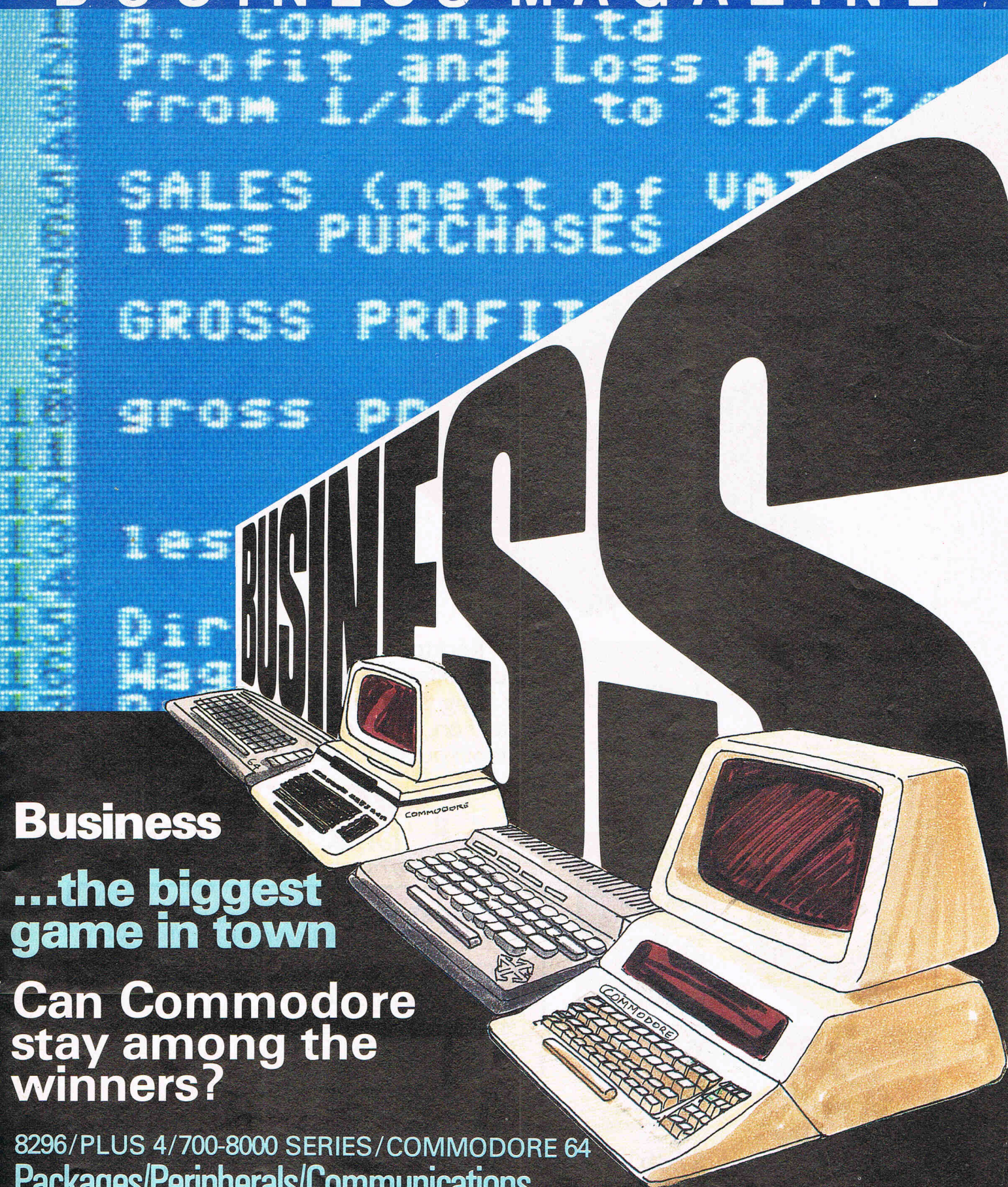
COMMODORE

COMPUTING INTERNATIONAL/NOVEMBER 1984

BUSINESS MAGAZINE



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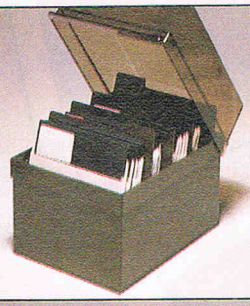

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In this issue:
First Impressions, the new 8296D ... Battle of the Business Micros ... Disk Drives ... Word Processing, a Checklist ... Business Packages ... Commodore Profiles – Gail Wellington and Nick Green ... and the New Communication Revolution ...

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First Impressions

The new 8296D is being widely advertised but is noticable for its absence for retail buyers. Even CCI had difficulty in obtaining a model to review. When it arrived we were not a little impressed. It is an attractive object of design. We decided however to give the full examination of the computer a realistic form by making use of it in our normal routine – it is often unfair to seek out faults or virtues that would not be usually noticed in our standing working environment. Our in depth working test will appear in the next issue of Commodore Business. In the meantime here are our first impressions.

The 8296D would shame no rising executives desk. Designed by Porsche – yes the car company – it has confident style and an agreeably futuristic look, especially the screen.

The disk drives are not so up-to-date, indeed have a rather old fashioned sealing. the keyboard has a crisp attractive look and is ergonomically well-designed with room to rest the hands. The keys themselves are 'unsculptures' – against the fashion today and although the numbering and letters are clear and bold, the typestyle in prosiac and they tend to be noisy and clatter slightly in use.

The 'Insert/Delete' seems to close the Run/Stop key and could be a problem for careless typers. And, while the screen has brightness, it has no contort control.

Our impression is that it is one of the most attractive business micros on the market and the coveats are minor. We were impressed. Whether it works as well as it looks well, read the next installment...

The Battle for the Business Micro

In business, nothing is deader than yesterday. Or yesterday's computer. In the highly competitive world of business, the demand for the latest model, the most efficient system, that extra edge of software cost-effectiveness is brutally Darwinian; even the newest or the fittest has to struggle furiously to survive. Today's publicised launch can turn so quickly into tomorrow's discreet wake.

Commodore – the creator of the first business micro, the 700 series PET – has launched a major marketing campaign to recapture its original place. It will spend more than £6 million over the next year – a substantial proportion devoted to business – to keep and increase its market share.

The spearhead of its business drive is the new 8296D – covered on this page. But is the 8296 a machine that can put Commodore up with the winners in the fiercely combative, if highly profitable, business game? Or is the 8296, as some detractors claim a 'yesterday' machine – too slow, too small and too late?

Commodore is basing its marketing strategy on 'knocking copy' – comparisons; a technique widely used in the car business. Its 8296 advertisement points out a checklist against the IBM PC, the Apricot and the Apple Macintosh. They clearly show the Commodore 8296, at around £1500.00 including software, substantially better value.

However a major new factor in the game is the just announced IBM PC/AT computer which has shaken up the whole business micro field, leaving no-one certain what will emerge as the winning formula.

There is no denying that when IBM moves the whole computer world shakes and we could see a whole series of related changes

New Factor

However a major new factor in the game is the just announced IBM PC/AT computer which has shaken up the whole business micro field, leaving no-one certain what will emerge as the winning formula.

There is no denying that when IBM moves the whole computer world shakes and we could see a series of related changes that could push the small business micro – the 8296 field – down below the £1000.00 mark.

What has happened is that IBM AT has caused the price differential of the floppy and hard disk based systems to be dramatically reduced and the knock-on effect will be that the floppy systems must become cheaper either through manufacturers setting lower prices or simply market forces bringing heavier discounts.

The scenario is that the IBM PC/AT is a 16 bit, floppy and hard disk based system with 256KB of memory, 1.2MB of floppy disk and 20MB of hard disk capacity, selling at around £4500.00, which will bring the earlier IBM PC down to around £2000.00 and make a standard CPM or MS DOS retail for about £1500.00 at which the 8296 is presently priced.

Why should Commodore come down in price? Because the 8296 technology is not the newest; it is an 8 bit, floppy disk with about 1/10th the capacity of the new IBM. Another problem is the relatively limited amount of software presently running on it.

Superb Marketing

Nevertheless, don't jump to the conclusion that the 8296 will not be a success. Commodore has proven a superb marketing organisation – you don't sell 6.3% of the world's computers by chance. It may well convince the business public, as it has the home market, that its machines suit not just their budgets but also have the capacity and speed they want.

No-one, not even IBM, is presently certain about the supply or the price of the new AT. The Intel 80286 chip used in it is in very short supply and Big Blue is having to produce its own. Whether the AT can be supplied in reasonable quantities before well into 1985 seems doubtful and IBM, famous for its marketing muscle, seems to be more fallible recently. It had a disaster with the failure of its Peanut micro to sell in the U.S.

The key to the battle may be with the software that Commodore can get for its 8296 and the support it provides.

Business software is very much more than just a network of dealers vending boxes. It requires close attention to training, service and maintenance; all especially important to first-time business buyers. How will Commodore approach these aspects and can it equate the product with businessmen's needs that are by no means the same as its usual market?

Undoubted excellence of product, acute judgement of timing and price and its superb marketing have kept Commodore a major winner. But slugging it out with IBM in the fight for the business micro market is a big step up in class. As Commodore no doubt realises, a large chunk of its future is resting on the 8296. The risks are great but the prizes are even greater.

Commodo

A matter of choice

The type of printer that you buy should be determined by the work for which you require it.

If its use is to be primarily private, producing listings and internal reports, the chances are that you will be able to get away with buying nothing more than an ordinary dot matrix printer. The quality of the output will not be outstanding, but will certainly be legible; and a good dot matrix should be able to whizz along at speeds well in excess of 100 characters a second.

If the printed material is to be seen by anyone other than yourself; for instance, in a company using the printer as part of a word processing system, you will probably have to spend rather more money and be prepared to put up with a slower but higher quality, daisy wheel printer.

As ever, you pay your money and take your choice.

Commodore's own printers range from a relatively inexpensive dot matrix printer to a more expensive daisy wheel printer. The speed of the latter device has left some people thinking that they could type faster themselves.

Early Commodore computers, before the Vic 20 and the 64, had an unusual version of an IEEE interface which linked to many standard printers.

Owners of Commodore 64s and Vic 20s today are in a less fortunate position; the interface provided on those two computers is compatible with nothing other than Commodore's own peripherals.

If you don't want to go to the expense of buying various interfaces, but don't want to use Commodore printers, look at Ibek Systems. They have just brought out a daisy wheel printer called the Sanple Daisy Step 2000 which plugs directly into the 64.

IBEK. Tel: 0203 661162.

Dot matrix printers

Few printers, other than Commodore's own, will allow you to reproduce the graphics character sets found on the actual computer, although most of them will allow you to define characters and produce, for

re Printers

example, dot by dot copies of the screen. However, this requires some software to be written by you, the user, so we'll stick to straightforward printers, starting with the DRH 136, which can operate in either RS232 or Centronics modes.

The DRH 136, distributed by Triumph Adler (27 Goswell Road, London EC1, on 01-250 1717), is a 120 characters per second (abbreviated from now on to CPS) printer, with the ability to print bi-directionally. The number of characters printed per line is software selectable, and can range from 136 to 224, although this latter mode is the type that requires an extremely powerful magnifying glass.

Many character sets are available with this printer, but at a price of £675, you may care to take a look at the slower, but cheaper, DRH 80/81.

Again from Triumph Adler, this is down to 80 CPS, but only costs £540. Apart from only having a 140 column line at maximum, the only real difference between this machine and its big brother, the DRH 136, is the print speed, and, of course, the price.

Cheaper still, at £498, is the Facit 4510 from Facit-Addo Limited (Maidstone Road, Rochester, Kent ME1 3ON. Telephone 0634 401721). This is a 120 CPS dot matrix printer, with a column width of up to 80 characters, which is switchable down to 12 columns, should you so desire it.

There is a broad range of character sets available, and also a number of different print modes, including condensed and compressed. This can be linked up to either Centronics or RS232 interfaces.

Epson have long held a reputation for producing good, cheap, dot matrix printers, and the latest printers from them have done nothing to harm a hard-earned reputation.

The RX-80-FT is a 100 CPS printer with a variety of typefaces and sizes, supplied with a Centronics interface (although this can be converted into either IEEE or RS232 if required), and capable of taking either friction feed or tractor feed.

At just £319, this is worth considering, as is its slightly more expensive big brother the FX80.

This costs £438, but has the ability to print at almost twice the speed (160 CPS), and produce near letter quality output.

Epson (Dorland House, 388 High Road, Wembley, Middlesex HA9 6UH. Tel: 01-902 8892).

The price of speed

Possibly the fastest dot matrix printer that is readily available for any Commodore computer is the DRS 250, again from Triumph Adler. This races along at of 250 CPS, and comes complete with either an RS232 or a Centronics interface.

However, if the computer that you own is a Vic 20 or a Commodore 64, there seems little point in paying around £200 for a computer, and then paying out another £1,495 for the printer to go with it.

If you're extremely rich, obviously the DRS 250 has a lot to recommend it. If you're like the rest of us...

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The Sunol range of Winchester disk drives from Small Systems offers 8, 16, 25, 40, 65 or 92 Mbytes of usable storage capacity to Commodore business micros. The system operates with existing programs, appearing to the Commodore as a high speed, high capacity floppy drive.

Compatibility with the Commodore is achieved by means of the Small System Hardbox controller. With a hardbox at each work station, up to 16 Commodores can share a single drive, with each user having separate secure work areas and the ability to pass files between micros.

Interfaces are available to allow not only Commodore business micros but also most other popular micros to share the same disk drive. Micros currently supported include Apple Macintosh, Apple II and III, IBM PC and compatibles, Epson QX, TI, Victor/Sirius, Future, Zenith and Apricot.

For further information on the Sunol range of Winchester disk drives, phone Jane Teather or Simon McCarthy on 328 7145, or just fill in the coupon.

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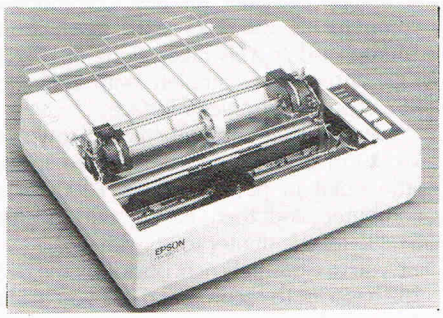
Epson FX-100 is the latest and greatest dot matrix printer to come out of the Epson stable, certainly if the specification sheets hold true.

has, including the 160 CPS print speed, optional interfaces of every kind, and superb graphic facilities. It also has a much wider carriage.

A sleek little number that should sell by the thousand.

The Integrex CX 80, which looks like an early Commodore printer, prints at 55 lines per minute (although to be fair it can print at 125 CPS in certain special cases, such as printing line after line of the same character), and with a Commodore-compatible IEEE interface will set you back some £845.

As a pure graphics printer it has many advantages over other conventional dot matrix printers, for it has a choice of printing in seven different colours, and a dot-addressable print facility (try also

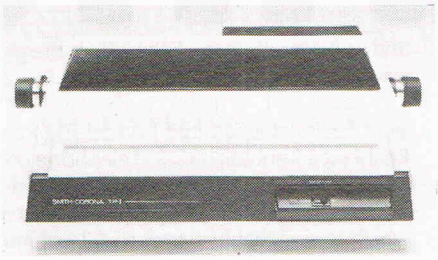


Commodore's own graphics printer). However, program listings in high resolution printed in seven different colours tend to look a little weird. *(D.N. Computer Services, West Croft Industrial Estate, Manchester Old Road, Rhodes, Middleton, Great Manchester M24 4PJ, or telephone 061-643 0016.)*

Mannesman Tally produce, among others, the MT80, which is a £217 Commodore-compatible 80 CPS dot matrix printer. They seem to have gone all out to be compatible with anything else currently available, as it can handle all the Epson codes, as well as having a number of its own. Any one of many different interfaces can be hooked up to this one. It is also very quiet, a boon for many small offices. *(Tel: 0734 791619.)*

Daisy Wheel Printers

Triumph Adler, produce possibly the cheapest daisy wheel, the TRD 170-S, which costs £725. This is not the fastest of printers, at just 17 characters a second, but it is of a high quality, and it is also quiet. A maximum of 198 extremely small characters can be

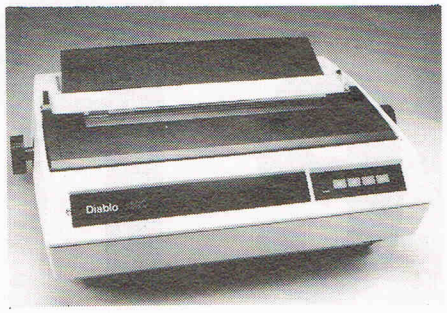


printed across a line, and with a whole range of optional interfaces, covering Centronics, Qume and RS232, it should be able to be linked up to just about anything.

Faster, at 55 CPS, but more expensive at £1,675, is the DWP 5055, from the same company. Many advanced features, including double print, bold print, underlining, printing up to 163 characters per line, and so on, make this a versatile and fast daisy wheel printer. Not many models under £10,000 will print as fast as this one.

A company producing a whole range of daisy wheel models, including one at just £475 is Geveke Electronics. However, the Getex D-14 won't win any sprints, as it produces its letter quality output at the yawn-inducing rate of 13 CPS. Still, you can print in either red or black, and a large print buffer compensates somewhat for the slow speed by freeing the computer to get on with more work while everything is being printed out.

Geveke Electronics *(Vale Farm Road, Woking, Surrey GU21 1DW, or telephone 04862 26331)*, also produces the Diablo 620 RO at £975 and the Diablo 630 API at £1,650. These two are fairly similar, printing at 25 CPS and 40 CPS respectively, and include various font sizes, character widths, margin controls, and so on. RS232 interfaces



are available on both models, but the latter scores in its graphic abilities, using Diablo's Hyplot vector plotting. Useful for business programs with bar charts and histograms.

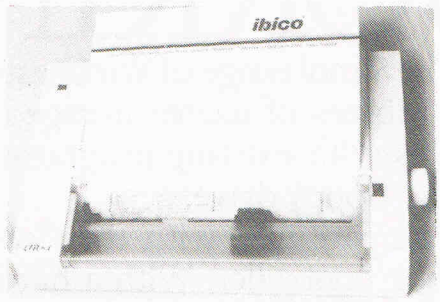
Quick Round Up

There are many other daisy wheel printers available, including the Olympia ESW 3000 RO, from Intelligent Interfaces Ltd. *(436 Wood Street, Stratford-on-Avon, Warwickshire CV37 6JQ, or telephone 0789 296879)* at £1,136.

Smith Corona are another commonly encountered name, and their extremely cheap (£346) 120 words a minute TP-1 model has already earned them many friends. *(Discom Trading Company, Dresden House, 51 High Street, Evesham, Worcestershire WR11 4DA, or telephone 0386 3591.)*

At a shade under £400, is the Bytewriter from the same Discom Trading Company. This normally comes with a Centronics interface, however you can get a Commodore-compatible IEEE interface fitted if desired. Although it has a slow print speed of just 8 to 12 CPS, it has one feature which, at this price, is truly amazing. It is also a typewriter, having a full travelling keyboard fitted to it. Since it only weighs 21 pounds, it also becomes portable rather than transportable!

And finally, just on the market is the letter quality IBICO LTR-1 which is compatible with the Commodore 64. This is a delightful



little machine which, though not designed for heavy duty would suit many small businesses or home use, very well indeed. Especially from the price viewpoint. At £199, it looks to be the bargain printer around. Recommended. *(IBICO, 181 Spring Grove Road, Isleworth, Middlesex. Tel: 01-568 2379/82.)*

To conclude

We've covered a reasonable range of printers, from the surprisingly cheap to the eyebrow-raising expensive, with print speeds going from snail's pace to lightning fast. Decide the purpose and then make the choice.

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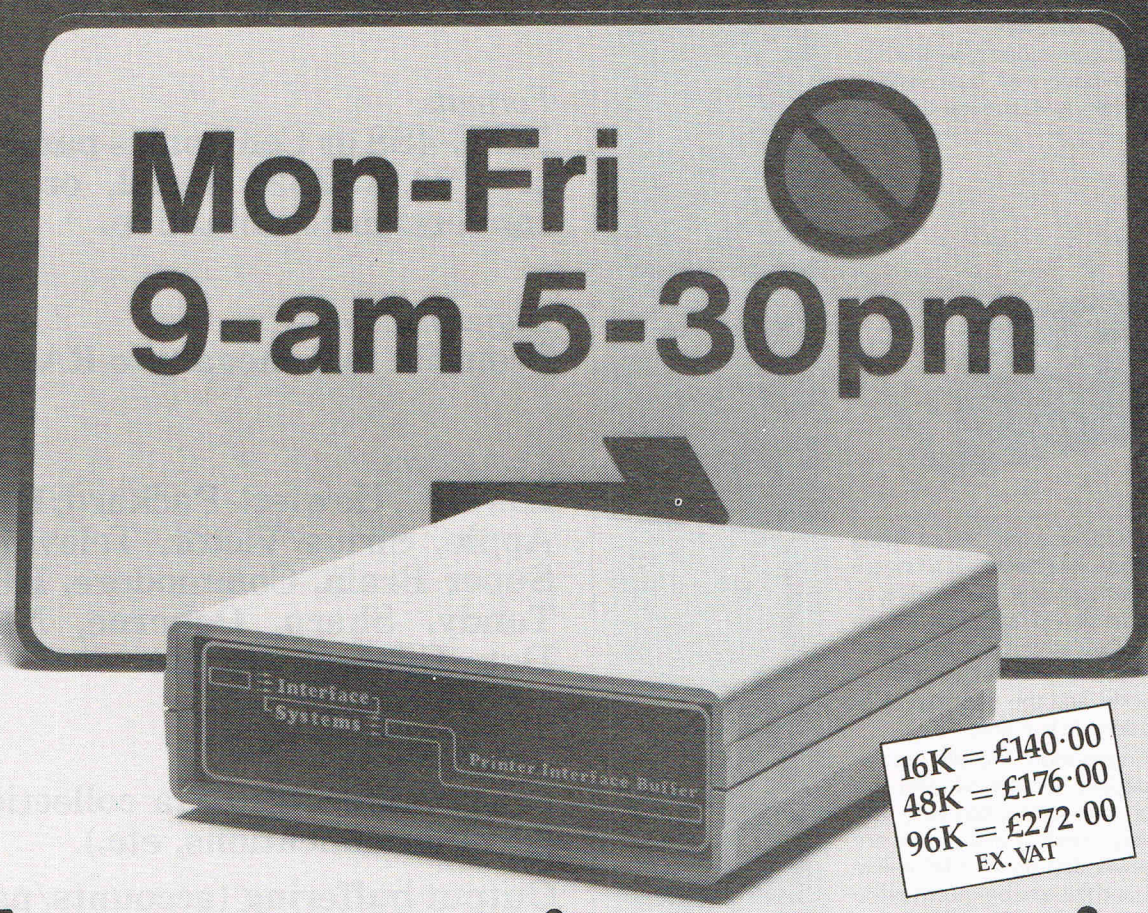

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DISK DRIVES

BUSINESS SCALE STORAGE

There are two disk drives for the Vic and 64 which plug directly into the serial port of the machine. Both are available from Commodore.

The 1540 was for a long time the only one available, and this is a 170K single unit, with, it is claimed by Commodore, an access time to anywhere on the disk of just two seconds. Well, it may find it in two seconds but it takes a much longer time to load it.

The 1540 was also intended to be the disk drive for the Commodore 64, but consternation reigned when it was found that the

drive simply would not work. The 64, being a delicate machine, had been told to switch the screen off whenever it was loading or saving any information to tape. This had the side effect of, when attempting to use the 1540 disk drive, getting the information in much too quickly, and the poor old chips just could not decode it in time.

In the end, Commodore brought out the 1541 drive specially for the 64, and this works without any screen blanking, but again works very slowly. Commodore are promising a newer disk drive to fall in line with the Plus 4, and this is to be known as the 1542.

Faster disk drives can be used with an IEEE interface, but the only other disk drives which anyone should seriously consider are Commodore's own earlier drives for the PET range of microcomputers.

All of these (with the exception of the 2031 drive) are double disk drives, and on the 8050 model can hold up to half a megabyte on one disk. However, since the 8050 is about four times the price of a 64, it makes little sense to buy it unless you're a serious, and wealthy, computer user.

The Vic and the 64 can link up to a 7.5 megabyte hard disk, using one of the IEEE interfaces, at a cost of some £2,495. Now that is computing gone mad!

Other manufacturers

Audiogenic are talking about bringing out a fast tape system, and it's worth dropping them a line to find out their latest developments. P.O. Box 88, Reading, Berkshire.

Also talking along similar lines are Cumana. Describing their unit as a 'floppy tape', Cumana can be found at Pinnes Trading Estate, Broad Street, Guildford, Surrey.

For the other Commodore machines, you can easily use the aforementioned 8050 and 8250, but they may be a little hard to find.

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PROFILE

Gail Wellington

Managing Commodore's Software World

I well remember the time when Gail Wellington came to join Commodore Business Machines. The software department at Commodore had been going through a strange period: disk drive sales were booming, Commodore was very big on the business side of things, but for some months cassette based software had been outselling disk based stuff, and most of those cassettes were games as well.

The software department in those days was rather like a football team of talented individuals without a leader. Plenty of people from that department have gone onto great things, some sat it out and are still there now, but what the department didn't have for a long time was that leader figure. Mike Whitehead had tried, and then left to help make the Bristol Software Factory a great success with Silicon Office. Rod Wellburn had tried, although he now seems to concentrate more on communications packages rather than straightforward software.

Then along came Gail. She didn't join as software manager. At first her role was to write and help supervise the production of manuals. She produced one massive manual, the size of War and Peace, which was all about manual writing, and sent several copies out to other writers for their opinions. After the fashion of Commodore then (but not now) I believe she got just one back.

Undaunted, the manuals began to appear, and Commodore's love affair with a program called The Manager began at the same time. The Manager manual was Gail's first effort, and sad to say she and I fell out over that because I thought it was dreadful, and said so in a magazine article in an early issue of Commodore Computing International.

Happily, after a recent meeting up at the Personal Computer World Show, we seem to be talking again!

Gail became software manager, and many changes were made. Some people (whom it would be unkind to name) were made to work a darn sight harder than they had been doing, and gradually things fell into line. Products began to appear, and the U.K. branch of Commodore is now the leading software department of any branch of Commodore in the world. Not bad for a couple of year's work.

None of the software produced by Commodore is written in-house. Under Gail's watchful eye, all the programs that are submitted on tape or disk are checked for suitability, and if found lacking returned with an evaluation sheet detailing the faults.

If successful, and only about 5 per cent of programs are, then the Commodore marketing machine goes into action, and the program hits the streets. Many different types of programs come in, from strategy and adventure games to educational and business packages.

Business world

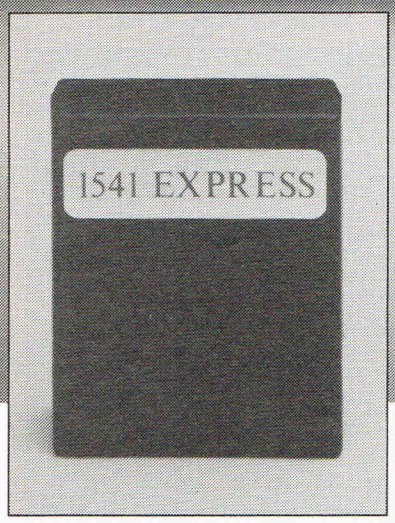
The signs are now that, after a couple of years in the doldrums in the business world, Commodore are planning a comeback, with new software and new machines.

The first software item that heralded this change was the Magic Desk, Commodore's software answer to Apple's Lisa. Seen only in prototype form so far, and likely to be released as Magic Desk II when it's finally ready, this program should go a long way to getting Commodore back where they want to be: on top.

Certainly if Gail has anything to do with it we'll be seeing better business software for the new Plus 4 than is currently included with it.

With Gain in charge, we can hope for better things, soon, for this and other machines. She's a busy woman, and no doubt going to get a lot busier in the months to come!

Drive faster!



There's nothing worse than waiting for your program to load. And good though the Commodore 1541 is, speed isn't exactly its biggest feature.

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"Word processors: why change?"

Below in this business magazine you'll find a word processor checklist that covers most of the popular word processors available at present. You might see, if you look through it, that the word processor that you're using at present doesn't have all the features of some of the rest, and feel sorely tempted to ditch your current program and rush out and buy something else.

I have personally been using the same word processing package for almost two years, and in that time there have no doubt been improvements to it, and equally as likely there have been new programs released that far outshine it in terms of performance and capability.

Reasons to be cheerful

Like any serious user of word processors, I have built up a vast collection of disks and tapes with word processor files on them, and one major reason for not changing would be that any new program I might acquire is extremely unlikely to be able to load and process these old files: two years work up the creek.

Also, the word processor that I use has many features on it that I'm likely to miss by going to another program. For instance, part of my work involves creating indices for books, and as everyone knows indices have to be in alphabetical order.

Similarly, there are many times when using the program that I would like to perform a simple mathematical sum. Short of switching off the machine, working out the answer, switching it back on again, loading in the word processor and starting all over again, many programs would require you to go out and buy a calculator.

There are other things that I would like to see in the program. Additional and subtraction are one thing, but it can't cope with multiplication or division (well, not easily anyway). However, if I were to change programs and go to one that could do this, I'm sure that there are many other features that I take so much for granted that I can't even think of them which would be sorely missed.

Conclusion

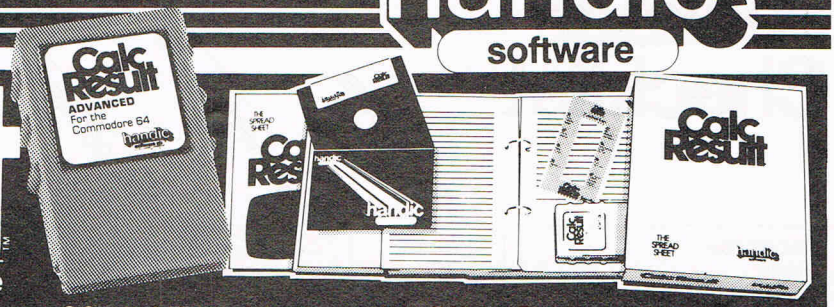
The point of this little tale is that if you're happy with the program you're using, don't feel tempted to rush out and change it for another, newer one. Like a man swapping his favourite old car that he knows inside out for a new one that he doesn't, you're almost bound to regret it.

Word Processing — Comparing Packages

	PAGEWRITER	PAPERMATE+	SUPERSCRIPT	WORDPRO 4	SIMPLY WRITE	WORD WIZARD	WORDCRAFT 40	THE WORP	VIZAWRITE	EASYSCRIPT
PRICE	£39 + Vat	£45 + Vat	£249 + Vat	£395 + Vat	Tape £35 + Vat Disk £40 + Vat	£6.99	£89.95 (cartridge)	£195.60 + Vat	£79.95 (disk) £89.95 (cartridge)	£75
AVAILABLE FROM	SUPERSOFT	SUPERSOFT	PRECISION SOFTWARE	PROFESSIONAL SOFTWARE INC./WEGO	SIMPLE SOFTWARE	BUBBLE BUS	AUDIOGENIC	IMPEX DESIGNS UK LTD	VIZA SOFTWARE	COMMODORE MARKETING
SUPPLIED AS	2K ROM	TAPE OR DISK	DISK	DISK	TAPE OR DISK	TAPE	8K ROM	DISK	DISK OR CARTRIDGE	DISK
LANGUAGE	M. Code	Basic & M. Code	M. Code	M. Code	M. Code	M. Code	M. Code	M. Code	M. Code	M. Code
BASIC 2/3/4	Yes	Yes	Yes	Yes	Yes	4 only	Yes	No	Yes	–
Max. TEXT (A4)	3 pages	9 pages	5 pages	5 pages PER SCREEN AREA	8 pages	1 page	20 pages	20 pages	Unlimited	16 pages
TEXT LINKING	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
MEMORY COUNTER	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	–
PRINTER	CBM PREFERRED	Any	Any	Any	ASCII Any	Most	Any	Any	Any	Any
PRINTER COMMANDS	Only Character mode	Fiddly	Yes	Yes	Yes	–	Yes	Yes	Yes	Yes
Adj. PAGE SIZE	Only at turn on	Yes	Yes	Yes	Yes	Yes–Fast down to printer	–	Yes	Yes	Yes
PAGE NUMBERING	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
DOUBLE SPACING	Manually	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MARGINS	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R. JUSTIFYING	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
TABULATION	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CENTERING	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
KEYBOARD DEFINABLE	No	Yes	No	No	Yes	–	–	No	Yes	Yes
EDITING	Limited	Fiddly	V. Good	V.V. Good	Good	V. Good	Excellent	V. Good	Excellent	V. Good
FIND WITH REPEAT	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
FIND WITH CHANGE	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
MOVE TEXT BLOCK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
WORDWRAPPING	No	Sometimes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
PRINTOUT REVIEW	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MULTIPLE COPIES	Up to 9	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
FORM LETTERS	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TAPE USE	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
DISK USE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
DISK COMMANDS	No	Basic 4 only	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TEXT SAVED AS	Basic Prog	Seq file	Basic Prog	Basic Prog	Seq file	Basic Prog	Relative file	Seq file	Seq file	Bagic Prog
NUMBER OF COMMANDS	Low	V. High	High	High	High	Moderate	V. High	High	V. High	High
EASE OF USE	Good	Fair	V. Good	Good	V. Good	V. Good	V. Good	V. Good	V. Good	V. Good
KNOWN BUGS	None	Stack overflow	None	None	None	None	None	None	None	None
									80 column wordpros with data base & mail merge	

Calc Result

handic software



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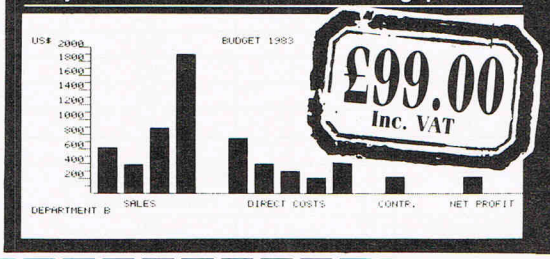

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SALES LEDGER NAME:		✔ Codewriter Elf System Fire Writer		✔		✔	✔
Numbering Structure		No Limit				9 Digits	8 Digits
Balance Forward or Open Item		Open Item		Open Item		Open Item	Balance Forward
Produces Statements		YES		YES		YES	YES
Produces Commission Statements		YES		NO		NO	NO
Produces Aged Debts		YES		YES		YES	NO
Produces Day-book Listings		YES		YES		YES	YES
Produces VAT Listings		YES		YES		YES	YES
Produces Name & Address Labels		YES		YES		YES	NO
Produces Full Customer Print		YES		YES		YES	YES
Produces Analysis Reports		YES		YES		NO (Covered under Nominal Ledger)	YES
Number of Customers per Disk		Depends on Memory		75 per File		200	700
Number of Transactions per Disk		Unlimited		750		1,200 Inc. Invoices	3,500
Number of Invoices Held		Unlimited		10 per customer		See Above	600
PRICE		£91.95 Codewriter. £28.95 Elf System. £34.95 Firewriter.		£40		£119.50	£27.95 cassette. £29.95 disk.
STOCK CONTROL NAME:	✔	✔	✔ Micromagpie	✔	✔	✔	✔
Numbering Structure	Alpha Numeric	No Limit	Alpha Numeric	Alpha Numeric	–	16 Digit Alpha Numeric	Alpha Numeric
Number of Prices that can be Listed per Item	2 cost and selling	No Limit	2 cost and selling	2 cost and selling	2 cost and selling	2 cost and selling	2 cost and selling
Capacity for Description	35 characters	No Limit	20 characters	28 characters	22 characters	30 bytes	33 characters
Unit(s) of Measure	Not Pre-set	No Limit	£ Value & Quantity	Numeric	Numeric	–	Doesn't Distinguish
Capacity for Supply Numbers	YES	YES	YES	YES	NO	NO	NO
Capacity for Supplies Reference	YES	YES	YES	YES	YES	NO	YES
Capacity for Last Cost Price	NO	YES	NO	YES	NO	NO	NO
Capacity for Balance at Start of Period	YES	YES	YES	YES	NO	NO	NO
Capacity for Balance at End of Period	YES	YES	YES	YES	NO	NO	YES
S.C. Capacity for Current Activity	YES	YES	YES	YES	NO	NO	–
Capacity for Year to Date Movements	YES	YES	YES	Period Movement	NO	NO	YES
Number of Transactions per Disk	550 Stock Items – unlimited transactions	Unlimited	1,500 Stock Items – unlimited transactions	128 products per file – unlimited transactions	220	500 stock lines	–
PRICE	£75.00	Included in Sales Ledger	£39.95 incs. Database	£30.00	£19.95	£40.00	£27.95 cassette. £29.95 disk.
INVOICING NAME:		✔		✔		✔	Included in 2 package as above
Generates System Numbers		YES		YES		YES	NO
Calls Up Delivery Addresses		YES		YES		YES	NO
Number Of Lines Per Invoice		No Limit		15		Not Pre-Set	6
Discounting Done By Line or Invoice Total		EITHER		TOTAL		EITHER	TOTAL
Provides for Settlement Discounts		YES		NO		NO	NO
Provides for Carriage and Postage Charges		YES		YES		Can key in as an item	YES
Has Message Facility		YES		YES		YES	YES
Number Of Transactions Per Disk		Unlimited		500		1,200	600
PRICE		Included in Sales Ledger		£30.00		Included in Sales Ledger	Included in Sales Ledger & Stock Control

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5 Digits	6 Digits	4 Digits	1 Alpha 3 Numeric		5 Digits	1-32,000 up to 10 million	–	
Balance Forward	Open Item	EITHER	EITHER		EITHER	EITHER	OPEN ITEM	
NO	YES	YES	YES		YES	YES	YES	
NO	NO	NO	NO		NO	NO	NO	
YES	YES	YES	YES		YES	YES	YES	
YES	YES	YES	YES		YES	YES	YES	
YES	YES	YES	YES		YES	YES	YES	
YES	NO	YES	YES		YES	YES	YES	
YES	YES	YES	YES		YES	YES	NO	
YES	YES	YES	YES		YES	–	YES Over Sales Area	
500	550	5,000	2,400		1,000 3,000	1,000	220	1,000
500	2,000	10,000			7,500 2,500	1,200	–	–
500	500	5,000	7,000				13 inv. per customer	15 inv. per customer
£9.95 (must have Superbase @ £99.95)	£98.95 inc Purchase Nominal Ledger, Invoicing & Stock	£300 £450	£350 + Vat		£300 + Vat	£395 + Vat + other functions	£75	£299
✔	✔	✔	✔	✔	✔	✔	✔ 64	✔ 8000
8 Digit Alpha Numeric	9 Digit Alpha Numeric	8 Digit Alpha Numeric	12 Digit Alpha Numeric	3,000 items	14 Characters		–	–
4	20	2 cost & selling	6	2 selling & cost	9999		2 cost & selling	2 cost & selling
255 characters	30 characters	30 characters	40 characters	24 characters	–		550 stock items	30 characters
Whatever	Can set up to 9	Numeric	Not Pre-set	Whole Units	Whole numbers inc. fractions		no decimals	whole numbers or 3 decimal points
YES	YES	YES	YES	NO	YES		NO	YES
YES	YES	YES	YES	NO	YES		NO	YES
YES	YES	NO	YES	NO	YES		YES	NO
YES	YES	YES	YES	NO	YES		YES	YES
YES	YES	YES	YES	NO	YES		YES	YES
YES	YES	YES	YES	NO	NO		YES	YES
YES	YES	YES	Year & period to date	NO	YES		YES	YES
500	2,000	5,000 Stock Items. 10,000 Transactions	5,000 Stock Items	9,999 Items Stock Level 10,000	As for Sales Ledger		550 Stock Items	2,500
£9.99 – must have Superbase @ £99.95	Included in Sales Ledger etc.	As for Sales Ledger	As for Sales Ledger	£95 + VAT	£300 + VAT		£75	£399 + VAT
	✔	✔	✔		✔		✔	
	YES	YES	YES		YES		YES	
	NO	NO	NO		YES		NO	
	30	19	12		No Limit		20	
	EITHER	EITHER	EITHER		EITHER		EITHER	
	YES	YES	YES		YES		YES	
	YES	YES	YES		YES		YES	
	YES	YES	YES		YES		YES	
	2,000	Links with Stock Control & Sales Ledger	Links to Sales Ledger		As for Sales Ledger		–	
	Included in Sales Ledger etc.	Included in Sales Ledger	£200 +VAT		£300 + VAT		8000 - £599 + VAT 700 - £699 + VAT	

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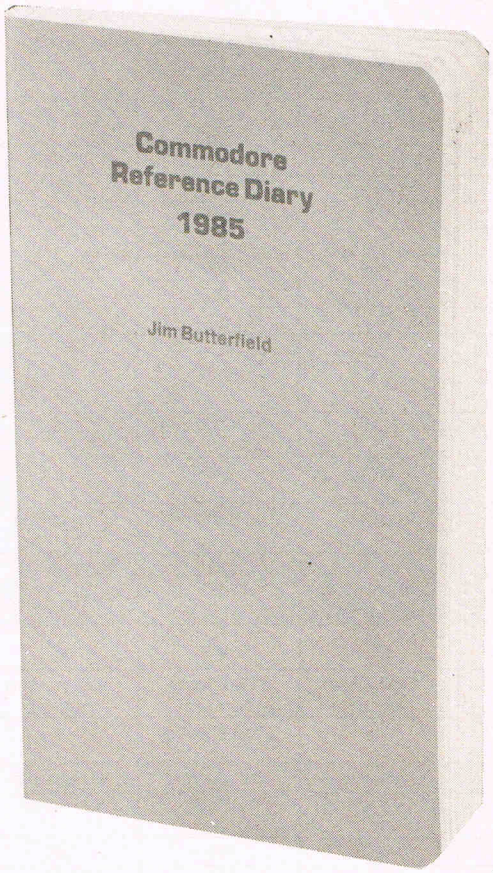

The Commodore 1985 Reference Diary — created by Jim Butterfield — is a must for anybody with a Commodore computer. The 1985 Reference Diary is packed with information and useful material relevant to everything from the whole range of Commodore Computers, their peripherals and all the tricks to get the best out of your machine. All of it in a clear easy to read style and with the authority that only Jim Butterfield — universally regarded as the world's leading expert on all aspects of Commodore — can provide. In addition, of course, the Diary has all the usual diary features and details. The 1985 Commodore Diary is unique in providing the comprehensive coverage of any information you might need throughout the year — an ideal companion for Commodore Computing International — the premier magazine in the field.

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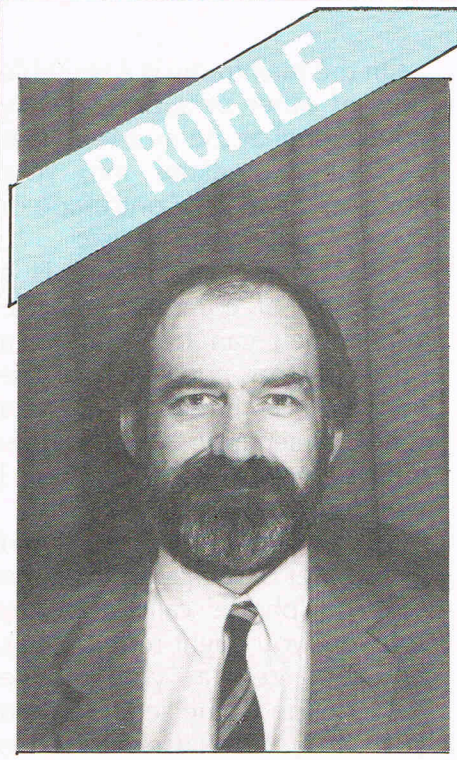

Nick Green

Between Commodore and Compunet

I was originally going to entitle this article 'Nick Green: Man, Myth or Maniac', a phrase I first came across when it was used to describe Brian Wilson of the Beach Boys. Like Brian, Nick is one of those rare, endangered species that any company should hold on to.

Nick Green has been many things in his days at Commodore, from Software Manager in the days when there wasn't any software about, to his current role as chief mediator between Commodore and Compunet, of which more later.

Along the way he was in charge of the education department, a role which seemed to mystify Commodore as much as it mystified anyone else, since he was soon moved from there and put in charge of the Special Projects Group. This gave him scope to do pretty much as he liked, which wasn't always to Commodore's liking.

He had a reputation for seemingly loaning out more computer equipment than has yet been produced by the factory at Corby, and for being blessed with a wonderful disregard for the immense amount of paperwork that we (yes, I used to work there as well) had to fill out in those days. Nick professes a great interest in Cybernetics, Artificial Intelligence, and anything to do with the legendary Seymour Papert and 'Mindstorms'.

I remember on one now famous occasion when Nick attempted to prove Einstein wrong. This wouldn't be too bad in a classroom full of academics using computers, but this was in a pub using beermats to work out the reasoning. After half an hour, Nick triumphantly waved his fourth beermat into the air, convinced that he'd done it, Einstein was wrong and history would have to be re-written! Even when someone pointed out that the equation on which he had based his whole argument

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WASN'T E=MC (squared) but E=MC (squared) + ½M (squared) C (to the power four), Nick remained undaunted and a pint of cider was drunk to celebrate changing history.

I mentioned earlier that Nick now liaises between Commodore and Compunet, and the people who started the whole thing off, namely ADP and Ariadne Software (remember PETNET, from Commodore Computing International April/May 1982?). So, what exactly is Compunet?

Compunet

Compunet is the latest in a long line of computer communications projects, and has finally got off the ground after months and even years when it appeared unlikely that it would.

It is similar in design to the rather more well-known Prestel and Micronet. It is a service that enables you to communicate with other computer users, and with the added advantage of being able to communicate with a massive mainframe computer as well.

It is the mainframe that is the real power behind Compunet.

Nick Green- Supremo of the networks

Using the Commodore modem (and at present this service and modem is available only on the Commodore 64, although it should grow to other machines as they appear), you can send information to and retreive information from that mainframe.

On the mainframe is a veritable host of other programs, mainly educational at the moment, that you can 'download' into your computer and save onto tape or disk for subsequent re-use.

Also on the mainframe is a collection of commercial packages which can be used (at a price) but not copied, since the modem also has built into it a series of security systems. How long before they get cracked, I wonder?

At present the use of Compunet is free (apart from the cost of 'phone calls and any software you might rent or buy), as you get a year's free subscription to the service when you buy the Commodore modem. From then on, it's thirty pounds a year, and judging by the efforts going into developing this system, it looks like Nick Green is going to be very busy for some time to come.

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Communications

the biggest news since the computer

No, IBM & BT, it was a good try but you are not going to get away with it....

The British Government has just turned down an attempt by IBM and British Telecom to set up a joint data communication company. The two organisations, the government claims, would have blocked out competition in what is believed now to be the business with greatest potential for the coming decades, electronic communication. The two giant corporations have realised what has become clear to many in the field: that the computer will no longer stand alone with an enthusiast tapping & zapping away. It will link up with many others; it will receive and transmit and it will stretch out its user's reach to an almost unlimited distance. The age of electronic communication has arrived.

Go back a few years and remember huge IBM-style number crunchers standing in lonely eminence – computers then spewed out massive data but could not communicate with anything else except their DP masters. Now nearly all telephone lines have been laid with two separate facilities: one for acoustic (speech) and one for data transmission. Suddenly computers could talk to each other. Only the mainframes and minis, at first, along private networks like Ethernet. They used PSS – packet switching; sending squeezed-up lumps of data flashing along the networks or even better in the gaps in our conversations.

At about the same time Videotex arrived. Videotex is the generic name for Viewdata; systems like BT's Prestel and also Teletext; the BBC's Ceefax and the IBA's Oracle. These simply combine the technologies of the large computer, the telephone (or broadcasting) and the TV set.

Mass Market

Now the telecommunication, data processing, publishing and information businesses have begun to merge and there is, all predictions indicate, a mass market fast coming into being.

We are seeing dramatic changes in the way people obtain information, communicate with each other and conduct transactions – buying, selling and consuming goods and services. With millions of micros in homes and businesses and cheap modems becoming a reality, electronic communication is not just a buzzword for trendy corporate executives but a growing and relevant factor in all our lives. It promises to be as general as the telephone and as influential on the way we manage our lives as that now seemingly indispensible instrument. No wonder BT and IBM wanted to grab a lions' share of the market.

The main thrust on the new communication is through public networking. Public networking, connecting micros to such services as BT's Prestel, Micronet, Telecom Gold – a business message/telex service; and Compunet, Commodore's own recently launched network is growing fast in popularity. The key to this particular breakthrough is the modem (Modulator/-Demodulator) – the small piece of hardware that connects your micro into the telephone network. A modem converts the signals in a computer from digital to analog so that they can flow down a telephone line; and, of course, receiving analog signals, it converts them back again. The modem needs the computers' parallel bytes to be converted into serial ones. For this you need a serial interface, for Commodore an IEEE. Modems are uncomplicated and becoming very inexpensive. Their prices are falling fast and are beginning to come down towards the £50.00 mark.

Some modems have very interesting features. Commodore is proud that theirs, in addition to letting you connect directly to Prestel, Micronet and Compunet, also includes a built-in security system which eliminates unauthorised use by anyone but the registered owner.

This can be very useful as a major drawback with networking can be the cost. If you restrict yourself to cheap call times it can be economical – each log-on is, of course, a telephone call too – and connect to databases which offer a local call access mode i.e. reaching a distant service through your own local exchange. These accesses are charged at local rate. If you have special interest, you can subscribe to the packet switching services which let you dial and access around the world at cheaper than normal rates.

But what do you want electronic communication for? What can you do with it? There are four main areas of advantage. Information retrieval; messages and mail; interactive and commercial services; and software up and down loading.

Compunet – growing fast in popularity

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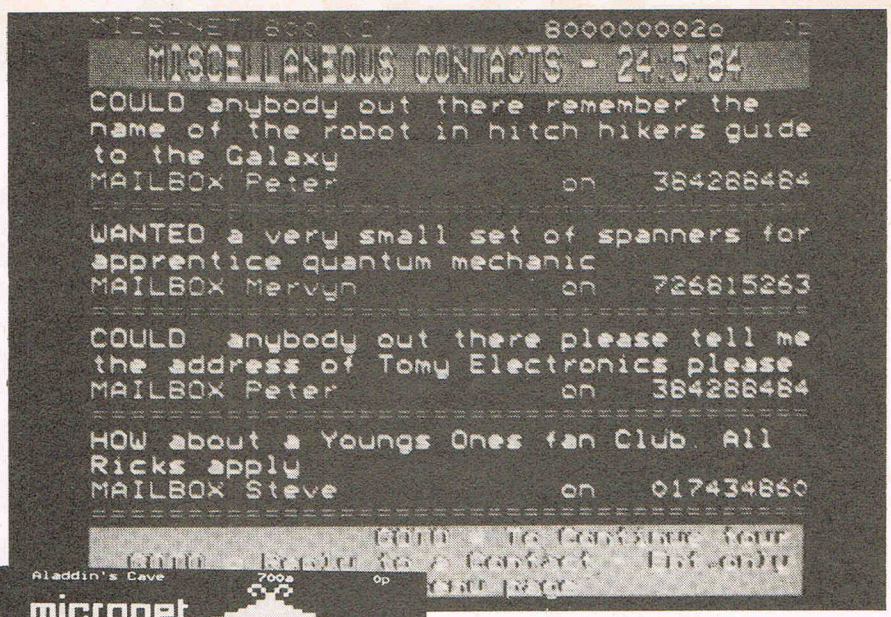

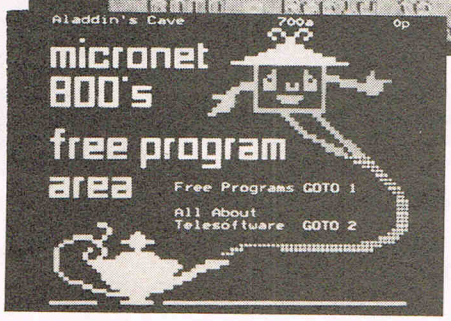

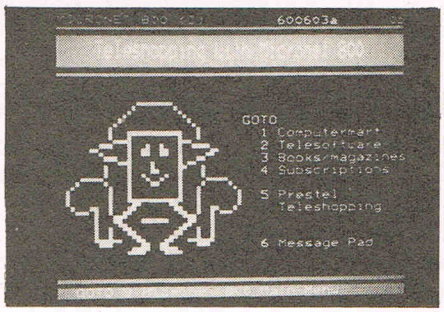

Information Retrieval

The main frame computers which hold the huge amounts of data offered by services like Prestel and Compunet can vastly outperform micros. They process millions of instructions per second and are ideal for organising enormous amounts of text-based information. You can just tap into these boxes to track information you need quickly and easily. Very convenient for small business use.

Messages and Mail

With services like Telecom Gold, you can have a mailbox to send and receive messages. The charm of this is that at any time convenient to you, you can draw off messages and send them to any number of mailboxes simultaneously at no extra cost. It is cheaper and a great deal more convenient than sending telexes.

Interactive Facilities

Home banking in the U.K., with Nottingham Building Society and the Bank of Scotland; shopping and many other commercial operations are now available. Virtually all major travel agents have Prestel booking facilities and so, for example, do the Royal Shakespeare Theatres. You can get free flight and weather information and teleshopping lets you flick through pages as you might a catalogue – only without leaving your TV set or micro. Cable will bring even more facilities.

Software

The networks are nearly all offering software that you download and charge to your telephone account. One computer company lets you access their head office computer and download new versions of their software. You can even sell your own software onto the systems by announcing it and providing it for payment, if you wish.

Communication developments are only limited by the imagination of the users. One recent idea was to move the electronic games world out of the single lonely fanatic syndrome and games suitable for groups of players connected over the networks are now available. Micronet offers a galactic strategy game which can involve 1000 players simultaneously nationwide with the computer assimilating the moves once a day.

Bulletin Boards

A close idea to this is Electronic Bulletin Boards which are achieving the kind of vogue enjoyed a few year's ago by CB. Most bulletin boards are menu driven and easy to use. They all have different special interest sections. You can buy a package and set one up yourself. The most popular package is CBBS and is used by a large number of boards throughout the world.

In the U.S. there is a communication facility called The Source, especially for micro users. It has a bulletin board that can be searched by keyword – an advantage in time and money over the page jumping tree structures mostly used in the Prestel-style services. A growing trend with these services is SIGs – Special Interest Groups – essentially electronic clubs for particular topics. Some of these are machine specific.

An interesting development in one facility in the U.S., Compuserve, is a magazine section where computer and electronics publications put out computerized versions of their magazines. Now wouldn't you like to know what you can read in CCI next month or better still read some of it in advance? I am not revealing any secrets when I say that CCI is actively pursuing such a development for itself.

Communications Revolution

What we are seeing in the communications fields is the beginning of a revolution – a radical change in the way we regard many functions of our world. Just as the telephone, the car, the radio, the TV, needed comparatively simple technological advances like the refining of oil or the manufacture of valves before they became highly influential factors in our lives, so the modem can bring out the latent forces of telecommunication; linking our micros in a simple-to-use two-way, highly economical connection to a whole range of far reaching opportunities. No wonder IBM and BT tried to swallow up this exciting market, they realise that it is the next stage in our increasingly technology-based lives and that vast sums of money will be made by those who can exploit this new revolution in communications.

Commodore's modem includes a built-in security system

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As well as the IBM PC, the Alpha 10 is compatible with most micros, including Act Sirius and Apricot, Apple II, Commodore, and DEC 11.
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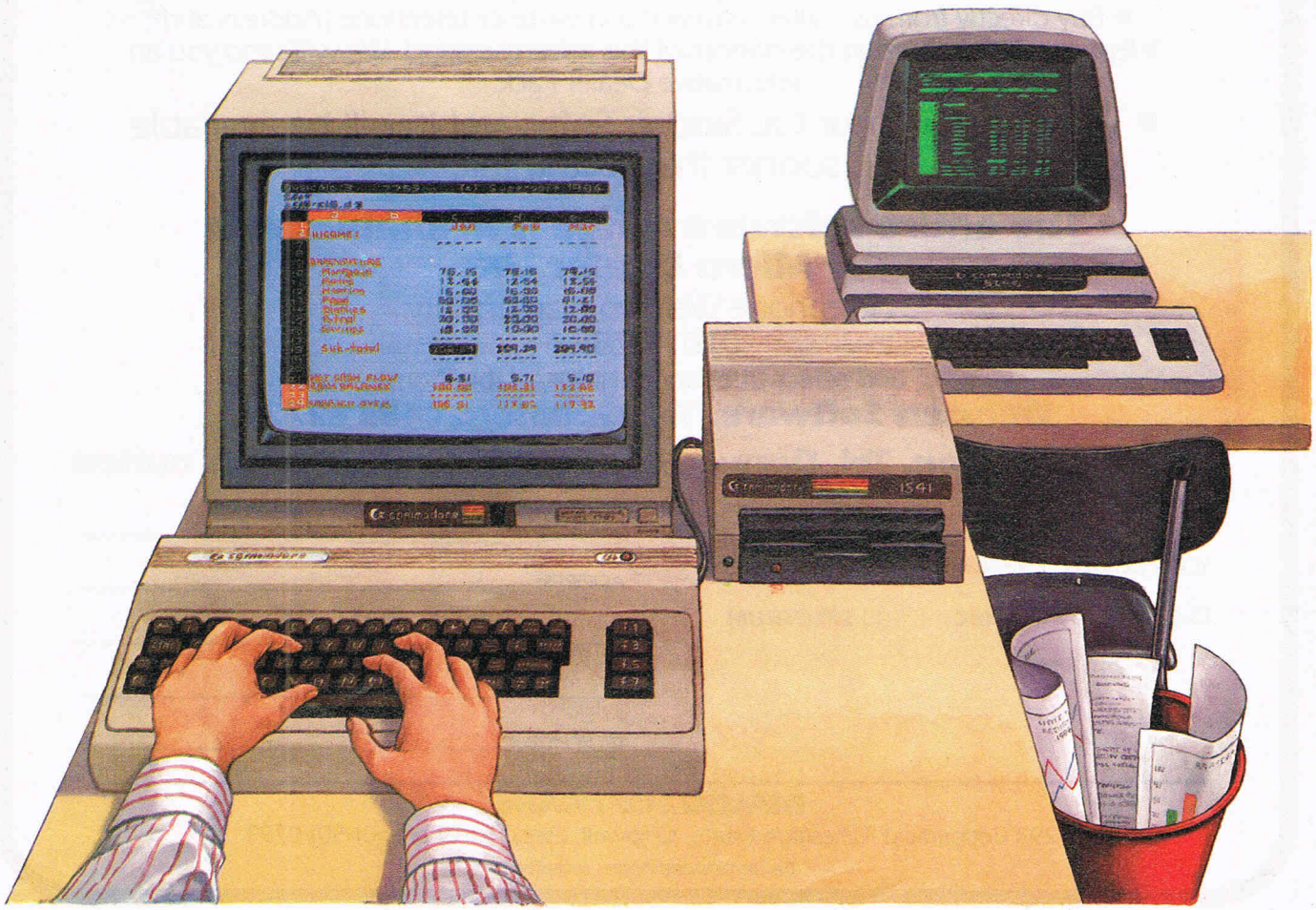
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