES COMPENDIUM

A varied selection of the best machine code programs available for CP/M. Includes Pacman, Snake (PCW only), Chess, Othello, Mastermind, Spellit, Awari, Life, Golf, Polish Pong, Maze, Biorhythms, Word Search puzzle maker, TicTacTo.

CPC Ref: #613 PCW Ref: #813

ADVENTURES

 Colossal Cave Adventure which originated on main frame computers. With game save and re-load • Bestiary (written in Mallard Basic for either PCW or 6128 Mallard users. Standard CPC users see Adventurer's Attic March 1989)- you play the part of a young prince, your greatest love being to read the ancient bestiaries about strange and often legendary animals. Your task is to find a solution to the terrible blight which, one year, destroys both crops and animals in the kingdom. Includes game save and re-load • *Return from Arg* - a short but interesting new adventure written in 'C'. CPC Ref: #614 PCW Ref: #814

PCW GRAPHICS (PCW only)

Simple user-designed graphics drawing program. Enables you to create, save, edit and print pictures on your PCW. Plot lines, points, boxes, four fill patterns, easy to use and wholly interactive • *PCW Screen Font designer* with several readyto-run font sets • *Biomorph* - fascinating, graphic demonstration of natural selection - develop your own bugs! • *Readme* - program to display any ASCII text file in 45 character format on the 90 character screen - makes it easier to read. **PCW Ref: #815**

HOW TO ORDER YOUR DISCS

Before placing your order, please make sure you have selected the correct item for your computer.

Software for CPCs have a reference starting with #4 (for CPC464s with a disk drive and CP/M 2.2)) or #6 (for CPC6128 running CP/M Plus).

Software for PCWs have a reference starting with #8. These discs can be converted to run on a PCW9512.

You may either order over the phone quoting your credit card, or by post enclosing a cheque, money order or quoting your credit card number and expiry date.

The cost of each	disk	is	as	follows:
CPC 3" disks				15.00
PCW 3" disks				15.00

(Please add relevant postage as shown on Page 46)

STRATEGY PUBLICATIONS 641 High Street Road Mount Waverley Victoria, 3149

(03) 803 9661

User dictionaries

How to maintain your user dictionaries more easily - including combining and even printing them.

he 2.28 version of Loco-Spell (2.29 for 9512s) contains two new features - one that lets you automatically add the 'unknown' words in a document to your (Jser dictionary, and another that lets you insert user dictionaries into documents.

Used on their own, these are pretty powerful features allowing you to create user dictionaries from specialised word lists or to print out all the words in a user dictionary. Used together, these two features can, for example, combine user dictionaries, update user dictionaries when you change over to a different system dictionary or 'tidy up' (and therefore speed up) system dictionaries to which you have added a number of User dictionaries.

This article looks at a range of possible applications for the new features, but first a closer look at the features themselves.

Automatic addition

The first feature we shall look at is

called Automatic addition. This automatically adds to your user dictionary any words that aren't already in either the system dictionary or the user dictionary itself.

The chief reason for introducing this option was to give you an easy way to pull all the words from specialised word lists into a user dictionary. Up to now, the only way of doing this was to patiently spell check the whole document, selecting Add to user dictionary each time LocoSpell stopped at a word it didn't recognise. This certainly gave you the results you wanted but, as any of you who tried would know, it was extremely tedious to do.

The new option is available in the f7 Spell menu and to use it you just have to edit the document containing the words you want, press f7 to display the Spell menu, select Automatic addition and press ENTER. LocoSpell then checks through the whole document and any words it doesn't recognise gets automatically picked out to add to the user dictionary.

All of document Just forwards from here Single word
User dictionary upkeep ► Automatic addition

At the end of the document, the usual summary appears telling you how many words were checked and how many have been added to the user dictionary.

Insert dictionary

The new option to insert a dictionary is really just an extension of an existing feature - the Insert text option in the f1 Actions menu. With LocoScript/LocoSpell 2.28 you can now use Insert text to insert a user dictionary into a LocoScript document, giving you an alphabetical list of all the words in the user dictionary - one on each line of the document.

A: group 0/ Layout	TOWNS . 1 Pil2	LSI	diting CR+0	text. LP6	
f1=Actions	f2=Lay	out	f3=Sty	le	{4= 9
·····		?			
	ylesburye oncastere				
	urhame				
	dinburghe				
	anchester alford∉	÷4			
	alisbury	,			
	auntone				
	eovile				

The steps are simply the usual ones for Inserting text - edit the document, position the cursor, press f1 to display the Actions menu, select Insert text, press ENTER etc. etc. The only difference is that instead of picking out a document when the Disc Manager screen is displayed, you pick out a user dictionary.

The user dictionaries that you can insert in this way aren't just the ones that you have as separate USERSPEL.DCT files on your disc. You can also insert user dictionaries that you have appended to system dictionaries. To put the contents of these dictionaries into your document, just carry out the same steps as before but instead of picking out a USERSPEL.DCT file, pick out the relevant system dictionary instead.

You won't get all 80,000 words or whatever of this dictionary inserted into your document but you will get the contents of any user dictionaries that have been appended to it, each as a separate alphabetical list.

Applications

These two LocoSpell features have a range of uses, from simply producing lists of the words in your user dictionaries to combining dictionaries and generating glossaries. The following are just a selection of the possible applications for the new features.

1. Dictionaries from word lists Automatic addition makes creating a user dictionary direct from a list of words supplied by someone else very easy. Indeed, this is precisely the application that was in mind in developing this option.

All you need is the list of words as a LocoScript document. (If it is currently in some other form, simply get the person whose word list it is to convert it to an ASCII file, then insert this ASCII file into a LocoScript document). Once you have the appropriate Loco-Script document, just select Automatic addition from the Spell menu. LocoSpell then picks out all the words it doesn't recognise and adds them to your user dictionary.

However, before you rush ahead and do this, we recommend checking that the words will get added to the right user dictionary - particularly if you want the words to be put in a new dictionary. LocoSpell goes to some lengths to find a user dictionary to use if none is immediately to hand. So before you start adding the words, it is worth using the User dictionary upkeep option in the f7 Spell menu to see what words the current user dictionary contains or whether it is just an 'empty dictionary'.

You should also note that any user dictionaries you create in this way will not be used as efficiently as a system dictionary. We have compressed and indexed the system dictionaries supplied with LocoSpell so they take up a relatively small amount of disc space and are fast to look up. User dictionaries aren't compressed and indexed - so if, for example, you use the new features to create an Esperanto dictionary, don't expect it to be fast or small!

2. Printing user dictionaries Printing a user dictionary is the obvious application for the new Insert dictionary feature.

All you do is create a new blank document, select Insert text from the Actions menu, select the user dictionary you want to print, then save and print the resulting document.

The result that you get is a printed list of the words in the dictionary, in perfect alphabetical order - each word starting on a new line.

3. Updating user dictionaries If you started creating a user dictionary while you were using one of smaller system dictionaries, this dictionary could well contain a number of words that are in the 80,000 word dictionary you are now using. Such duplicates are a complete waste of space and the new features allow you to clear them out.

What you do is a combination of the actions described above. You start by using the Insert dictionary procedure to put all the words in the current version of the user dictionary into a new blank document. You then make sure that LocoSpell is looking at an 'empty' user dictionary, before using Automatic addition to pull the unknown words from this list into a new user dictionary.

The result is a new user dictionary free of any duplicates between it and the system dictionary that you now use.

4. Combining user dictionaries A similar procedure can be used to combine user dictionaries - but instead of just inserting one user dictionary into your blank document, insert all the dictionaries that you want to combine into this document. Alternatively, insert each user dictionary into its own document and spell check each in turn using the Automatic addition option. Either way, the result is the same - a single user dictionary containing the words from each of the individual user dictionaries.

Combining dictionaries in this way has a definite advantage over the other way they can be combined which is by appending them in turn to the system dictionary. The new technique only adds each word to the combined dictionary once, so any duplicates between the various dictionaries are automatically cleared out. When you add separate user dictionaries to a system dictionary, any duplicates remain.

5. Unattended word count Whilst LocoSpell provides a word count facility for LocoScript, some people would prefer it if they didn't have to stop at each misspelt word when all they wanted was to count the words. Now you don't.

LocoSpell finishing Words checked: 592 Words added to user dictionary: 11

Simply select Automatic addition from the f7 Spell menu and LocoSpell will work through

LOCOSPELL

the whole document without stopping. When it has finished, it will give the number of words in the document in the usual summary LocoSpell displays at the end of any spell check.

One thing to note about using this procedure is that it is a good idea to make sure that you don't have a current (Iser Dictionary before you start as any misspelt words will be added automatically. Not a good idea!

6. Tidying up system dictionaries Adding user dictionaries to your system dictionary allows you to use a number of different specialised dictionaries at the same time but, unfortunately, the process of checking words gets slower the more dictionaries you add. Loco-Spell is faster when there's only a single appended user dictionary.

The new LocoSpell features help here too, by allowing you to create one single dictionary out of all these separate dictionaries.

Again, the technique is just like one used to update a user dictionary, only this time what you insert into the new blank document is the system dictionary with all the appended user dictionaries. This gives you the contents of all the appended user dictionaries, each as a separate alphabetical list. (If you want to remove any of the words, we suggest you do this now by deleting them from this document).

When you use Automatic addition on this document, what you get is a single user dictionary containing all the words from the individual dictionaries, but cleared of any duplicates. Append this to a fresh copy of the original unadulterated system dictionary (as supplied on your Master disc) and you get a new special system dictionary with all the same words but much leaner and fitter than the old one!

7. Generating a Glossary

The new features (plus a little lateral thinking) give you a way of producing a glossary of the words used in a document, automatically sorted into alphabetical order for you.

When you have the final version of the document, take a copy of it. Then edit the document and put a prefix on all words you want to add to the glossary. Choose a prefix such that the fully prefixed words created are gibberish - zzp for example. Now run Automatic addition from the Spell menu and Loco-Spell will create in your user dictionary an alphabetic list of these nonsense words. It's the nonsense prefix that ensures they aren't in the dictionary!

Then create a new document and use Insert text from the f1 menu to insert the user dictionary. You'll immediately notice if there are any real misspellings as they'll be at the front (unless you misspelled a word after zzp in the alphabet!): use CUT to get rid of these lines. Finally, use Exchange again to get rid of all the zzp prefixes.

0/DUCUMENT.00 1 Pil2 L ns f2=Layou	1 Editing text. S 1 CR+O LP6 E f3=Style f4=Size f
zzphlocke zzphluelinee zzphriefe	Find: zzp Exch:
zzpcarbro# zzpcollotype zzpcolophone zzpcopyfitti	✓ Ignore case ✓ Preserve case Look for whole words Use wild cards
zzpcromaline zzpcutscoree zzpdemye zzpdiazoe	Manual exchange ▶ Automatic exchange
zzpdummy# zzpduotone#	

You will then have a list of the selected words in your document, sorted into alphabetical order.



If you're happy with your PCW but want to give it extra memory, you can do no better than plug an SCA RamPac unit into the expansion port and boost capacity by 512k. This will allow you to run more efficiently popular programs such as Flipper2 and Microdesign 2 as well as loading LocoScript2, LocoMail, LocoSpell and a selection of fonts from LocoFont. RamPac is very simple to install and costs just \$329 + postage. If you're happy with LocoScript but want to move from your PCW to an IBM compatible, you will no doubt want to purchase LocoScript PC (see outside back cover for more details) and save the hassle of learning to use another word processor. To make things even easier, all your LocoScript files can be transferred intact to your new PC with LocoLink, a PCW -to-PC file transfer cable and software pack. LocoLink costs \$79.95 + postage.

Mail Orders to: STRATEGY PUBLICATIONS, 1/641 High Street Road, Mt. Waverley, Vic 3149 or ring (03) 803 9661 and quote either Bankcard, Mastercard or Visa details.

LOCOSCRIPT

Hot Tips

We've unearthed some gems to help PCW owners

LOCOSCRIPT ADDRESS BOOK

One method of storing frequently used addresses in LocoScript is to set up a special group named 'Address' on your start-of-day disc and create a TEMPLATE .STD in that group. You should then type in your list of names and addresses into this template file with an 'end of page' indicator ([ALT]+[RETURN]) at the end of each address.

The clever thing is that all TEMPLATE.STD files on your start-of-day disc are automatically copied onto the M drive each time LocoScript starts up. So, by having all your addresses in a TEMPLATE.STD the address file will always be available in the M drive. Since the addresses are one to a page, they will have their own separate page numbers. For your own convenience you can keep an index on page 1 and print out a sheet with all the page numbers, then use the [PAGE] key or 'Go to page' command in LocoScript 2 to get to the one you want.

To print as address on an envelope you can just select the TEMPLATE.STD from the 'Address' group in M drive. Press P for Print and select 'Print some pages' then choose the page number of the required address from the menu. Alternatively, you can edit it, find the address, copy the address to a phrase, 'abandon edit', and then moving back to your document, just paste it in at the appropriate place.

G.L. Warner.

PAGE BOY

A quick way to force LocoScript to end a page at a certain point without going through the 'page' menus is to hit [ALT]+[RETURN]. James Roskell.

THE 64,000 FILE QUESTION.

For those who haven't found out yet, one side of a 3" disc in the PCW's top drive can store a total of only 64 files at any time. This total is regardless of how much space is free on the disc, and which groups are used for the files. After this point, a message 'directory is full' appears, and you will have to delete some documents before you can store new ones on that disc.

CHEAP MAILMERGE.

LocoMail, the official mailmerger package for LocoScript, will set you back \$175, but you can duplicate its 'Fill' command for free.

"Filling' is the process of going through a form letter inserting special lines such as names and addresses, although you do it by hand. Proper mailmerging takes the data from a file stored on disc. Filling is suitable for short mailshot runs, where it would be too much trouble to set up a data file for a full mailmerge.

So, with ordinary LocoScript, type the basic letter into a document. Place a 'Unit' marker by typing +UT where you will later want to insert names and so on, and save the document when all set up.

To do the fill process, edit the file and press the [UNIT] key (which is [SHIFT]+[PARA]). The cursor now moves to the next 'unit' mark it finds, and you just type the relevant text to be inserted. Press [UNIT] again to get to the next mark,and so on until complete. Save the document, print and repeat.

A small catch is that when you put a 'unit' marker into your letter, it will end the line automatically as if you had typed the [RETURN] key. As a result, this method is best suited to marking the slots for addresses, dates and titles, where you want them to start on a new line anyway.

HEADERS AND FOOTERS

The rules for placing headers or footers on solely the first or last pages of a document with LocoSCript can be very confusing.

Using the 'Pagination menu' you can set 'First page differs' for headers and footers, and then you go to set up the actual header and footer text. In this 'Editing Pagination' screen, there is a section marked ":End of footer 1: used only for the first page", but if you put a footer in here and then print out a document of only one page, the footer will not appear.

The LocoScript manual reads "LocoScript arranges that the Header text on a single page document will be the one for a first page, and its Footer text the one for a last page."

The moral is then, for single page documents, either put the footer for the page in the section marked 'End of footer 2: used for all pages except the first', or to use the 'All pages same' pagination instruction.

Mrs H. Hammond.

Here's a list of our top selling products for both the Amstrad CPC and PCW range of computers. Our full list, containing over 400 products, is available on request or by reference to the March 1991 issue of this magazine.

Please remember that this list is prepared many weeks before you see it and stock or prices can fluctuate. It is prudent to provide an alternative choice if possible.

Postage should be added to your remittance as follows: Order value under \$20 - \$1.00 (Overseas - \$2.50); Order value from \$20 to \$60 - \$3.50 (Overseas \$7.00): Order value over \$60 - \$5.50 (Overseas \$12.00).

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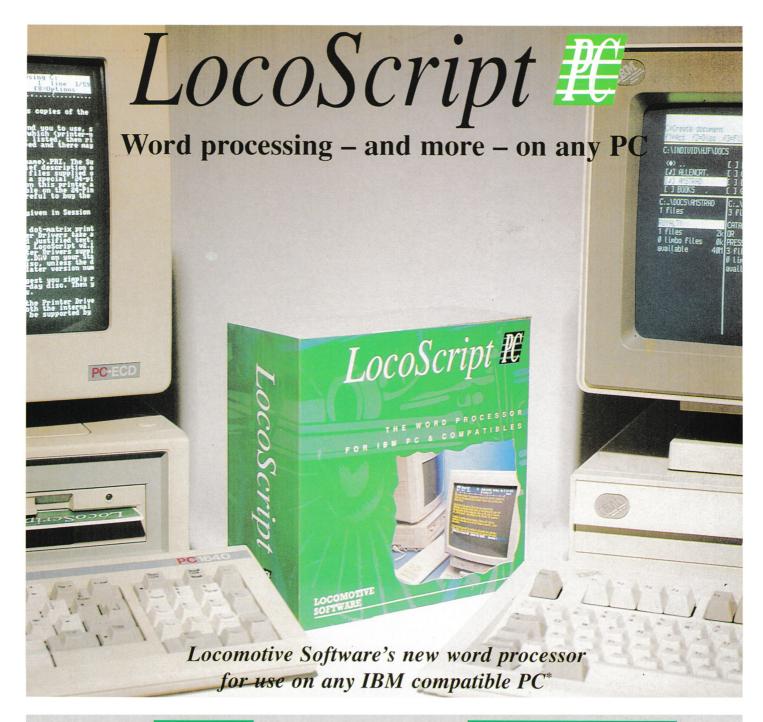
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