

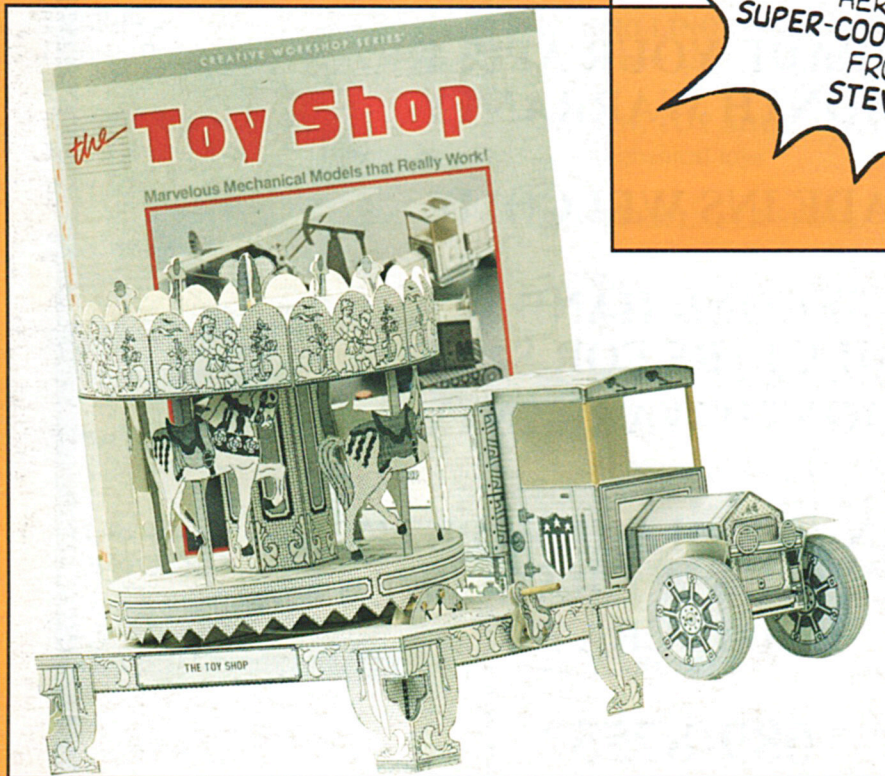
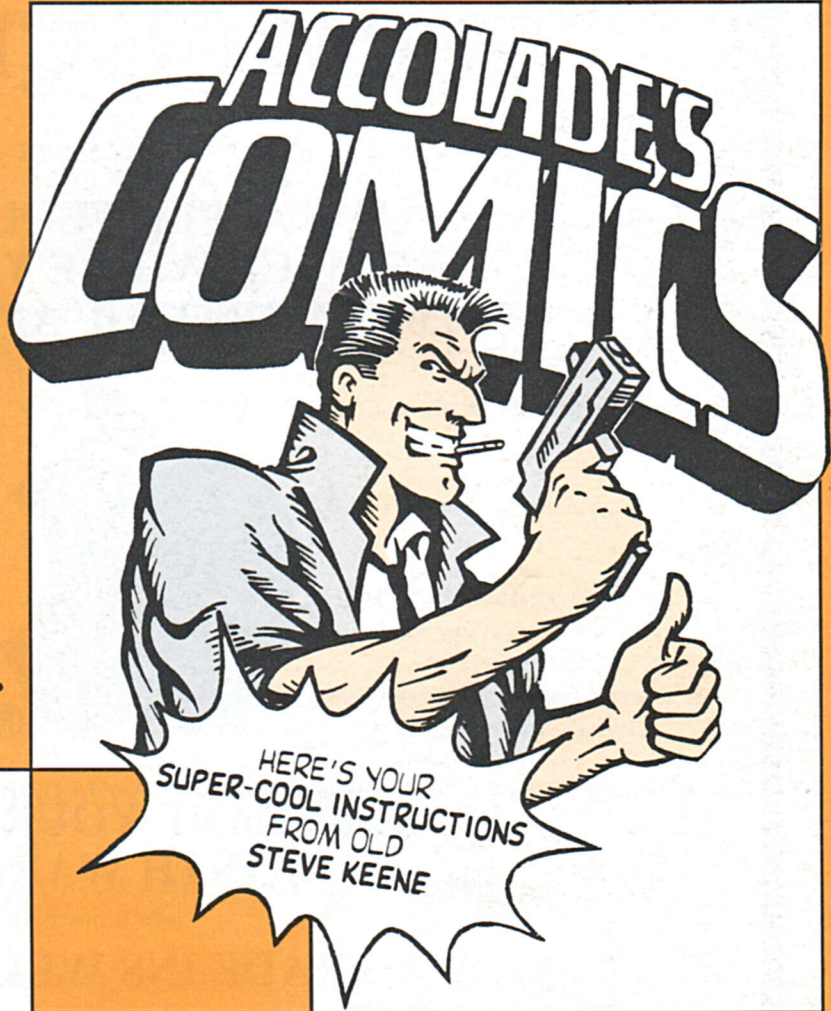
The Australian Apple Review

**Some Personal
impressions of the
new MACS**

***SOFTWARE
for the IIGS***

Which Modem?

Full BBS Listing



COMICS

Battles in Normandy

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The Australian

Apple Review

Vol 4 No 4 1987



The Australian Apple Review
Top Rear, 4 Carrington Road,
Randwick, NSW 2031.
Phone: (02) 398 5111.

Published by:
Saturday Magazine Pty Ltd.

Editor:
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Publisher:
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Subscriptions & back issues:
Tristan Mason (02) 398 5111

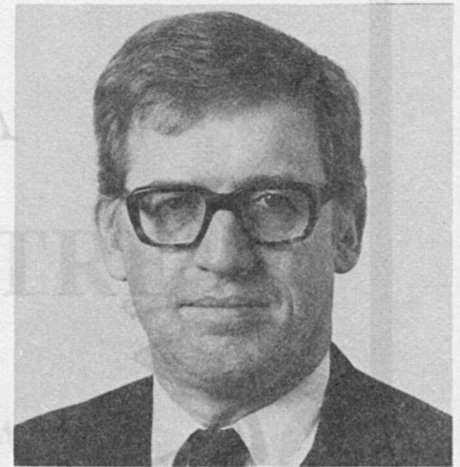
Distribution:
NETWORK

Printed by:
Ian Liddell Commercial Printing

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Editorial



THERE ARE lies, damned lies and statistics. Thus the Iron Duke, the Duke of Wellington. He was not wrong. Recently a distribution company of PC desktop publishing programs has been claiming that a specific program for the PC - *Ventura* - had now captured over half of the market. If his claim had been unsupported we would all have smiled quietly and carried on with using our Macintoshes. After all what is salesmanship if it is not the art of large promise? Neither sullied nor trammelled by facts.

But in this case the authority of a research organisation was cited to back up the claim. And, indeed, further investigation showed that the research organisation truly held this view and had the apparent figures to back up the claim.

For once, Apple were moved to an appearance of wrathful action. They checked through independent sources and

came back with the figure that this program had something a shade less than 30 per cent of the market.

The view has been put forward that in taking this action Apple were doing themselves a disservice by calling attention to an opposition program - on the basis that MS-Dos is the opposition - which had made such strides into a market previously Apple's very own in less than four short months. There is some merit in this view.

In the other hand Apple's challenge to these figures brought into the open a growing distrust of the figures put together by researchers for public consumption. They are fine when they are used as an indication of direction. Where they fall down is when people believe in them implicitly. When the figures are used in the same way as a drunk uses a lampost - for support rather than illumi-

nation.

Our view is that this obsession with figures and market shares only lies in the narrow ambit of marketing departments. Out here in the real world the rest of us just believe that Apple makes the best computers in the world and we go on our merry way using them. If there are unenlightened users in the dark out there we can feel sorry for them wallowing in their ignorance. But it is surely not a matter that should overly concern us. 🍏

Gareth Powell

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Bits and Bytes

Apple versus Ventura

THERE would appear to be a fair amount of conflict going on between Apple with their Macintosh desktop publishing system and Xerox with their *Ventura* desktop publishing program for the PC.

First of all their claims and counter-claims about their respective sales.

In truth, Apple has a fair point to make in that the *Ventura* percentage of the desktop publishing market appears to have been more than somewhat overinflated by a research organisation. Now comes the news that Apple have reported Xerox and *Ventura* to the Advertising Council, complaining about some of the claims made in their advertising.

This is interesting because desktop publishing programs are very small beer when compared with the overall sales of computer programs for the Apple II and the Macintosh series. Probably fangs are being bared at this early stage because Apple clearly sees the tremendous potential of desktop publishing in the near and middle future.

On Making a Quid

MACINVEST is a group of computer programs from the United States which, tied in to a series of seminars, are intended for entrepreneurs starting a business from their own homes.

The idea was developed by Al Rotola, founder of the American company Com-Vest. He says, "It is a dedicated hardware and software package created around an Apple Macintosh personal computer. Initially, I designed a program just for investing in real estate, but MacInvest now contains more than twenty different programs."

These programs - which have been or are being adapted for the Australian market - cover a number of real estate plans, an accounting and finance package, data management, loan amortisation program, advanced word processing, banking tactics, an art and graphics program for publishing and a graphics business program. There are also several programs that tell you how to start up a home based business.

Al Rotola says, "I believe that the personal computer is making enormous inroads into our daily lives and that over the next few years it will dramatically change the way we all live. We have the chance now to step out of financial mediocrity and into financial freedom simply by being in the right place at the right time and possessing the right skills to use when opportunity knocks".

The seminars start off by teaching you how to use a Macintosh and then proceed to teach you how to use the programs. According to the publicity, which is written in the florid You-Too-Can-Make-A-Million-Bucks style, attendees at these seminars come away with a knowledge of how to use a personal computer to run their business.

We have the gravest doubts. First of all, the whole style, method, approach to doing business in the United States is very different to Australia. Secondly, the titles of all the programs suggest a total American bias. Thirdly, the hyped up press release and the persistence of the agent in Australia - an American called Herb Newman who telephoned us five times in one afternoon - smack of snake oil selling.

Wrong to be overly suspicious before we have looked at one of the seminars but we will reserve judgement until we

have tested one of the programs thoroughly and have been given a comprehensive price list so that we can compare their cost with similar packages available from other sources.

The Australian Computer Society

A YEAR ago in another place we wrote, somewhat scathingly, of the Australian Computer Society and of its aims and membership construction. It was then the avowed aim of this society to restrict appointments in positions of authority in the computer industry to persons who were members of the Australian Computer Society. And to become a member you had to have what they considered approved qualifications. In other words what they were trying to do was create a closed shop and no amount of high flown phrases about raising the standards of the industry could disguise that fact.

At the time we listed a number of people in the computer industry who we considered of solid worth and who would not, according to the rules at that time, be permitted membership. One of the names mentioned was that of David Strong, managing director of Apple in Australia. Not widely known but he has a strong computer technical background as well as solid managerial experience. If he could not join then in our stated opinion the whole issue was a farce.

And judging by the membership of this somewhat less than august society most computer professionals are in agreement. They show their attitude fairly clearly by not joining. In fact, they vote with their feet. Those who are members seem to belong to the push

who delight in putting strings of letters after their names. If they need that sort of ego boost they are not the sort of people we would wish to associate with.

Now the Australian Computer Society has bungled off a telex explaining that their rules changed on January 1, 1986 and that no one has taken any notice. They want it known that you do not need tertiary educational qualifications to join. As the publisher and editor of this magazine had his education curtailed at the age of 14 when he left to join the circus he will no doubt find this encouraging.

Now you can join the Australian Computer Society under one of three listings. You can either have: Appropriate tertiary qualifications and experience. Achievement of a pass in the Australian Computer Society and experience. Provision of evidence, written and/or oral of a level of professional competence expected of a Member. (Notice they

always use a capital letter when referring to a Member.)

Let us suppose you want to join under the third alternative. This is how it works. "Those Members seeking professional grading who do not have appropriate academic qualifications will be asked to supply information to all a Branch Review to assess their cases. This assessment will usually take the form of an interview with an intending Member identifying his/her area of expertise prior to the interview so that the Branch can ensure that the panel is suitably qualified to assess the case." Top that for a lucid explanation.

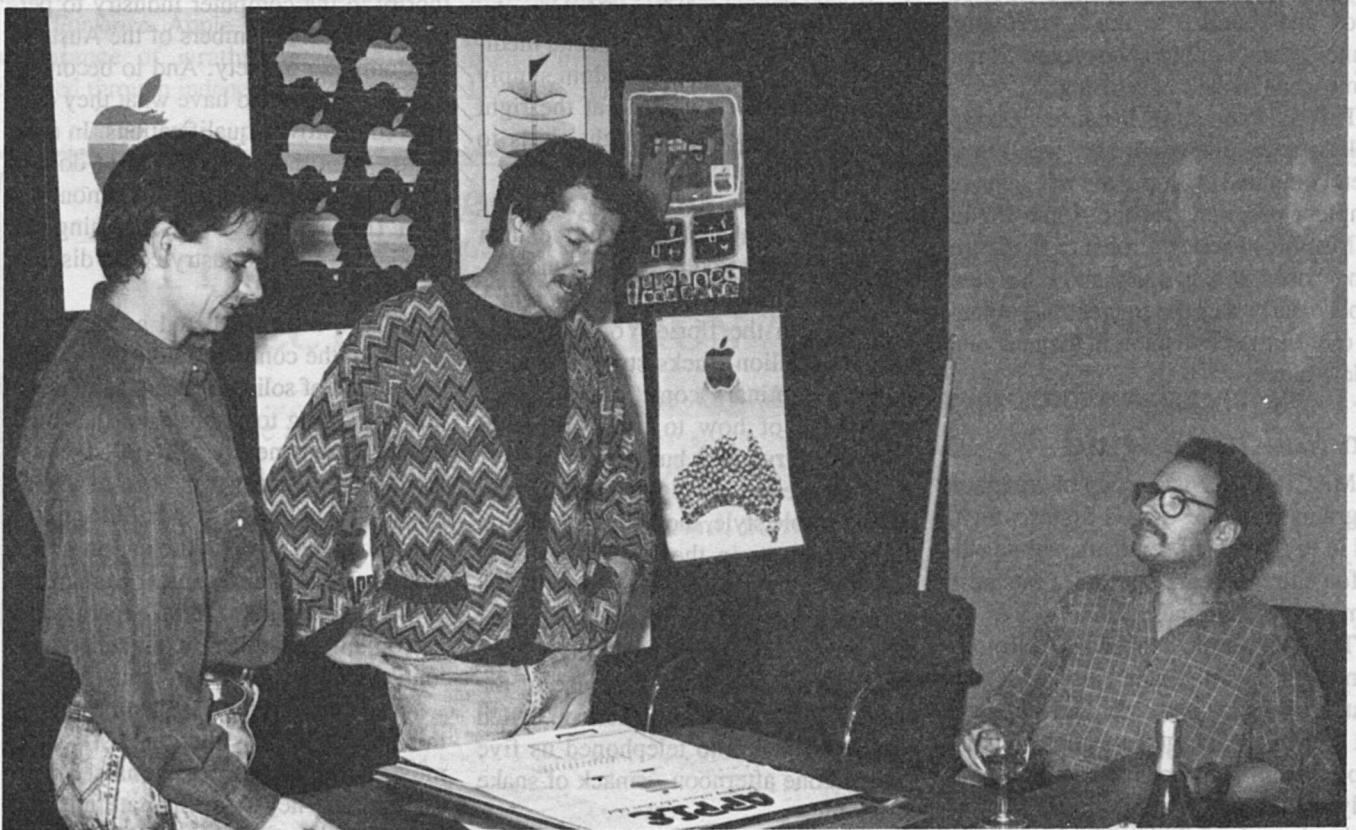
As far as we can ascertain what they are saying is that you will have an interview to see whether the panel that is interviewing you has its act together before you have an interview. We pass. As do the majority of the people in the computer industry.

Better than Campbell's Soup

A NATION wide poster campaign was recently held by Apple to produce a poster that would "Do for Apple Computer what Andy Warhol did for Campbell's soup." You may wonder, as we do, at the taste and the wisdom of selecting such a slogan in that a) Andy Warhol is indelibly associated with the launch of the Amiga computer for Amiga and b) is now dead but let it pass. Judges were heavy metal indeed. Ken Done, he of the brilliant T-shirts, Michael Ranallo, art director of Campaign Palace' and Keith Davis who is an independent designer.

From what we have seen of the entries they were quite literally stunning in their graphic impact. Winners are Fiona Flack of Mortdale School in Victoria and Danielle Rant of Perth Technical College. To each of them, and to their lucky

Continued on p.22



A slew of artistic talent which judged the Apple design and poster competition. From left to right, Michael Ravallo of Campaign Palace, Ken Done - now a legend in his own mind - and Keith Davis

Some personal impressions of the new Macs

by Gareth Powell

In a strange sense the new line-up of Macintoshes is the first full offering of these machines since the first Lisa - effectively the very first Macintosh - rolled off the assembly line. That statement requires some little explanation.

WHEN STEVE Jobs went on a tour around the Palo Alto Research Centre of Xerox sometime in the early eighties he saw development work going on in a series of areas which he realised would, together, make "an insanely great machine". Those were his words, not mine.

At the time there was a closer working relationship between the computer scientists in California than there is today.

At that time cards were dealt above the table.

At that time secrecy was something you saw on television or read about in spy books. It was a more innocent, fresher world than today.

Steve Jobs was, in many ways, a Pied Piper.

He had, he has, charismatic good looks, a visionary's belief in the future and an empathy with computer hardware and software designers which has been rarely equalled.

Xerox, on the other hand, was going through a period of being an up front corporate American company that made all its money from selling photocopying machines. It had managed - how, has never been made very clear - to set up a research centre that was costing them something like a million dollars a day that was crammed full of geniuses. These computer whizz kids were feeling frustration at the corporation for being unable to take their brilliant ideas and turn them into some form of commercial reality.

Steve Jobs came and offered them a similitude of heaven.

Some took it. Some left and went to other, equally interesting companies. Some started their own corporations. Some stayed with Xerox.

The team that came to Apple brought with them a set of neat ideas which dovetailed into the long held dream of Jobs, the DynaBook. This was then - probably still is now - a practical impossibility but it was around the idea of the DynaBook that the Xerox idea was developed and the result was, in the first stage, the Lisa - later the Macintosh.

Notice that the machine could not fulfill Jobs' dream, simply because the technology - and specifically the screen and memory technology - was not available at the time.

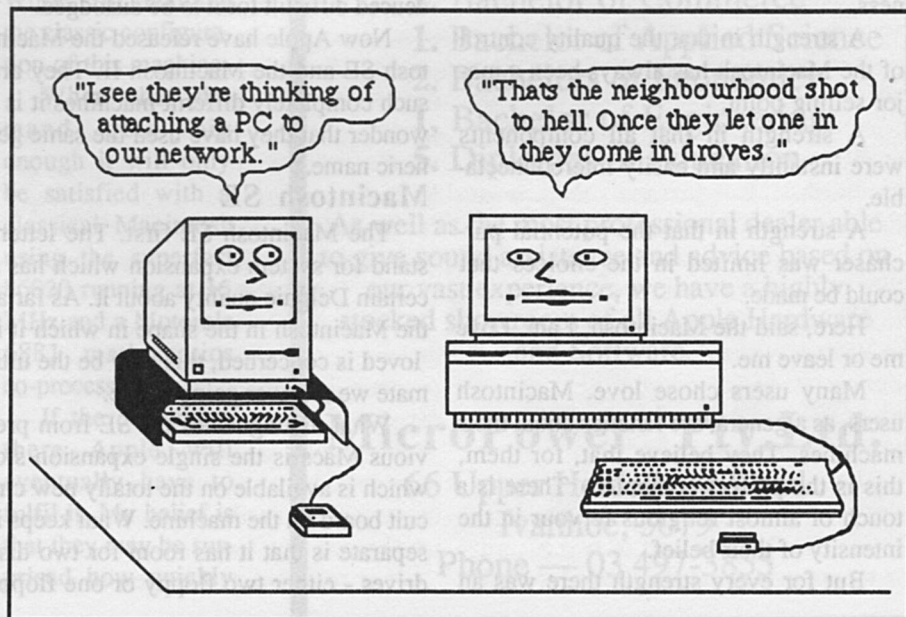
Even though the DynaBook was put on a shelf, the ideas that it had fermented

were used to design an ideal machine - the Macintosh. It had to be constructed within the limitations of technology available at that time. It is only now, with the launch of the Macintosh SE, that we see the finished machine as it was originally conceived by Jobs and his team of dreamers.

Although Jobs included many of the Xerox ideas into the machine - the icons, the mouse, the use of *QuickDraw*, the integration of a graphics chip, the ability to access a page description language like *PostScript* - he had one obsessive idea. Whether this was a blind spot or not only history will judge.

He believed that many of the add-ons that had been produced for the Apple II - the machine on which the company's fortunes had been built - had detracted from rather than enhanced the performance of that machine.

He believed, with some reason, that a good computer could be stuffed by the addition of ill-designed, inelegantly conceived, badly made accessories.





Macintosh Plus

And there was, perhaps, a touch of megalomania in his idea that the Macintosh concept would belong to Apple alone and not be sullied by anyone else.

Hence the idea of the closed architecture of the original Macintosh. Steve Jobs made it very, very difficult for anyone to modify, enhance or otherwise tamper with his sweetheart. Only the most savvy of computer engineers could work any transformation of the Macintosh.

For most add-on merchants the Macintosh was as acceptable as the Forbidden City in Lhasa.

This was both a strength and a weakness.

A strength in that the quality control of the Macintosh has always been a major selling point.

A strength in that all components were instantly and easily interconnectable.

A strength in that the potential purchaser was limited in the choices that could be made.

Here, said the Macintosh, I am. Love me or leave me.

Many users chose love. Macintosh users, as a genera, are fanatics about their machines. They believe that, for them, this is the perfect computer. There is a touch of almost religious fervour in the intensity of their belief.

But for every strength there was an

opposing weakness attached to this policy of closed architecture.

Weakness because corporate America, the big businesses, simply were, at first, unwilling to take a machine seriously which would not work with their serried ranks of PCs.

Weakness because when the machine was launched there were truly only two programs - *MacWrite* and *MacPaint* - that would work with the Macintosh.

But such was the magic of the Macintosh that the strengths overcame the weakness and, despite the limitations of software and memory, in its first year it sold more machines than IBM did of their PCs in a similar start-up period.

The Macintosh established, very quickly, a place in the hearts and minds of enthusiasts. What drove it into the bosom of corporate America was desktop publishing. The combination of the Macintosh, the Apple LaserWriter, the page description language *PostScript* and the desktop publishing program *PageMaker* was almost unique. For a time, if you wanted to get into desktop publishing that is what you bought - or you did without. Now there are dozens of different ways of getting into desktop publishing but the Macintosh has a toe-hold - no more than that - in the corporate world and my guess is that it will be deuced difficult for it to be dislodged.

Now Apple have released the Macintosh SE and the Macintosh II. They are such completely different machines it is a wonder that they have used the same generic name.

Macintosh SE

The Macintosh SE first. The letters stand for system expansion which has a certain Delphic quality about it. As far as the Macintosh in the shape in which it is loved is concerned, this may be the ultimate we are ever going to see.

What distinguishes the SE from previous Macs is the single expansion slot which is available on the totally new circuit board on the machine. What keeps it separate is that it has room for two disk drives - either two floppy or one floppy

and one hard. What shows the direction Apple is heading is the keyboard which has much of the IBM PC about it.

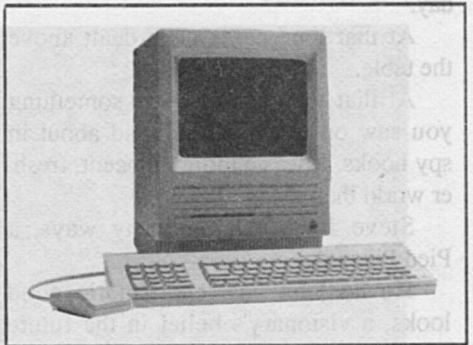
Some details.

The new Macintosh is in a colour which Apple call platinum and say is their new standard for the future. Unless you have an acute colour sense - I have not - this will not bother you one way or the other.

On the front there are two slots for standard 800K drives or a single slot when the hard disk option is included.

At the back is a knockout panel which gives access to the guts of the SE so that add-on designers can create internal expansion boards their wonders to perform.

Also at the back are two Apple Desktop Bus connectors - more on these in a moment - an external floppy socket, a SCSI connector and the standard two miniature serial ports.



Macintosh SE

On the main board the Roms - the read only memory chips - have been changed from 128K to 286K which helps improve the performance and the networking capability of the machine but does not transform it into any sort of a speed demon.

The central processing unit, the CPU, is still the Motorola 68000 operating at what is nowadays a fairly sedate 8 megahertz and the standard random access memory package is one megabyte upgradeable to four megabytes.

A major change exists in the Saratoga keyboard - the one I tested - which has 105 keys including 15 function keys and

cursor movement keys, something which would have been considered unthinkable in the original concept according to Jobs. There is also an Eastwood model which is much like the board on the Apple IIGS. Both of these new keyboards have sockets conforming to Apple's new ADB standards so that the mouse can either be attached through the back of the machine or on to either end of the keyboard. This gives a minor amount of extended flexibility but nothing to get over excited about.

In essence the SE is the logical extension of the original Macintosh with added flexibility, more intelligent ROMs - for example the Desktop file can be written to externally - and a way for other manufacturers to provide expansion boards. Despite the expansion of the ROMs almost all software that runs on the standard Mac Plus will run on the SE - indeed, all of the software I had on hand at the time. Difficult ever to claim total compatibility for any machine but the SE as far as I can tell can make that claim with impunity.

The single slot will be a great delight to add on specialists. No doubt one of these expansion boards will be offering limited PC compatibility. Apple have said that the SE is the Macintosh in its final form and that no more revisions are in the pipeline. They also aver that they will continue to sell the Mac Plus as a separate machine but this does not seem to make too much commercial sense and, at some time in the foreseeable future, it is an educated guess that the Macintosh as we all know it will be represented by a single model - the Macintosh SE.

The Macintosh is still the benchmark by which other computers must be judged.

My own feelings about the Macintosh SE are fairly simple to list.

It is the easiest computer in the world for the computer illiterate to use.

It is very fast with most programs, acceptably fast with all.

Some of the programs available for the Macintosh are simply not available on any other machine.

The keyboard of the Macintosh was always a problem. That problem is now totally solved.

The built in 20 megabyte hard disk is acceptably fast although there are those of us who are still quite contented to work with floppies.

The screen is still too damn small if you have any sort of eyesight problem. I have, which makes me biased. For me to use the SE and enjoy it for long periods of time - as in over two hours - I need an add-on screen like a Radius. This is my problem. Many users do not see it as a problem in any way whatsoever.

The Macintosh is still the benchmark by which other computers must be judged.

Finally, I simply do not believe that this will be the final model of the Macintosh in this form. It is the ultimate executive's weapon and as it finds itself on more and more business desktops the demand will be for speed, more speed and yet more speed. While still retaining the classic configuration of this machine.

When that demand gets big enough it will only be satisfied with a classical Macintosh using the superfast 86020 running at 16 MHz and a Motorola 6881 mathematics co-processor.

If the demand is there Apple will eventually have to fulfil it. My belief is that they may be surprised how quickly

this demand will grow.

Macintosh II

And now we come to the Macintosh II.

It is, at one and the same time, both a disappointment and a triumph.

It is, at one and the same time, both less and more than we had all expected.

Let us look first at where it disappoints. Where there could be considered to be a shortfall in expectations.

The machine looks too much like an IBM PC. It is not distinctive enough. It does not project the image of being from the manufacturer of the Macintosh which, whatever you might think of it, was an unique and distinctive exercise in design. The Macintosh II looks as though it comes from a Taiwanese clone maker with aspirations of grandeur.

Here we are just talking about appear-

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ance, icing on the cake.

Is it all that important?

To my mind, indeed it is.

I believe the Macintosh has forged its own steady path of success in a major part through the uniqueness of its concept, the singularity, if you like, of its design.

To me it seems plain daft to abandon that image the moment the machine has a major upgrade, a total refit.

A case might be made for their design approach that, after all, a computer is a computer. With a keyboard, a box to keep the engine in and a screen.

True.

But a great designer, a clever designer, could have made the Macintosh II look uniquely Apple, even working within those tight parameters.

It might have been through the use of an ergonomic arm or through a different orientation of the box that holds the engine or an unique ultra flat plasma screen or through a combination of design details which would have said proudly, uniquely, this is a Macintosh.

Instead we have a machine which has much in common - in appearance only - with the Commodore Amiga, the Atari, the Taiwanese MultiTech.

If I may take it a step further.

Whereas I could always see a senior executive finding space on his desk for a standard Macintosh because this made a statement about that executive's approach to technology, to the modern world, I cannot see the same happening with the Macintosh II. It is just too - there is no other word for it - pedestrian.

This complaint applies only to its looks. As far as performance is concerned the Macintosh II as it stands far outstrips the average user's ability to test the outer boundaries of its possibilities. It is, indeed, the computer of the next decade, the next generation.

The main box of the computer contains the mother board and the disk drives. The floppies (one or two according to preference) are standard Mac 800K

and there are several hard disk options. Nothing overly spectacular there. Where the real changes come is on the motherboard. First of all the central processing unit is the true 32 bit Motorola 68020 working at 16 MHz. This is exactly twice the speed of the earlier generation chip - the Motorola 68000 - which is standard on all other Macs.

Also driving the machine on at blinding speed is a maths co-processor - the Motorola 6881 floating processor chip. The standard random access memory is one megabyte but this can be expanded to sizes beyond the dreams of avarice. In theory the Motorola 68020 chip will address up to 4 gigabytes of memory but the design constraints of the Macintosh II seem to suggest that one would have to be constricted, content with a maximum of 2 gigabytes. Some constriction. Some contentment.

It is to my undying shame that I wrote an article on the launch of the Apple II criticising Jobs and Wozniak for announcing that it could easily be upgraded to 48K of memory which, if need be, could be expanded to 64K.

As far as performance is concerned the Macintosh II as it stands far outstrips the average user's ability to test the outer boundaries of its possibilities. It is, indeed, the computer of the next decade, the next generation.

What, I asked querulously, would anyone ever find to do with 64K? What program, I asked, could ever fill that vast expanse of memory?

My excuse is that I was younger and more foolish then and there were, indeed, many pundits in the computer industry who agreed with me.

It is true that as I write this I have



Macintosh II

difficulty in conceiving why anyone would ever want 2 gigabytes of random access memory on a personal computer. It is true that as I write this I have the greatest difficulty in imagining what 2,000 megabytes of random access memory, two million K of memory could ever be used for.

And it is true that according to my figures at present prices it is going to cost something over quarter of a million dollars to fit the Macintosh II up with its maximum possible memory.

But the fault is with the limitations of my imagination. If one thing was ever certain besides death and taxes, it is that programs will always expand and fill the space available. And that the price of memory will continue to come down.

Enough for the moment that I cannot see in this century anyone finding any limitations - theoretical or practical - in the amount of random access memory available on the Macintosh II.

And, in truth, this is what this machine is all about. It shows the way in which Apple see the Macintosh developing in the years to come. It sets outer limits which programmers are miles away from tapping - at least in the ordinary sense in which most people use the machines. It provides a platform, a basis on which Apple can build further.

I just wish they had made the design more distinctive. 🍏

Software for the IIGS



Beagle Bros Compile

Distributor: Imagineering

Price: \$125.00

Converts Applesoft programs to machine language speed. Programs can be compiled from any standard ProDos disk, including floppies, hard disks and Uni-Disk 3.5s. Syntax errors etc are automatically caught during compiling.

The Business Works

Distributor: OziSoft Busiware

Price: All 4 plus System Manager \$1695

Any 3 plus System Manager \$1345

Accounts Receivable \$476

Accounts Payable \$476

General Ledger \$476

System Manager \$570

A complete integrated accounting package. There are four modules, Accounts Receivable, Accounts Payable, Inventory Control and General Ledger, together with System Manager.

Drawing Table

Distributor: Imagineering

Price: \$164.00

A program similar to MacDraw and best used for creative precision drawings and general line art as its program is a sophisticated line and object oriented one.

Features include colour design and printing, zooming and accurate coordinates and drawing tools.

Fantavision

Distributor: Imagineering

Price: \$109.00

This is an animation package where you can create a 'movie disk' of drawings and animate text and graphics with T.V. style special effects. Drawn with a joystick, mouse or graphics tablet, the com-

puter will make up to sixty-four separate drawings, automatically producing fluid movements and special effects.

GraphicWriter

Distributor: Techflow Pty Ltd

Price: \$285.00

Specially developed for the IIGS. A word processing and graphics package with desktop publishing facilities. Different fonts and sizes, and all word processing features. But also you can lay out a page with blocks of text and graphics just as a graphic artist would. You can make lines, boxes, circles etc, and fill with patterns and colours. You can also create templates and save the format for next time. Version 2 supports the LaserWriter.

Hyperdrive FX/20 Apple II Conversion Kit

Distributor: Imagineering

Price: \$85

Software conversion kit allows IIGS users to use the Hyperdrive FX/20 in the ProDos environment. Gives: Apple II system software on both 3.5 and 5.25 inch disks; a powerful backup utility; a full functioned diagnostic utility; a special Apple II version of the HyperDrive FX manual.

Multiscribe

Distributors: Imagineering
TechFlow Pty Ltd

Price: \$198.00

This package takes advantage of all Apple IIGS features, giving you a Mac-like word processor.

Lots of font styles and sizes, multiple document windows and easy ruler-based text formatting - with both Laserwriter and Imagewriter print options.

Music Studio

Distributor: Imagineering

Price: \$142.00

A very professional tool for creating music. Listen to previously written scores, write your own music. Easy to understand and operate. Midi compatibility etc.

Newsmaker

Distributor: Imagineering

Price: \$164.00

A great little package for producing colour newsletters and signs distinctively your own by combining word processing and graphic files. It has a sophisticated page layout and a text-tiling feature which allows you to diagonally print and crop text around graphics.

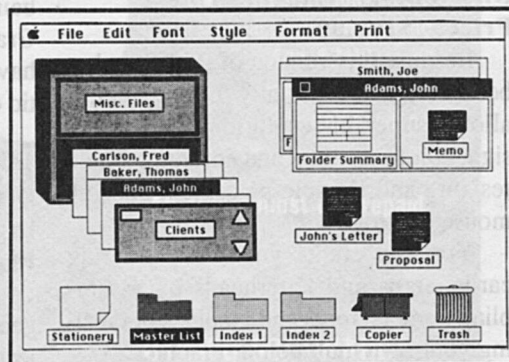
Comes with Laserwriter support and a wide variety of fonts and special effects.

Notes 'n' Files

Distributor: Techflow

Price: \$249.00

A database. Technically an electronic filing system rather than a true database. Uses almost a Macintosh interface in that it allows you to file copy, notes, addresses, reminders, in a series of folders which are shown in icon image on the screen



Notes 'n' Files

with a filing cabinet elegantly above them.

Omnis (single user)

Distributor: OziSoft Busiware

Price: \$495.00

A powerful relational database. You can use it as it comes out of the box, when you can use all of its immense power and all of its functions without it being specially tailored to your needs. Or you can tailor it to suit your exact needs.

Pinpoint Document Checker

Distributor: Imagineering

Price: \$120.00

Fast spelling checker, word cache, personal dictionary, up to ten alternative words with automatic replacement.

Pinpoint Starter Pak

Distributor: Imagineering

Price: \$239.00

Spelling Checker, Keyplayer, Pinpoint all on one 3.5" disk. Spelling Checker - the only "pop-up spelling checker for AppleWorks. Keyplayer: powerful macro keys and scripting program. Pinpoint Desktop Accessories - including GraphMerge to merge pictures into text, auto-logon modem software, automatic envelope addressing and five other time saving accessories. Apple IIGS RAM Enhancement Kit - automatic system start-up program with RAM drive partitioning.

Printshop GS

Distributor: Imagineering

Price: \$109.00

Because this version of Printshop has been designed especially for the IIGS, it allows super hi-resolution graphic design, colour printing and editing, graphic resizing and flexible placement and full mouse control.

You can create your own greeting cards, signs and letterheads by assembling borders, fonts and graphics or creating your own multicolour graphics.

Reach for the Stars

Distributor: Strategic Studies

Price: \$40.00

Available: October

A four player game of space conquest and colonization, already popular with Apple II owners, will be available in October specifically for the IIGS. As a fledgling space tyrant, you start with only one planet. Then you expand your space empire by exploration and colonisation, while maintaining tight economic control of your empire. Since there are always four players (the computer runs any that are not controlled by humans) expanding empires will sooner or later collide. The new version will have even tougher decisions to make.

Reader Rabbit

Distributor: Astron Software

Price: \$86.95

Provides children with a playful and exciting way of learning reading and increasing their vocabulary. Consists of 4 games with vocabulary of 200 three letter words. Each new game builds on the skills learnt in the game before.

Tass Times in Tonetown

Distributor: Imagineering

Price: \$85.00

An excellent adventure game with good graphics and animation. To live in tonetown you have to look Tone (ie Tonetown trendy). If you don't, a malicious character called Franklin Snarl bumps you off. And before being allowed to investigate Gramps' disappearance, you have to prove your journalistic capabilities.

TopDraw

Distributor: Imagineering

Price: \$198.00

This is a program which is geared towards shape or object-based drawings which can be moved, flipped vertically

and horizontally, rotated in 90 degrees increments, edited and coloured.

TopDraw allows you enlarged drawing formats, various text options, patterns and colours (the user can draw with up to 12 colours at a time), a wide choice of tools, font styles and sizes and both Imagewriter and Laserwriter compatibility.

VIP Professional

Distributor: Imagineering

Price: \$595.00

Quite a sophisticated business package - containing an 8,192 row by 256 column spreadsheet and database, and business graphics.

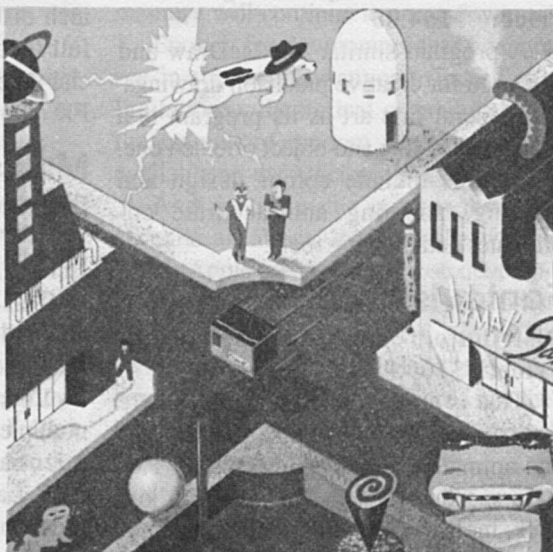
VIP allows you to use pull down menus, dialogue boxes, scroll bars, column grabbers, colour and full mouse control.

The Visualiser

Distributor: Imagineering

Price: \$187.00

A professional graphics application designed specifically for the IIGS. Can create pie, 3-D pie, bar, 3-D bar, stacked bar, line, point, scatter, high-low and area graphs. Also includes statistical analysis and definable axes. Allows you to create your own data within the program or directly access AppleWorks spreadsheet files and all DIF files. Select from over 100 different colours for use in the graph.



Tass Times in Tonetown

IIGS Memory Expansion with Boards

Distributor: Powertech P/L

GS-RAM — For normal memory requirements. Available with 256K, 512K, 1 MEG, or 1.5 MEG of memory already on board. If you don't need the full 1.5 MEG now, you can choose a GS-RAM with less memory and expand it up to 1.5 MEG in the future — or upgrade to GS-RAM Plus for a small charge. With an optional piggyback card, you can expand GS-RAM even higher than 1.5 MEG! (Other cards are only expandable to 1 MEG.)

GS-RAM Plus — For growing leaps and bounds. The first Apple memory card to use 1 MEG RAM chips on the main board. It's available with 1 to 6 MEG on board. If you don't need the whole 6 MEG now, you can buy a GS-RAM Plus with less memory and easily expand it in the future.

GS-RAM Plus can be expanded up to 8 MEG with an optional piggyback card, 5 year "no-hassle" warranty and outstanding technical support. 🍏

Index of Distributors

Astran Software

P.O. Box 579
Gosford, N.S.W.
(043) 283 555

Imagineering

77 Dunning Avenue,
Roseberry, 2018
(02) 697 8666

OziSoft Busiware

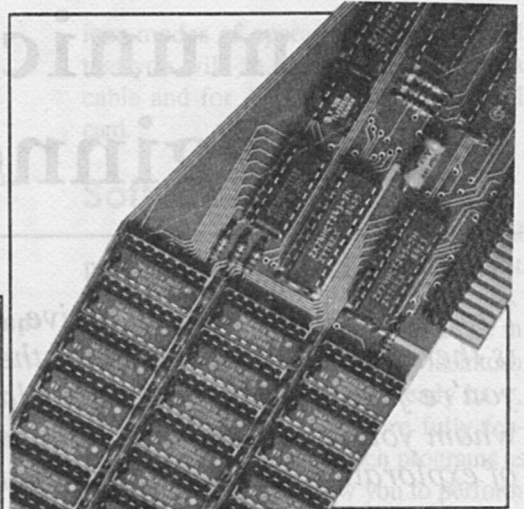
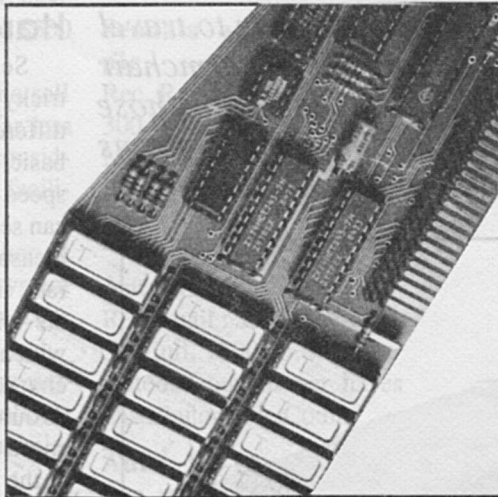
8 Kippax Street
Surry Hills, 2010
(02) 211 1266

PowerTechnik Pty Ltd

P.O. Box 143,
Killara, 2071
(02) 439 5488

GS-RAM

GS-RAM Plus



Strategic Studies

73 Alexander Street
Drummoyne, 2047
(02) 264 7560

TechFlow Pty Ltd

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Woodford, 2778
(047) 58 6924

BACKUP

ESSENTIAL DATA DUPLICATOR

Back up your copy-protected disks with **ESSENTIAL Data Duplicator 4 PLUS** ■

EDD 4 PLUS is new technology, not just "another" copy program. The **EDD 4**

PLUS program uses a specially designed hardware card which works with your disk drives to back up disks by accurately copying the bits of data from each track. Don't be fooled... no other copy-program/system for Apples can do this! ■ In

addition to backing up disks, **EDD 4**

PLUS includes several useful utilities such as examining disk drives, certifying disks, displaying drive speed rpm's, plus more!

■ **EDD 4 PLUS** runs on Apple II, II Plus (including most compatibles), and IIe, and is priced at \$190.00 (duodisk/ unidisk 5.25 owners must add \$32.00 for a special cable adapter). ■ A standard

EDD 4 version which doesn't include any hardware is available, and can be used on Apple IIc and III (using emulations mode) and is priced at \$125.00.

■ Bankcard and Master card accepted by phone. Add \$3.00 to all orders for postage and handling.

All orders must be prepaid.

UTILICO SOFTWARE

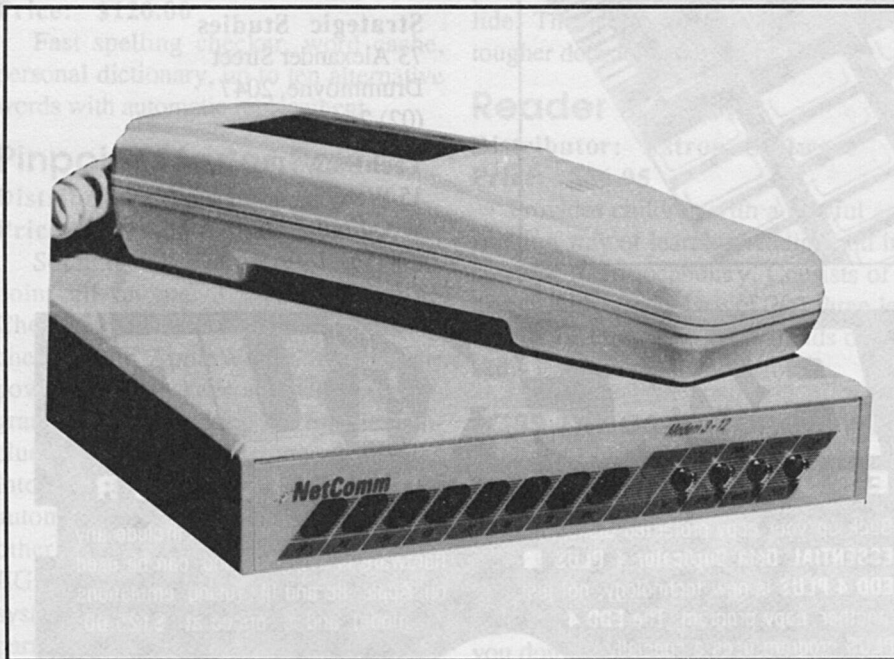
83 HALL ST., BONDI BEACH,
NSW 2026 PHONE (02) 30 2105

WARNING: EDD is sold for making archival copies only

Communications For Beginners

by Andrew Farrell

To travel is better than to arrive, and no better way to travel is there than by modem. From the comfort of your armchair you're free to visit far away places and speak with those whom you have never met. How does this mysterious means of exploration work? Andrew Farrell explains.



IN A multitude of counsellors there is wisdom. New computer users are always in need of a little counsel, be it to solve the contorted explanations of manuals or to try some feat never before performed. Finding help when you are in need is made far simpler thanks to the modern world of communications.

One of the fastest growing facets of this field is that of telecomputing. In short, this is the ability of computers to speak to each other by means of the public telephone network. Entering into this world, you will discover yet another array of jargon to help explain the various

technicalities involved. You probably already know that to get started you'll need two things.

1. A MODEM (MODulator DEModulator) changes the information stored in your computer into a series of audible tones that may then be sent down the telephone wire - this is the first and most expensive part required.
2. A terminal program lets your computer talk to the modem and in turn to other computers. Various levels of sophistication allow more complex operations such as file transfers and remote access to your equipment.

Hardware

Searching for the best buys is a tricky task. Dozens of brands with vast differences in ability exist. At the most basic level, the biggest variation is the speed at which these little black boxes can send and receive information. This is measured in bits per second or the baud rate. In common practice most home users will use either 300 or 1200 baud, which is roughly equal to 30 or 120 characters per second respectively. Around 30 characters per second is the speed at which most people read. However the faster speeds are very useful, especially in transferring files or programs.

Viatel, a service provided by Telecom, uses a special 'split' baud rate, where the sending and receiving speeds are different. Information is received by the user at 1200 baud, but sent at a sluggish 75 baud. This is fine when you are mainly viewing or retrieving information. The various combinations of speeds are often represented by the following codes :-

V21 - 300 Tx / 300 Rx
 CCITTV22 - 1200 Tx / 1200Rx
 CCITTV22bis - 2400 Tx / 2400 Rx
 CCITTV23 - 1200 Tx / 75 Rx
 CCITTV23org - 75 Tx / 1200 Rx
 CCITT (V23 set to originate)B103-300
 Tx / 300 Rx
 BELL (U.S.)B212 - 1200 Tx / 1200 Rx
 BELL (U.S.)

Cheaper modems support only 300 baud or perhaps 300 and 1200/75. This should suffice for the moment, but once you've been treated to a dosage of 1200 baud, you'll be forever sold on the higher rates of operation.

I use a Dataplex DPX224 with our office Macintosh Plus. This beastie is

Star Printers.

capable of most speeds currently in use, as well as a few rather rare combinations.

It also supports what is known as the HAYES command set. This is a set of short instructions which allow you to COMMAND and PROGRAM your modem to do certain things. For ease of use, and flexibility, I normally recommend a HAYES modem. Fortunately these have of late dropped in price to under the \$500 mark.

Non-Hayes compatible modems sell for as little as \$110, but provide far less power potential. Other features to consider are the Autoanswer and Autodial facilities - if any.

These save immense time when it comes to dialling your favourite system and enabling others to remotely access your own computer.

I approached most of the leading suppliers of modems to compile the following price/feature guide of what's available.

Modems

Apple II/E requires serial card.

Under \$500

Cicada 300

Rec Retail : \$110 (Only available direct.)
300 full Manual operation only.
Distributor: Centre Industries

Cicada 312

Rec. Retail : \$245
300, 1200/75 Manual operation only.
Distributor : Centre Industries

Sendata + Zyllyx (Viatel) + cable.

Rec Retail : \$250
300 full (requires software), 1200/75.
Manual operation only.
Distributor: Rosser Communications

Modem 3+12

Rec. retail : \$341
300 full, 1200/75.
Manual operation only.
Distributor : NetComm

Sendata + Viaterm.

Rec. Retail : \$349
300 full (requires software), 1200/75.

Manual operation only.

Distributor: Rosser Communications

GPA Supermodem

Rec. Retail : \$395
300 full, 1200/75 (optional 1200 full - \$190)
Autoanswer, autodial, hayes.
Distributor : Micro-Educational

Sendata + Viaterm + Terminapple.

Rec. Retail : \$449
300 full, 1200/75
Manual operation only.
Distributor : Rosser Communications

\$500 - \$1000

Automodem 21/23

Rec. retail : \$549
300 full, 1200/75.
Autodial, autoanswer, hayes
Distributor : NetComm

Auto 12+12

Rec. retail : \$699
1200 full only.
Auto answer, auto dial, hayes.
Distributor : NetComm

Automodem 123-A

Rec. retail : \$925
300 full, 1200/75, 1200 full.
Autodial, autoanswer, hayes.
Distributor : NetComm
\$1000-\$1500

Dataplex DPX-224 - SA

Rec. Retail : \$1288
300 full, 1200/75, 1200 half, 1200 full,
2400 full.
Autoanswer, autodial, hayes.
Distributor : Rosser Communications

Smartmodem 1234-SA

Rec. Retail : \$1499
300 full, 1200/75, 1200 half, 1200 full,
2400 full.
Autoanswer, autodial, hayes, software included.
Distributor : NetComm

Several package offers are included in the above table. These usually offer bundled software which will support var-

ious modes of operation. Keep in mind that you will, in most instances, need a cable and for Apple II owners, a serial card.

Software

There are literally dozens of terminal programs around, all of which will get you going.

One of simplest of these would be in the form of a desk accessory (Macintosh users), that you probably already have, called Macterm. Other more fully featured packages include such programs as Versa-Term which allow you to perform all sorts of tricky tasks.

If you're using a Hayes modem, many functions such as auto-redial, are controllable using the built in instruction set.

Viaterm - Apple II range including GS.

Viatel/Videotext

Rec. Retail : \$129
Distributor: Rosser Communications
NB : Locally developed.

Terminapple-Apple II range including GS.

General Communications

Rec. Retail : \$159.00
Distributor: Rosser Communications
NB : Locally developed.

Xylex + serial card-Apple II range.

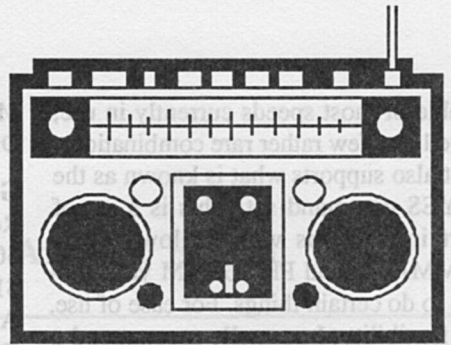
Viatel/Videotext

Rec. Retail : \$149
Distributor: Rosser Communications

All the above prices and specifications were verified at the time of publication. Please note that various optional extras are included free with some modems. Rosser Communications, for instance, always provide the necessary double adaptor for your telephone to be used in conjunction with the modem. 🍏

Teach Yourself The Easy Way

by Gareth Powell



ALL OF us who have spent the long, lonely hours battering our way through the arcane mysteries of operating systems and applications software for lesser machines than the Mac know that self-tuition requires dedication and an almost masochistic approach to computers.

This most users - outside our own select, nutty fringe - simply do not have.

Which is perhaps why there has been so much resistance to the personal computer in the offices of the higher echelons of executives - "I have people who do that sort of thing for me. I have neither the time nor the patience to bother with smaller details like computers. Anyway, it makes me look like a typist."

And it is certainly why computer educational companies have grown and proliferated like a field of mushrooms almost overnight.

We may scoff and titter at the idea of grown people paying \$500 for three days of tuition on using a word processor, but the simple fact is that this market would not exist if there were not a crying need.

And none of us should be overly smug that we have learned all there is to know through working our way through the manual. A quick survey in our own office showed that no one knew all the facets of any program. (No one, that is, except for the writer who claims that he knows *Ready, Set, Go* version 3.0 better than the authors. A quick test proved that he was sadly wrong in this.)

All of which makes the learning courses for the Macintosh from Personal Training Systems, distributed in Australia by XL Computing, doubly welcome. Because this system provides the sort of help and tuition that is needed to get on stream with a given program.

The two programs we were sent to test give you tuition on *PageMaker* and *The Word* Version 3.0. As we believe *The Word* is nowhere near as appropriate on the Macintosh as it is on the PC and we have our own, private views on version 3.0, we decided to test the *PageMaker* program.

The package contains an audio cassette *PageTutor 1 Beginning*, and a disk, also *PageTutor 1 Beginning*.

No instructions come with the pack worth talking about. It says very simply that you should insert the audio tape into a tape player, turn on the tape and listen to the instructions.

Fair enough.

The instructions on the tape are clear, easy to follow and paced for the slowest user. Sadly they are spoken by two Americans, Dave and Liz.

I am not, by nature, an aggressive person. People use me as an example of meekness and humility when they are educating their children on the finer aspects of life. But if I ever meet Dave he will earn a fortune from the tooth fairy. He has the sort of voice that drives me into an insensate fury.

However, he is only at the beginning and the end of every lesson. For the main part we have Liz, who I can relate to. Not that I think she is some sort of sex dolly. She is not. But she has an intelligent, interested voice which is no pain to listen to. What she is doing with the

oily-mouthed and ultra-boring Dave passes my understanding.

Listening to Liz you ease your way through the lessons. First you see a newsheet and then you learn, step by step, how to design one exactly like it.

All of us who are quite certain we know everything about *PageMaker* get a nasty surprise when following through the well structured lessons because, lo and behold, in almost every single lesson there is something new to surprise, to educate, to interest.

It appears to me that this is the way that computer programs should be taught - with a combination of audio and visual instructions taking you through the actual program in carefully graded steps. I would have given my eye teeth for such a program when I first sat down with Version 1.0 of *VisiCalc* and tried to hammer my way through its arcane and eclectic instruction book. And the same goes, to a lesser extent, for *PageMaker*.

If you are making the capital outlay necessary for one of these programs then you should get the maximum use out of it.

Personal Training Systems seems to be a quick and competent way to learn everything about a program. Which doesn't stop me hating Dave. He's a turkey.

Distributed by XL Computing, 56-58 Robert St, Rozelle, NSW 2039. (02) 818 3586

Price for PageTutor package: \$79.00

Necessary equipment:

Macintosh Plus, SE or II

2 floppy disk drives or

1 floppy disk drive and a hard disk

Printer

Tape Player
PageMaker 2.0 from Aldus

Courses available include the following:

PageTutor series: \$79.00 each

- P1 - Beginning Course
- P2 - Intermediate Course
- P3 - Tips & Techniques

LearnWord 3.0 series: \$79.00 each

- W1 - Beginning Course
- W2 - Intermediate Course
- W3 - Advanced Course

Excellerate series: \$99.00 each

- E1A - Fundamentals of Excel (first time spreadsheet user)
- E1B - Fundamentals of Excel (other spreadsheet user)
- E2 - Creating Business Graphs
- E3 - Adding Power to your Spreadsheet
- E4 - Building and Using Databases
- E5 - Building and Using Macros
- E6 - Linking/Consolidating Spreadsheets
- E7 Advanced Spreadsheets
- E8 - Advanced Macros

High Quality Printing

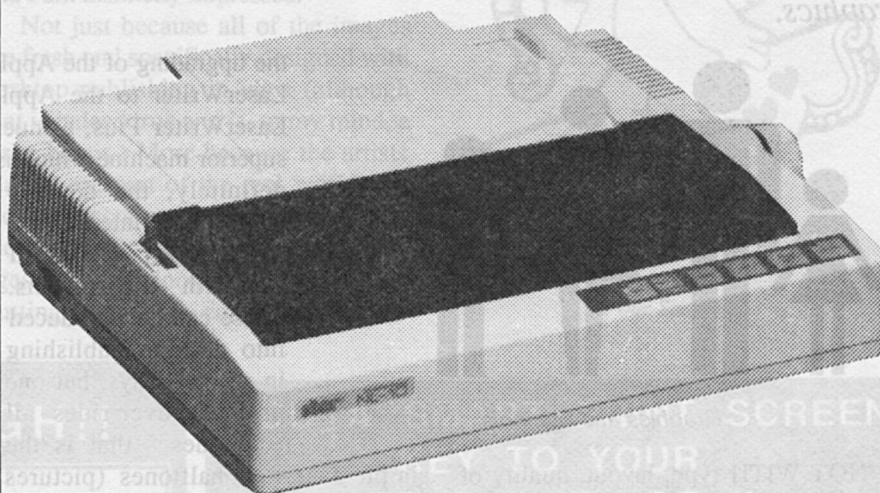
Print while you wait, LaserWriter printing at 300 dpi (dots per inch) and Linotronic printing at 635 or 1270 dpi. Accept Macintosh disks or via Telememo. 300 dpi Image scanning. Full Graphics typesetting, copying and instant printing service.

Creative Computer Co.

117 York St., Sydney, NSW 2000.
Phone: (02) 261 1611 Fax: (02) 264 7161

Star Printers.

When you feel the need for speed



Star's new range of dot matrix printers gives your personal computer a triple-hit

- High quality output in draft or near-letter-quality mode
- High-speed output – up to 300 characters per second
- Fingertip control to select pitch, typeface, print mode, margins, paper feed

Whether you need quality output of word processed documents or full-width spreadsheets and graphics, you will find a Star printer that meets your exact needs.

Choose from the economy of the Star NX-10 with 120 cps draft and 25 cps NLQ, through to the top-line NB24-15 printer which boasts 15-inch carriage, a 24-pin print head, 300 cps draft output, and true letter-quality at 100 cps.

Add competitive pricing, interfacing with a range of PCs (Commodore, Apple II, Macintosh and IBM), a buffer that has twice the memory capacity of our competitors and a reputation for reliability second to none in the printer business.

Now ask yourself why you would look beyond Star. Phone now for the name of your nearest dealer.

star
MICRONICS

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7/25 George Street
Homebush, NSW 2140
Telex: AA73872 Fax: (02) 736 1032
Melbourne: (03) 544 6676
Brisbane: (07) 875 1551

SM 4208 B

Art Collections for Desktop Publishers

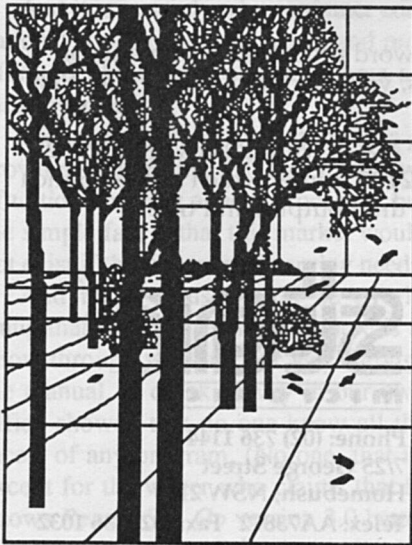
A Review by Gareth Powell

The problems that still exist with desktop publishing - and they get less and less by the day - are all connected with graphics.



Graphics and Symbols

NOT WITH type, layout, quality of reproduction, ease of use of programs or software bugs. All of those problems have been solved in the last several months through the introduction of some amazing desktop publishing packages and



Artfolio 1

the upgrading of the Apple LaserWriter to the Apple LaserWriter Plus, a much superior machine which is, definitely, the desktop publishing printer.

No, the problems all lie with illustrations. These can be introduced into desktop publishing in several ways, but one problem over-rides all techniques - that is the

simple fact that halftones (pictures which have shades of grey) cannot be reproduced using a laser printer.

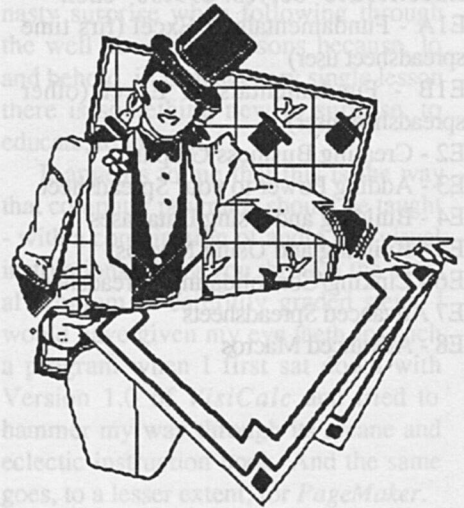
The reason for this is simple and basic. The laser printer is a binary machine understanding 1 and 0, or if you like yes and no, on or off, or black and white. It therefore goes to each dot in the 300 dots per inch screen and asks itself whether the dot is on or off, black or white, 0 or 1. Depending on its instructions it then either puts a dot there or doesn't.

The way that true halftones work is very different. They have different sized dots depending on whether the area of the picture is dark or light - larger dots for dark areas, smaller dots for light areas.

A laser printer cannot vary the size of its dots and therefore, ergo, it cannot produce halftones. Not yet awhile and probably not for a year or so - no matter what the nice sales person says to you or the advertising declares. No halftones.

But what the laser printer will handle, and handle superbly, is line. It is a machine made for line illustrations. There

are many and varied ways of introducing line illustrations into the Macintosh and thus into the laser printer. But the easiest, the simplest, the quickest is to use desktop art provided in disk form by a multiplicity of vendors. On this magazine we use disk art quite a lot of the time. It is fast, cheap, accurate and works



Artfolio 1

well.

The biggest library of such artwork comes from Dynamic Graphics in the United States. This company was started in 1964 to create camera ready art for design professionals under the name Clipper Creative Art Service along with its complementary Print Media service. They now, incidentally, publish a monthly magazine on desktop publishing called DeskTop Graphics. You can take it that they have been in the graphics business a long time and they understand clearly the needs of publishers, designers and editors. Their disks are always packed full of artwork which ap-



Graphics and Symbols

appears to have been especially created by commercial artists who know what they are doing. (Their programs are distributed in Australia by Dynamic Graphics Pty Ltd, Tel (02) 660 0211 or (008) 22 5319).

Many other disks are compilations of

artwork produced from other sources - frequently Victorian picture books now out of copyright - and have a feeling of incongruity. They are not of desktop publishing, they are not for desktop publishing. They feel and look slightly alien.

Not these disks, which come directly out of a desktop publishing background. I have been playing around with three of the DeskTop Art disks and I am distinctly impressed.

Not just because all of the images are fresh and specifically designed with desktop publishing in view (although that is indeed true and is, to my mind, a large bonus.) More because the artists plainly are part of the real world and work in a commercial environment, and therefore know precisely the sort of images that I am looking for when I am putting together a commercial docu-

ment.

But for me the icing on the cake is the "How-To Guide to DeskTop Art" which comes free with each package.

This slim 24 page booklet contains



Four Seasons

BREAKTHROUGH!!

LASER PRINTER for MACINTOSH

\$4799

(including Tax)

For more information please contact

THE DATABASE

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**532 Lutwyche Road
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ADD A SMART PRINT SCREEN KEY TO YOUR APPLE II, II+ OR IIe

The **FingerPrint** printer interface card lets you instantly print any graphics or text in colour or black and white.

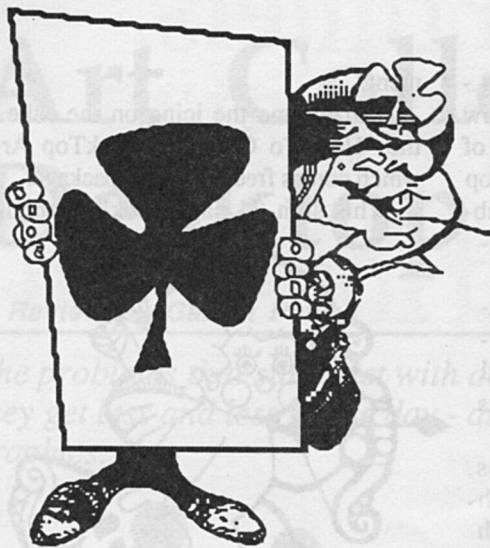
- * Puts any program on hold any time, including games.
- * Built in ROM provides lots of functions.
- * 2K of user RAM lets you dream up new functions.
- * Card supports both parallel and serial output to all popular printers.
- * Emulates Super Serial card.
- * Touch sensitive button adheres to your keyboard.
- * Comes with printer cable.

Tax Inclusive price **\$228.59**

To order or for **FINGERPRINT** brochure contact:

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**53 Rea Street
Shepparton, 3630
Telephone: (058) 217 325**



Four Seasons

extremely helpful advice on using clip art to the greatest effect. When they tell you that it is better to work in *MacDraw* than *MacPaint* they are telling you the real truth.

When they show you how to modify and manipulate the images they provide, they are giving you an art lesson worth a guinea a box. The booklet even starts you on the road to producing colour sep-

arations.

The booklet reflects the care with which these programs of artwork have been assembled.

There is also a very useful index to each disk which shows you, in miniature, exactly what is on each page.

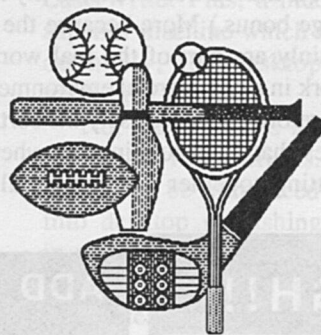
Desktop Art currently available for the Macintosh includes:

Graphics & Symbols:

Signs and symbols of every kind.

Borders & Mortices:

More than 200 designs for producing borders, plus decorative ele-



Sports



Four Seasons

ments for a variety of design needs.

Sports:

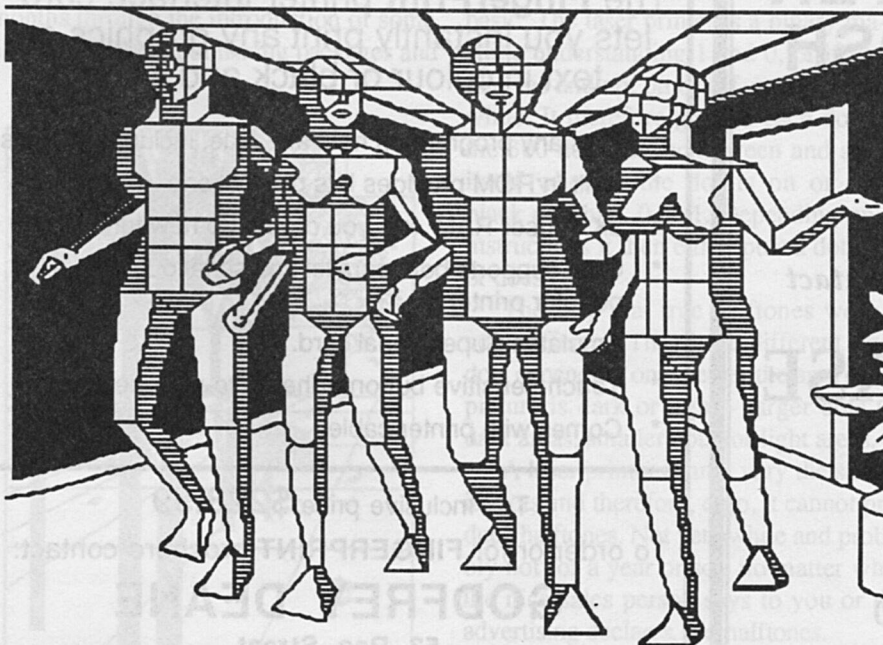
Action graphics for all major sports and many recreational categories.

Four Seasons:

Illustrations for every season and major holiday.



Borders



Artfolio 1

Business:

Contemporary graphics covering office, factory, construction and retail situations.

Education:

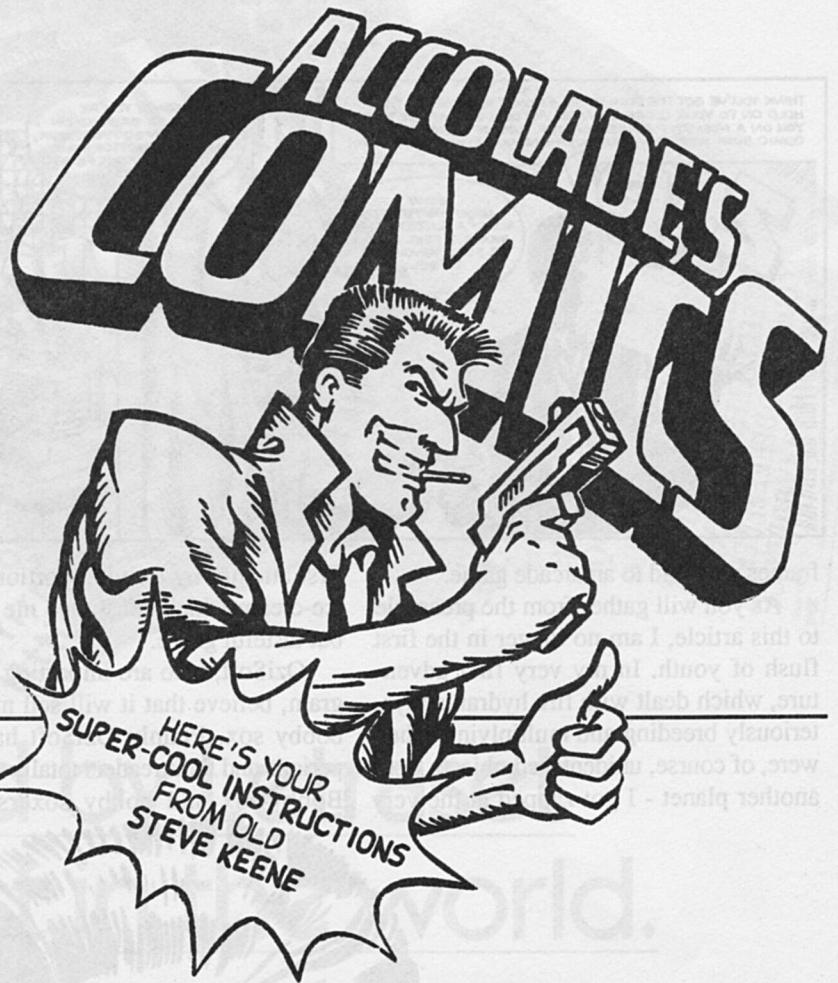
Current illustrations cover every level from primary to college.

Artfolio:

A mixture - animals, common objects, individuals, families, occupational art etc.

Distributed by: Dynamic Graphics Pty Ltd, 36-38 Parramatta Rd, Glebe, NSW 2037. Telephone (02) 660 0211. Price per disk: \$165 plus 20% sales tax.

Comics are not what they used to be. And perhaps they never were. When I was young, in those dark awful days pre-television, a lad was known by the number of comics in his collection. (Girls did not collect comics. They read magazines called Girl's Crystal and giggled a lot in corners. Those were the days before feminism).



THE STYLE of comics varied tremendously. At one end were those produced by DC Thomson of Dundee with names like *Dandy* and *Beano*. They were populated by wondrous characters like Desperate Dan and Lord Snooty and his Pals. At the other end were comics like the *Wizard* and the *Hotspur* which specialised in what might be called rattling good yarns, featuring some super hero who was always in double dead strife. In my day it was the Great Wilson, who wearing a pair of black dyed long johns, performed wondrous miracles against a motley and beastly crew - most of whom turned out to be foreigners.

And then in the middle - in the full glory of colour, were the American comics with, but of course, Batman and his wimpish buddy Robin, Superman and others who are just there on the fringes of my memory, Flame and Toro, Captain America. Many of the detectives have now been swept from my memory banks but I will never forget they all had clean, tough names like Johnny Iron, Rod Diamond and so on. It made me ashamed to be called Gareth Powell.

My introduction to realising that the other sex could be interesting was reading a Wonder Woman comic and noticing,

for the first time, that women had brass conical protuberances called bras.

Since those early formative years I have always felt a tremendous affection for the comics. They are my own childhood nostalgia.

Now a program has arrived for the Apple II which has me wallowing in my past. It is *Accolade's Comics* featuring the appropriately named private eye, Steve Keene.

Plainly the designer and the artists associated with this program are comic books collectors from way back when. The whole program has a feel of authenticity that only comes with sure knowledge or painstaking research.

Our hero is dressed in the good gear of a bygone age. Sometimes he looks like a superannuated Presley clone complete with ducktail haircut and three inch thick crepe soles. Sometime he looks like Captain Flagg in *M.A.S.H.* - all muscles, chin and sincere expression.

There are at least eight complete comic strips built into this three disk program although, in all honesty, I counted more.

In each of them, as in real comic books, the hero finds himself in a tricky corner and only his ingenuity - and your quickness on the trigger - will get him out of trouble.

The comic has two interwoven elements, animated frames and arcade-game sequences. Frames appear on the screen one at a time; each one is different. You have several choices -

1) Read the dialogue and enjoy the animation, then press the fire button to continue with the next frame.

2) Use the joystick to change the dialogue and the fire button to choose your response. This may affect the course of the story.

3) Use the joystick and fire button to change the action and vary the story line. At some points in the plot, a series of



frames will lead to an arcade game.

As you will gather from the preamble to this article, I am no longer in the first flush of youth. In my very first adventure, which dealt with fire hydrants mysteriously breeding and multiplying - they were, of course, unidentified objects from another planet - I got zapped at the very

first attempt by a flying portion of mint ice-cream which consigned me to an icy but tasteful grave.

OziSoft, who are importing this program, believe that it will sell more than bobby sox. Plainly OziSoft have their periods and their readers totally confused. Bobby-sox and bobby soxers was an

American collegiate phenomenon that was neither concurrent with comics (which in America are spelled comix) nor associated with them. People who wore bobby sox would like movies featuring Debbie Reynolds and would fall seriously in love at nine.

The world of comix was much rougher, tougher stuff. Comix followers would have been juvenile delinquents if only they had heard of the phrase. They dressed badly, slyly smoked stumps of cigarettes during play break and combed their greasy hair with dirty combs which had been lifted from Woolworth's the week before. And that was just the girls.

Accolade's *Comics* is a celebration of that time long past. It is also one of the better computer games around. Try it and see. If you find yourself mauled by a man-eating dog, as I was, you will perhaps come to realise that this is the first comic ever published that can bite the reader.

Gareth Powell





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Continued from p.4

educational institutions, one Apple IIGS, that of super graphics fame. A special third prize went to Carolyn Pagani of Kilkenny TAFE in South Australia and a special craft award went to Robyn Craig of the Chisholm Institute of Technology.

This contest seems, at the very least, to have been A Very Good Thing. Perhaps at some time in the future Apple can extend it. And the entries converted into 35 mm slides would make an audio visual to raise the hairs on the back of your neck.

Apple GS Prices Down

APPLE have announced a series of price cuts for the Apple II GS. The new recommended retail price including tax of an Apple IIGS including the RGB colour monitor and 1.25 megabytes of random access memory has dropped from \$3,585 to \$2,948 while the 512K Ram model has dropped from \$3,090 to \$2,528.

End User Support

TECHFLOW Pty Ltd is happy to announce its new customer support policy. This policy covers all software licensed and distributed by TechFlow and is detailed on Techflow's user registrations forms, supplied from August 1st 1987.

TechFlow's new policy is aimed at benefitting the end user. One of the entitlements for the end user is the supply of a free update within three months of purchase, if one should become available.

TechFlow's customers are encouraged to read and return their user registration forms to take advantage of the benefits offered.

Borland Expands Pacific Rim Distribution

BORLAND International, Inc. has entered into a distribution agreement which gives Australian-based Tech Pacific Pty Ltd of Melbourne, the right to manufacture, distribute and support Borland's product line for marketing in selected countries in the Pacific Rim.

Effective immediately, Tech Pacific

will provide Borland products, service and direct support to dealers and sub-distributors throughout the region.

The new agreement appoints Tech Pacific as Borland's exclusive distributor in Australia, New Zealand, Hong Kong, Singapore and Malaysia. Other distributors in these countries, including Australia's largest volume distributor Imagineering, will obtain selected Borland products directly from Tech Pacific.

In addition, Tech Pacific and Imagineering will be authorised Borland distributors for Taiwan, Thailand, Indonesia, Korea and the Philippines.

Tech Pacific will manufacture Borland Software and manuals for distribution in the Pacific Rim. Product updates, training and telephone support will be provided by Tech Pacific directly to its consumers. A Borland hotline will be established in Tech Pacific's Melbourne office for technical support.

Earlier this year, Borland disclosed its plans for a new Professional Software Series to include Sprint, a professional word processor; Sidekick Plus, a TSR operating environment and complete time management system; and other products scheduled for release later in 1987.

Borland is considered a market leader with its Turbo Pascal, Turbo Basic and Turbo C developer's tools.

Tech Pacific Pty Ltd is a major distributor of microcomputer hardware and software products. It currently has offices in Sydney, Melbourne, and Wellington, New Zealand.

Sponsoring Dragons

A KOMODO Dragon's life is far removed from the high tech world of computers. At Sydney's Taronga Zoo, however, the Komodo Dragon has moved one step closer to that high tech world.

Taronga's Komodos have been sponsored by the Waterfield Company. Waterfield data management and maintenance systems are marketed as "the dragon tammers".

Komodo Dragons, the largest lizard

in the world, can grow up to three metres in length. They are found on only a few remote Indonesian Islands. In the wild Komodos will eat deer, pigs, and a variety of small animals. They have been known to attack and kill man. Young Komodos are very quick and climb trees to surprise their prey from above.

To celebrate the sponsorship Waterfield and its sister companies AD-PAC(USA) and Ashisuto (Japan) visited Taronga's Komodo Dragon Exhibit and presented the Zoo with a cheque for \$5,000.

Taronga relies on the generosity of companies like Waterfield to maintain its high standard of animal care and expand the Zoo's important role in education, conservation and research.

To be part of Taronga's sponsorship program, contact Taronga Zoo (02) 960 4072 and speak with Karen Perry.

Imagineering Introduce New Low Cost Netcomm Modems

NEWLY appointed major distributor of Netcomm modems, Imagineering, are pleased to announce the release of the automodem range of low cost, intelligent modems from Netcomm.

These new modems incorporate all the current popular modem features such as auto dial, auto answer, AT command set and auto disconnect — but at a substantially reduced price.

The automodem family is a full range of asynchronous only modems, including speeds of 300bps, 1200bps and 2400bps in multispeed models (automodem 21/23, 123 and 1234) as well as 1200 bps and 2400bps (automodem 12/12 and 24/24) in other models. No specific software package is bundled with these modems but is available separately.

This new automodem range now makes data communications more affordable than ever to an existing user or an integral extra for any new business. 🍏

Over the page
is a new
computer.
Inside it are
two more.

The new Apple IIgs.



existing II software programs.

Many, like AppleWorks, run an amazing 2.8 times faster.

Not that the Mega II alone can accept all the credit for this new-found speed.

The IIgs is powered by a new, blindingly fast 65C816 16-bit microprocessor (that's twice the power of the IIe).

And has 128k of onboard ROM that's expandable to 1 megabyte. Plus 512k of RAM, expandable to a massive 8 megabytes.

The new Apple IIgs features among other things, a built-in Apple IIe and IIc.

Both of these computers, or rather, their functions, have been built into the Mega II chip you see here (and that's its actual size, of course).

Two years in the making, you'll find the revolutionary Apple Mega II microchip alongside many other new custom chips on the IIgs motherboard.



We put it there for one simple reason.

Compatibility.

The IIgs runs virtually all of the 10,000

Which means you can run the most advanced software without running out of memory.

The IIgs was partly named after its graphics, and no wonder.

The IIgs can create graphics as clear and sharp as the photographs you see in this magazine.

But with one major difference.

The range of colours.

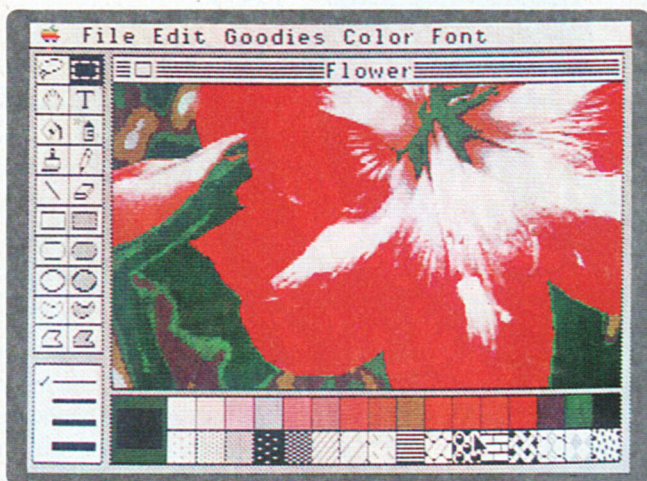
The IIgs has 4,096 in all. From delicate violet to electric red.

Any 256 can be used at a time in either of two graphic modes: 640 x 200 dots or 320 x 200 dots.

But you haven't heard anything yet. And we mean that literally.

The IIGS is so human, it even speaks.

The secret is a 32 channel Ensoniq sound chip, the kind you find in \$40,000



sound synthesizers (who says Apples aren't value for money?).

It allows you to compose for and play up to 15 instruments at a time.

(Now you know where the other half of its name comes from.)

Naturally, with such high-fidelity sound, it makes sense to add the optional Bose RoomMate hi-fi speakers.

It also made sense to redesign the IIG keyboard to give you maximum freedom.

This one is detached, so you can move it all over your desk.

Or hold it in your lap.

And to make number crunching easier, there's a numeric keypad built in.

The Mouse, now standard, can be attached to either side of the keyboard.

(We didn't want to make left-handers feel left out.)

Also standard on the IIGS is MouseDesk. The software program that gives the IIGS its Macintosh-like interface.

So now, transferring ideas into action is as easy as clicking a button.

And while the IIGS is easy to use, it's just as easy to expand.

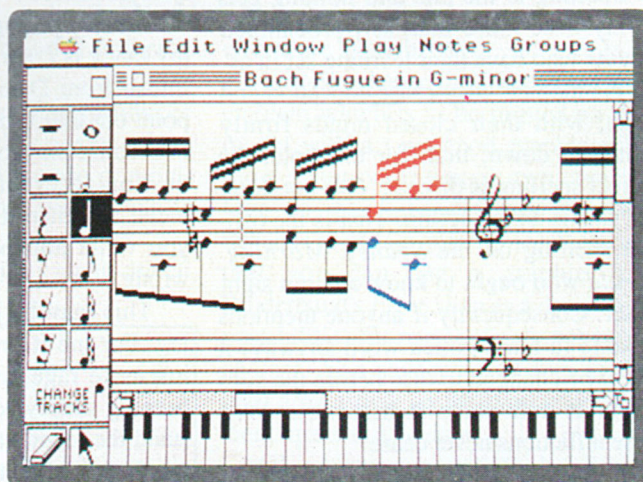
There are eight expansion ports at the back of the machine where you can plug in peripherals.

Anything from disk drives to modems, joysticks to printers.

You can share a LaserWriter with up to 30 other computers, thanks to AppleTalk, built into every IIGS.

Not only can you plug in a cord, you can plug in a card.

Take off the top of the IIGS and you'll find eight expansion slots where once again



it's easy to make the IIGS smarter, faster or more powerful.

As improvements become available, you'll also be able to plug them in. So your IIGS will never become obsolete.

The new Apple IIGS.

It's even greater than the two computers inside it.



Spelling it more "Korreckt"

by Gareth Powell

Bernard Shaw pointed out that spelling in the English language is so daft that ghoti can be pronounced fish. The gh as in enough, the o as in women and the ti as in action.

MADNESS, my friends, all madness. How in the name of all that is sacred can they complain about the standard of spelling in Australian schools when the language is such a bollixed up mess that no one in Australia knows how to spell diarrhoea and consequently has to use a shorter and more vulgar term.

Spelling is the pits and nothing gets up my nose more than self-proclaimed punçits who have their learning set in aspic the moment they cease education and insist, with their closed minds firmly shuttered down, that, for example, the correct spelling is discette. (Do not think that this is an exception. That is the official spelling on the *Sydney Morning Herald* who ought to know a damn sight better. Consequently if anyone mentions diskette (a fairly rotten word anyway) it has to be changed to disc before the subs get at it and make it discette). Will these afflictions never cease?

Altogether too much is made of spelling correctly and, setting myself up for attack, I will tell you that I think the American way of spelling is far more intelligent, logical and consistent than the Australian.

Having said that, if you write a letter, a petition, a summary, a report, a presentation then, sadly, its worth may well be judged by your ability to spell all the words therein correctly. Which is where the computers with spelling checkers come to the fore.

Note most carefully that a spelling checker only checks spelling. It does not read for sense, style, logical consistency or any of those other good things. Most-



ly it just checks spelling.

A new spelling checker that has taken my fancy is *Liberty Spell II* for the Macintosh from DataPak. Wrong for me to point out that Liberty Bell has a crack in it because the program does not.

You access it from your pull down menu and then it checks every word as you write and beeps when you get it wrong.

This may be to your style of working. For me it drove me into a state of insensate rage, as the damn thing kept beeping simply because it did not understand the recondite, eclectic and esoteric words that I like to use in my copy.

However, I quickly found you can turn the sound down. Then I found you can switch off - they call it disenable - this, to me, irritating feature.

If you want to check the whole document when you have finished then the procedure is as relatively complicated as you get on the Macintosh.

I quote the instruction book. "Select the text you want to check by dragging the pointer over it (or by doing a shift-click) to highlight the desired words, then select Copy from your application menu. Bring up the WordList window by selecting "show Word List" or by pressing Comma (Cloverleaf) + Return."

I followed the instructions and it works, but I must admit I have seen simpler, more felicitous ways of checking spelling.

There is a macro facility built-in which is setup to automatically function with *MacWrite* and *The Word*.

For this program: it uses a compressed dictionary of 30,000 words which by my measurements takes up about 100 K of memory, so with a 512K Mac you are laughing. The dictionary is always resident in memory so that it is extremely fast. You can create your own dictionary by adding and deleting words. For example, you might wish to remove all examples of American spelling and insert a group of technical words instead. No problem.

Against this program: is that damn beep nonsense and the fact that reading a long document from scratch takes seven more key strokes than I consider necessary. But then, I was ever picky. It is, however, interesting that I have never found a dictionary checker for the Macintosh that comes within spitting distance of that produced by Borland for the PC. I do not understand why this should be so. 🍏

The Toy Shop

by Eric Holroyd

"Yes, but what does your home computer really do?" How many times have you heard that from a non-computer enthusiast? Well, now you can show them what it really does, thanks to this absolutely brilliant new package from Broderbund for the Macintosh and the Apple II family.

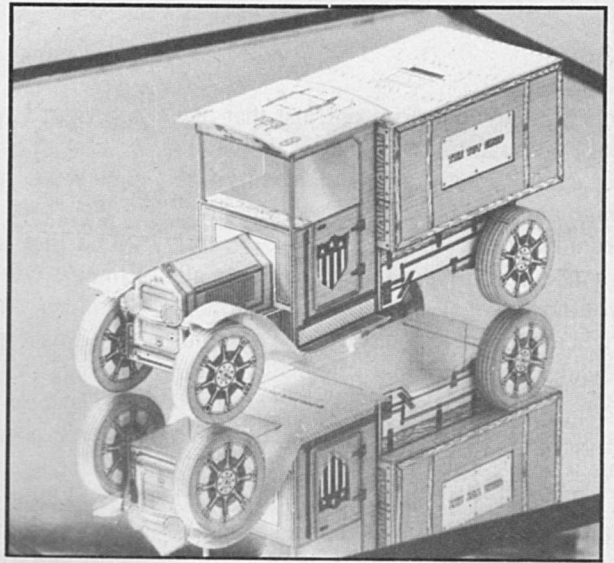
THIS IS a very clever 3-disk package that turns your home computer into a full-scale factory which produces components for a range of 20 "kit-set" toys for you to assemble and paint. The sub-heading on the packaging says "Marvellous Mechanical Models That Really Work!" and they certainly do!! The models are all quite big too, as you'll see from the accompanying photo of the Antique Truck.

Included in the impressive list of toys are: A 1910 model Truck which can have either a flat bed or a van body, a Jet Plane finely-balanced on a pin-point and which twists and turns when set in motion (this is a terrific executive desk-

top toy by the way). There's a medieval Catapult which will lob a jellybean right across the room (or a paperclip across the office), a Glider that really flies, a Carousel with four beautiful prancing horses, a Dragster which is powered by air from an inflated balloon and much, much more. A detailed list of the various models is included further in this review.

As I say, *The Toy Shop* produces parts for 20 models right on your printer and the exquisite detail on the printouts has to be seen to be believed as it's so incredibly fine.

The sequence is entirely menu-driven,



and you first of all select the toy to be printed, then the next menu asks if you wish to customize it. A good range of options here allows you to change the "painted" areas which are actually done with a flood-fill pattern and some great effects are available too.

You can change the "decals" or graphic emblem which is to be printed on your model with a very good graphic editor (how about putting your own company logo on the Antique Truck doors for instance?) plus a really nice feature in that you can use a graphic from Broderbund's *Print Shop* as a decal so the possibilities for personalization there are endless. You save your custom models onto a data disk so that you can reprint them again at any time.

Of course, if you don't wish to customize your first try you just go straight to *Print Toy*, where you first of all perform the Set Up for your printer (a once-only job) from a large range of printers listed there.

Once you press the print button it's a case of "go and make a cup of tea" and wait a little while as the printouts can take up to twenty minutes due to some of them having five full pages of very fine detail. It's well worth waiting for though, and once you've got the printout you can get to work on the actual construction.

If you chance to spoil one of the pages during assembly you can go back



to Print Toy and print out just that one page. You don't have to print the whole lot again. Some models have only one page anyway, but others have anything from two to five pages.

The Toy Shop package contains all you need to get started making models right away, and includes wooden rods and lengths of wire for axles etc, balloons for powering various models, cotton cord and a large number of cardboard sheets which are adhesive-backed.

The idea is that you stick your printouts onto the cardboard and carefully cut out the parts with a hobby knife (being careful to protect Mum's polished table first with a cutting-board!) and follow the directions to assemble the components. When assembly is finished and the glue is dry you can paint the job in your choice of colours using model-makers paints from your local hobby shop.

Balloon-power is used on a superbly-engineered and detailed model of a 19th century Steam Engine which actually works to produce power! It runs for approximately 15 seconds on one balloon and will drive a pair of "accessory" models: a Steam Table Saw and a Steam Oil Pump. These are very intricate models which will give hours of pleasure to young and old alike.

The manual for this outstanding piece of software is a lesson in how to write an instruction book. It's very easy to read and at the same time it's most thorough and comprehensive. You're taken right through every step of the job, from loading a model from disk, customising it, printing it out, then assembling the finished job.

It grades the models into three categories: Easy, Medium and Challenging, so as to give you an idea of the level of difficulty and it also tells you of the customization options available to each model.

As the program originates in the USA some of the terminology is different and needs to be explained. A couple of the models use a "penny" as a counter-weight for balance. This is an

American 1c piece and you should use an Australian 5c piece as this is the closest equivalent.

For "card-stock" read "cardboard" and where they say under white glue "use Elmer's Glue-all" I found that "450 Stainless Adhesive" from the hobby shop was a good substitute. For "rubber stripping" read "rubber bands".

The Toy Shop is great family idea and you could make it a team effort to produce a particular model or even have several different ones "on the go" at once with everyone involved. How nice for father and son (or daughter and mum) to be able to say that "we made that together"!

It would also be a great idea for school use and I'm sure every school would benefit from having a copy for Handicraft courses. The package says "Ages 12 to Adult" but I know of at least one bright 10 year old who's having great fun with it. Teachers could make their own judgements as to its suitability for individual pupils and I feel sure that there'd be a lot of interest from the students. If the school has a good photocopier I think that copies of printouts may be suitable to work from if a lot of students were doing exactly the same model.

So, any teachers reading this (and I know a number of you are computer enthusiasts) make some enquiries and I'm sure you and your students won't be disappointed.

My review copy of *Toy Shop* is only on loan to me and has to go back soon and I'm going to buy my own copy right away. That's how good it is!!

The price is a little higher than some single-disk programs, but don't forget that you get 3 disks with this one, plus all the cardboard and wire etc. Furthermore, if you have a look in the hobby shops you'll see that you can pay from \$20 to over \$150 for just one model-kit depending on size etc.

With that in mind, and remembering that *The Toy Shop* makes 20 different models, each with a big range of customising options, you'll see that it's

a bargain price for a program that'll be good for years of fun and enjoyment. There are plans too for extra Toy Modules to be released in the future which would work with *The Toy Shop* master disk to make more models.

A refill pack of component materials is available from your software supplier and costs around \$69. This is similar to the inclusions in the original pack as outlined above but if your supplier is temporarily out of stock you can use ordinary cardboard from the newsagents and coat one side of it with spray glue from an aerosol can. I've done this and it works well.

The wooden rods are one-eighth dowelling and the wire is paper-clip wire. It even says in the manual that if you run out of wire you can use a carefully-straightened paper-clip! Balloons, rubber bands and cotton string are all readily available too if you can't get hold of the refill pack just when you need it.

System Requirements: 64K Apple II+, Apple Iie or Apple Iic with disk drive.

Suitably-interfaced printer (check package for list of applicable printers).

Retail price is around \$125 from good stockists everywhere.

System Requirements: Macintosh, Macintosh Plus or Macintosh ML with mouse. External disk drive.

Printers applicable: ImageWriter (or similar completely compatible), ImageWriter II or Scribe (single colour print modes only).

The Toy Shop is distributed in Australia by Imaginering. 🍏

List of Models:

Antique Truck	Mercer Raceabout
Balancing Jet	The Oracle
Carousel	Pennypower Scale
Equatorial Sundial	Spirit of St. Louis
Experimental Glider	Starship
Flying Propeller	Steam Engine
Helicraft	Steam Oil Pump
Jet Dragster	Steam Table Saw
Mechanical Bank	Tractor Crane
Medieval Catapult	Zoetrope

SUPER LASER SPOOL

by Gareth Powell

IF YOU don't know by now I will tell you. I spend a large part of every year travelling around the world telling people about desktop publishing. You name it, I have been there giving out the good oil.

Botswana last month, Oman next. Sweden, Holland, Belgium, Scotland, Singapore, Hong Kong - all of them have heard me in full Welsh celtic fervour telling them the way the world of desktop publishing is progressing.

When I first started there was only the Macintosh and it is still the system we use throughout all of our offices. Simply because everything works simply and quickly together. Just like the telephone advertisement - *This goes with this goes with this goes with that* - but instead of Sussan (the girl who cannot spell her own name correctly) it is Macintosh.

If the Macintosh had a flaw it was the fact that when it was driving a page through the LaserWriter then both the Macintosh and the LaserWriter were hung up. This doesn't matter at all if you are pushing through simple pages that take seconds rather than minutes to print out. In fact, it gives you a welcome pause from your labours.

But where it gets right up the nose is when you are using non PostScript fonts and simulated half tones which can, if you are unlucky, take over half an hour to print out.

The obvious answer is to stick to PostScript fonts, not to try and use simulated half tones. But what is this life if we do not experiment? What is this life if we do not at least attempt to try something new, something different? Damn boring, that's what. So of course we use non PostScript fonts.

And yes, we used to sit and rant and curse until the page appeared.

That was in the past, and it was the

single largest drawback to the Macintosh when used with the LaserWriter for desktop publishing.

Now that has all passed. From SuperMac software (distributed by Infomagic) comes *Super Laser Spool* which stops all of the nonsense.

There have been spooler programs before that worked - more or less. But this works perfectly every time. The word spooler comes from old mainframe technology when jobs that were to be printed were kept on a spool of tape. *Super Laser Spooler* does exactly the same thing only electronically.

Distributed by:
Infomagic
(02) 858 4111.
Recommended
retail price
including tax:
\$196.00

You can use *Super Laser Spool* for the Imagewriter too.

If you only need it for the ImageWriter it is called *Super Spool* and costs \$148.00.



If you are into desktop publishing and you're relatively serious about it, you simply must have *Laser Super Spooler*. That is what I tell everyone who attends one of my seminars. That is what I am telling you.

It is one of those intensely practical pieces of software that saves hours of aggravation. For me it removed my final objection to the Macintosh. It works with no fuss and maximum efficiency.

Would that I could say that about all programs that I test.

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Education

by Lyn Ryder

This month there are two good programs which have just been released in Australia by Dataflow. The programs address very different, but important areas of education - early reading and drug awareness.

ONE THING which did impress me about these programs before looking at content, was the standard of presentation.

These days many people will tell you 256K is a necessity for memory or that JX or IBM PC is the minimum amount of computing hardware our children should have. This is rubbish. Such comments only hold for business or computer intensive applications. The wealth of educational software for the Apple, and the quality of this software, I doubt will ever be surpassed by the MS DOS machines.

However, there are areas where IBM software has the edge on the Apple software. One such area is copy protection. IBM developers have realised that cost can effectively wipe out pirates - something Apple developers have never been quite able to grasp.

The programs reviewed here are complimentary - it is a gesture most companies make to thank a reviewer for taking time and effort with their program, whether good or bad. So, my outlay is nil, and the programs are used at home in a clean environment.

Unfortunately schools are dusty. And, unfortunately, pupils do get their fingers onto disk media and worse. My best example of this is where a member of the auxiliary staff at my son's school was asked in by a teacher to have a look at a disk drive which was making "scraping sounds". The gentleman in question was perhaps not the best person to fix a computer, but his solution to a squeaky drive was simplicity itself - if a door squeaks, use WD40 - if the drive squeaks, well, a squirt of oil won't hurt.

To cut a long story short, the can was aimed into the drive and oil sprayed in. The second drive was treated in the same fashion and the computer went away for several months.

In the process at least a half a dozen disks were covered in penetrating oil and rendered useless.

Now, shouldn't a school which has made an investment in software have the right to protect its investment? I see this as essential and not something which should cost one cent over and above the purchase price. Perhaps software distributors such as Ozisoft, Imagineering and Dataflow could licence schools to use a particular program - charge more of course, but give that extra security that firstly a school will know exactly how much it's going to spend on a particular package, and secondly know that if disaster strikes a backup is in the office.

I must mention here that Dataflow has reduced the costs of backups. For a single user program the price has gone down from \$15 plus \$3 postage and handling to \$11 plus \$3 postage and handling. This is certainly a step in the right direction. Dataflow has also just brought out a catalogue of titles which shows a greatly expanded range, and I will be reviewing some more of their offerings in the next few issues. If you are interested in the catalogue, it should be available at your computer store. If you have difficulty in obtaining a copy call Karen Fisher at Dataflow on (02) 331 6153 and she will tell you where they are available.

Drug Alert!

By: Learning Well

Distributor: Dataflow

Cost: \$67.98 (includes tax)

Requires: Apple II +, IIe, IIC 48K

Single disk drive

Printer: Optional

Drug Alert! tackles the problem of drug awareness education in a most comprehensive way. Many parents have worries that their children will at some time or another, if not already, be exposed to drugs. And all teachers and school authorities should be developing an awareness of the massive problems that drug abuse can cause.

LESSON #4

• OBJECTIVES:
To learn about stimulants.
To understand why some common drinks are not as healthful as others.

- Elicit from the class a list of the various drinks they have had during the week.

fruit juice	tea
water	coffee
cola drinks	orange juice
apple juice	
- Ask which of the drinks are most healthy and if any of them could be dangerous. (Many teas, coffees and cola or soft drinks can be dangerous because they contain caffeine. Drinks without caffeine, like water, and fruit juices are healthier.) Explain that caffeine is a very popular drug. Not only is it found in the drinks, but it can also be found in aspirin, OTC cough and cold remedies and diet pills. Caffeine is a mild stimulant. For most people there is no harm in having some in moderate amounts.
- Make a chart or write this list on the chalkboard.

STIMULANTS	
Caffeine	Nicotine
Benzocaine	Dexamethasone
Methedrine	Pseudoephedrine
Ritalin	Cocaine
Amyl Nitrite	Butyl Nitrite
Nitrous Oxide	Solvents

Elicit from students other stimulants on the list that they recognize. (Nicotine, solvents—the vapors from lighter fluid, cleaning fluid, gasoline, paint thinner, and airplane glue are inhaled—and cocaine might be among their answers.)
- Explain that stimulants increase the activity of the brain or other parts of the nervous system. They speed up how a person's body works. They make the heart beat faster than it should and increase alertness and physical activity. For this reason they are often called "uppers."
- Assign Activity Sheet #7. Explain that this is not a test. It is simply to show how much they know about stimulants.

Figure 1

It is a bitterly emotional area which society must address and to their credit, the State and Federal government bodies - through extensive media advertising campaigns - are at long last bringing it into the open. For it is only in the open that drugs can be dealt with for what they are - big business at the expense of our chil-

ing this topic, but *Drug Alert!* requires an adventure game type of interaction with the Apple.

The aim of the game is to reinforce the classroom learning. The pupil must rescue a friend, Pat, trapped in a maze of hotel rooms that is a gallery for both drug users and dealers. As well as bringing Pat out, the drugs in the hotel must be destroyed and the drug Pat has taken be identified. This is not a simple task as the hotel has four floors, each of which can only be accessed after answering a question. Figures 2 and 3 show screens from the game.

With the use of this program I strongly recommend that a printer be accessible simply because the program contains factual information in the database that can be printed and used in various additional classroom activities. The program also has provision for printing an entire handbook or parts of that handbook.

The handbook is divided into specific drug categories e.g. Narcotics and pain killers; stimulants; depressants etc. A list of all the drugs covered under each particular category are listed in the manual for easy reference. It is through a simple menu driven option selector that this information can be accessed and either printed or displayed on screen.

The work or activity sheets can easily be reproduced using a photocopier or simply copied onto traditional stencils by the teacher. Figure 4 shows an example of

one of the Activity Sheets.

By the end of using this program the children will have an extensive knowledge of the more common drugs, their names, the physical effects these drugs have on the body, what they look like and the sensations they give.

Approximately 45 of the more common drugs are treated by the program, covering the more generally 'socially acceptable drugs' such as alcohol, caffeine, nicotine and aspirin through to the harder drugs as for example heroin, cocaine and LSD.

The program also provides a utility that allows for up to 40 players to plot their progress through the 'game'. These progress reports can be easily printed or used by the teacher to monitor or review individual students' progress.

The manual may look terrible - more like photocopied sheets stapled haphazardly in cardboard - but it does contain a wealth of information which is invaluable especially in the classroom situation. It is a complete and comprehensive guide to establishing a drug awareness program from scratch for the upper primary right through to lower secondary students (the packaging does set suitability for grades 3 to 9 but I feel that grades 3 and 4 are a bit young to deal with the kind of information presented).

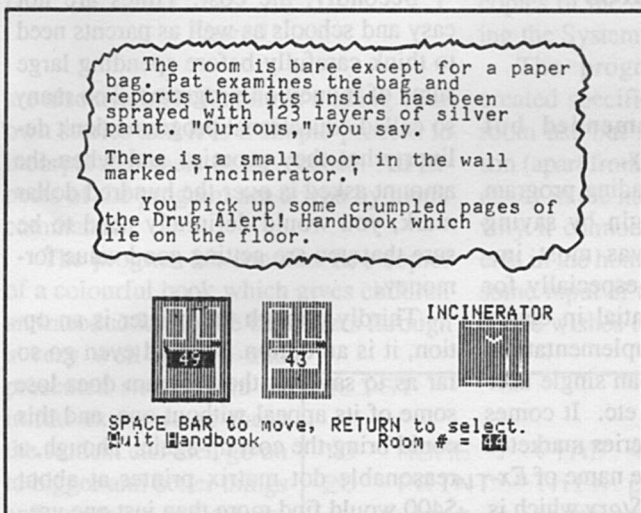


Figure 2 — A Drug Alert! Game Screen

dren. The cost of drug abuse, not only to individuals and their immediate family but to the society as a whole is an ever increasing problem that is not going to go away quietly. However like most, I feel that there is a fine line we must tread when it comes to treating such a sensitive area.

I believe that some drug education should be carried out at school. Some sort of drug awareness needs to be presented to all children to allow them to develop responsible attitudes that can be initiated when the question of drug usage arises.

Drug Alert! can facilitate the teaching as it contains current information on drugs and has been Australianised - though not as much as I would have liked, particularly in the manual. The package consists of a teacher lesson guide (Figure 1 shows an example), a set of activity sheets and a role playing graphic game on disk. I am not too sure that 'game' is a good word when one is treat-

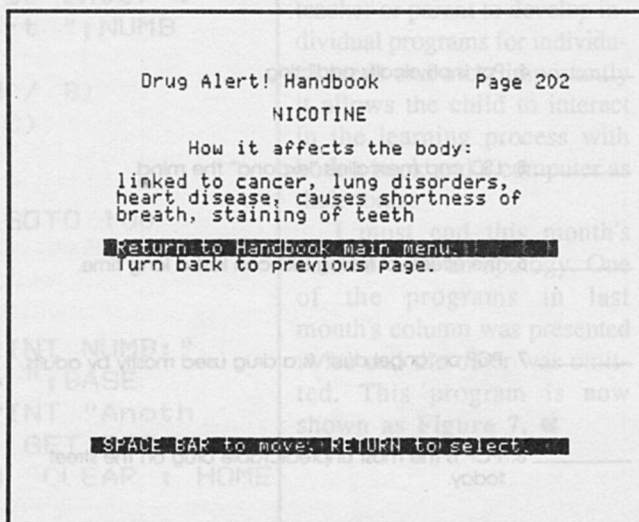


Figure 3 — A screen showing a page from the Drug Alert! handbook.

On this package, I was in two minds about whether to say 'great' or 'terrible'. There is value in having a child know the effects of a drug which is being offered, and know the slang. However this information must be carefully and sensitively presented by the teacher. I do not think *Drug Alert!* works well by itself, nor do I feel that the Activity Sheets are adequate.

However as a place to start, and as a source of both factual information and teaching ideas, *Drug Alert!* has definite merits.

By: Learningways Inc.
Distributor: Dataflow
Cost: \$102 incl. tax
Requires: Apple IIc, IIGS
Apple IIe - 128K
Single disk drive
Printer optional
Colour monitor recommended but by no means necessary.

This is a brand new reading program from the US. Let me begin by saying that I was most impressed especially for its potential in classroom implementation, rather than single user practice etc. It comes from a series marketed under the name of *Explore-a-Story* which is made up of eight different stories ranging in suitability from 5 to 11 year olds. The *Lima Bean Dream* story comes in at about the third grade level.

Before I begin to explore all the reasons why you should have bought this program yesterday, let us take a brief look at the drawbacks.

Firstly, memory requirements. Apple GS and IIC users will have enough memory in the standard unit but for the IIe's you need extra RAM installed. The standard IIe comes with 64K so if you have one of those without memory expansion boards, such as an extended 80 col-

umn card, you will need to invest around \$120 to \$180 before you can even boot the program.

Secondly, the cost. Times are not easy and schools as well as parents need to think carefully before spending large sums of money on programs. Too many so called educational programs don't deliver what they promise and when the amount asked is over the hundred dollar mark, you would definitely need to be sure that you are getting good value for money.

Thirdly, though the printer is an option, it is an option. I would even go so far as to say that the program does lose some of its appeal without one, and this could bring the cost up again. Though, a reasonable dot matrix printer at about \$400 would find more than just one use.

Reading is the most important learning area, particularly in the early school, and needs constant attention and monitoring by both parents and teachers. The learning experiences however do need to be made attractive, stimulating and novel to keep the interest level optimum for appropriate learning conditions to exist.

The *Lima Bean Dream* provides just such a mode whereby all aspects of reading can be catered for and then extended to allow the child to use his/her imagination and creative abilities. It also allows the child to incorporate, use and develop the basic skills learned in the initial reading lessons.

The basic idea is to allow children to create a story by generating 'pages' on the screen using the art from disk. The characters include Seymour, a little boy who hates lima beans but loves ice-cream, and unfortunately appears to resemble Noddy; Yollie Yuck, a creature from outer space who loves all the yuck things as well as lima beans, the Lima Beans and Seymour's parents.

A variety of props and backgrounds

ACTIVITY SHEET #10	Name _____
Write T in front of the statement if it is true.	
Write F in front of the statement if it is false.	
_____ 1. Marijuana use is harmless.	
_____ 2. Marijuana use can interfere with schoolwork.	
_____ 3. It is not dangerous to drive when "high" on marijuana.	
_____ 4. Pot is physically addicting.	
_____ 5. LSD and mescaline "expand" the mind.	
_____ 6. The effects of taking LSD can last a long time.	
_____ 7. PCP or "angel dust" is a drug used mostly by adults.	
_____ 8. PCP is the most unpredictable drug on the street today.	

Figure 4

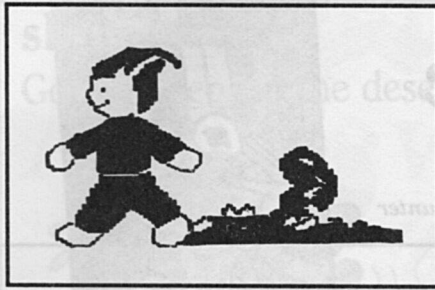


Figure 5

are also available for use in making your own stories and it is a simple process to incorporate labels in the scenes. All aspects of the program are driven by menu commands.

The program kit contains five copies of a colourful book which gives children an introduction to the characters through a very well written and presented story. From an initial exposure to these the student can then go on to bigger and better things and create an endless variety of adventures around the basic characters. It is then possible to print these scenes and make your own story books that can be used in class reading projects, library use, etc. The black and white mode allows printing to be done in outline form so pictures can be then coloured by the children themselves.

The manual is presented as a teachers guide that not only gives easy instructions as to how to use the program but also a variety of guidelines as to how the program can be implemented in the class. It provides information as to how to develop lessons around the program as well as important points to consider before attempting to get children

to design and develop their own stories.

The package comes with four disks, five printed story books and a user manual. It is not possible to make back-up copies of the main Program disk, however it is possible to make copies of the Student disk using the System Master disk.

The program has been created specifically for classroom use but there is no reason (apart from cost and redundancy in the number of books) why it cannot be used by parents in the home. It does however require some input of time by the teacher/parent if one wishes to gain the maximum ben-

The Menu Bar



Characters

Allows you to add animated characters to your scene.



Objects

Allows you to add objects to your scene.



Backgrounds

Allows you to change the scenery or background.

Figure 6

efits.

Don't be put off if you don't have a colour monitor or a printer. The advantages of just using this program far out-

weigh these aspects and children can always be resourceful and make their own books by hand after using the program.

I feel that this program accomplishes what it sets out to do - help children to develop both reading and language skills. The art work that can be generated by the program makes it extremely appealing to children and the overall presentation allows for diverse implementation. It allows the teacher or parent to develop individual programs for individual needs and most importantly it allows the child to interact in the learning process with both a book and a computer as their tools.

I must end this month's column with an apology. One of the programs in last month's column was presented twice and the other was omitted. This program is now shown as Figure 7. 🍏

```

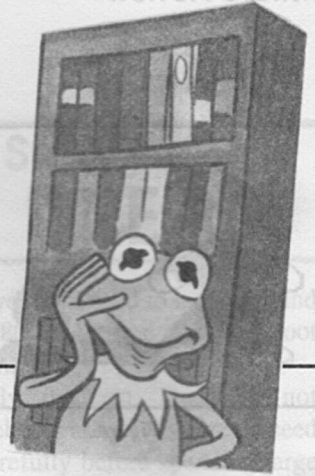
LIST
10 HOME : VTAB 4
20 PRINT "This program will convert a number to"
30 PRINT "base N, where 2 <= N < 10"
40 DIM C$(99)
50 PRINT : PRINT : INPUT "Please enter the BASE --> ";BASE
60 IF BASE < 2 OR BASE > 9 THEN
50
70 B = BASE
80 PRINT : INPUT "Please enter the NUMBER to convert ";NUMB
90 N = NUMB
100 C = N - B * INT (N / B)
110 C$(J + 1) = STR$(C)
120 N = (N - C) / B
130 J = J + 1
140 IF N < > 0 THEN GOTO 100
150 FOR I = 1 TO J
160 ANS$ = C$(I) + ANS$
170 NEXT I
180 PRINT : PRINT : PRINT NUMB;" = (";ANS$;" ) Base ";BASE
190 PRINT : PRINT : PRINT "Another one ? (Y/N) ";: GET REP$
200 IF REP$ = "Y" THEN CLEAR : HOME : GOTO 10
210 END

```

Figure 7

Kermit's Electronic Story Maker

by J. Mark Hunter



Undeniably, in its prime, the Muppet Show was one of the most popular shows around the world. And I'm not stating that as "most popular children's show" because it was the adults and the closeted teenagers that were elbowing their younger crowd out of their place on the bean bag in front of the tube whenever it was "time to start the music, it's time to light the lights, it's time to get things started, on the Muppet Show tonight."

...OH, DID I just give myself away? Well, yeah, I was a Gonzo freak myself, and measured cool by Fozzie's one-liners.

Now, stepping just a pace away from the entertainment scene, perhaps closer towards the old Sesame Street curricu-

lum, a group of educational designers have put together a marvellous package of comedy and learning.

Joyce Hakansson Associates is a team of artists, programmers, educators, game designers, musicians and writers who produce "playful educational software" for children. Their philosophy for the firm's guidelines to their software development according to Joyce Hakansson:

"We like to build exploratory worlds for children to investigate worlds full of sparkling graphics and music and a good measure of giggles...I want every aspect of a program, even the most subtle, to serve an educational purpose."

I take it the above words are for the parents or guardians of the children about to partake of what gets loaded onto the screen, because I feel the children would be wise enough to suss out the soppieness of these. Maybe it was just our Apple II but the graphics were not the most "sparkling" I'd ever encountered, but it did induce "giggles". I was entertained.

And I'm also wondering if the American Consumer Affairs Bureau has been checking out all the ingredients of what Hakansson soups out as academic track-testing before it hits the market and the young child's fragile egg-shell mind. For they tell us that research and "kid-testing" is con-

ducted throughout production and development by a team of "educational specialists". The researchers evaluating the children's reactions to the programs.

And contracted to the company is Christopher Cerf, author, editor, producer, humorist, composer and computer software designer. (Does he ever get time for his children?) He was the founding editor-in-chief of the Children's Television Workshop Products Group, responsible for organizing CTW's efforts to create educational books, toys, records and games based on Sesame Street and the Electric Company. Additionally, he has won two Grammy Awards for Best Recording for Children.

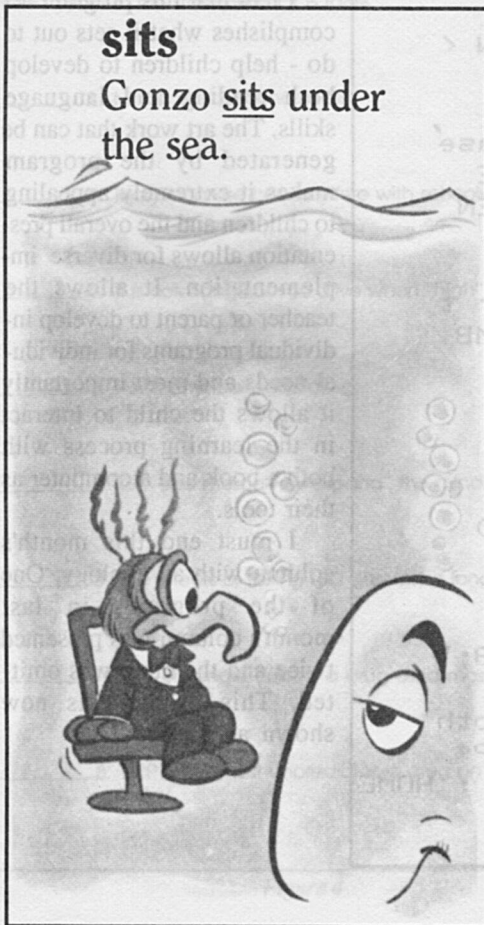
Then his major inspirations hit him when he started the creation of computer software featuring Jim Henson's Muppets.

So how did the *Electronic Story Maker* hold up under such riveting accreditation?

For generations, reading has been taught through the presentation of words and pictures. Now for the first time, due to the unique interactive capabilities of the computer, this program invites children to read by showing them the one-to-one correspondence between words and their meanings. Just as fast as kids can place a word on their screen they'll see it illustrated in full colour. And, because computers - unlike books - can present animation, verbs as well as nouns and adjectives can be clearly and amusingly depicted.

By simple trial and error the program permits the creation of literally thou-

sits
Gonzo sits under
the sea.



sleeps

Gonzo sleeps in the desert while Fozzie dances.



sands of different sentences, all grammatically correct.

For instance, with cursor pointed to the first line on the screen and a click of either the joystick button or return key a word appears, or phrase to start the sentence. This main screen page is like a blank page. As each sentence starts to build the child picks each part of the sentence as he moves along. This would include the main character for the sentence which could be Miss Piggy or Kermit or Fozzie Bear or Gonzo or even a bathtub or banana. The action part of the sentence comes from what the child decides to make the selected character do, either to spin, bounce, fly, swim or possibly even dance, which I enjoyed most. And where that character dances or swims or whatever is determined by the choice of location. Moving the cursor along to the next line at the top of the page you decide where to let the sentence take place. Maybe this is a literal spin through the backgrounds of a jungle upon a hippopotamus, or the city or on the moon, or below the sea.

As the story moves along the sentences change with each new construction and surprise the child with varying sentence structures. Some sentences are long, while others are short. Sometimes the main character is the first word in the

sentence, but at other times the sentence begins with an action or a scene.

Using the keys or the joystick, the cursor arrow is placed on the top line of the screen, which will then light up and show that it is ready for a choice of word or phrase. By pressing return or the fire button you begin to spin through a selection of words to fill that particular blank. When the desired word is picked all that is necessary is to stop at that se-

lection and move the cursor to the next blank and pick the next word or phrase in the same way. It is possible to even go back and change the preceding verse if the child decides it doesn't quite fit the scenario, or even if he wishes to really make it comic.

Example: A sentence could read, "Gonzo-walks-in-the city." Or the choices of where he walks are, "in the desert, in the library, in space, in the soup, on the moon, in the jungle, in the theatre, in the harbour, under the sea, on television, in the sky." Or, by choice the subject could be "the cow". The cow does what? The cow-"barks, tweets, moos, oom-pahs"-etc. I chose "oom-pahs" by fascination of what the sound effects would be and had the cow oompahing-"while Fozzie-spins on the-hippo-in the-(jungle, city, moon, under the sea or in the soup), I selected "in the soup," then punched up the joystick icon to watch just how they all managed the crazy animation of a vividly twisted and silly mind. ... Bravo! It was well done and quite entertaining. The kids will be quite delighted.

On the main screen page are four icons, a joystick, a disk, a song note and

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Z-80c:	CP/M card & software. IIc.

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the words THE END. When clicking the "disk" the options for writing the story come up. You can save a story on a separate disk, erase a story from the disk or the computer's memory. You can read all the story created or just part of it.

The "joystick" icon is for animating the story the child has written. After the blanks have been filled in and the sentence is written completely, all that has

an environment in which your child can develop a sight-reading vocabulary, begin to understand the meaning of words in context, play with different combinations of words and sentences and most important of all, have a terrifically good time.

To support the educational goals of the software, included in the accompanying booklet is the Kermit's Story Maker Dictionary, which presents in humorous



and if you're planning on having more, fine, and if you belong to some nursery or must daycare a bunch of children yourself then it has lasting value.

Otherwise, continue to park them in front of Sesame Street with a pen and paper and keep entertaining them with your own time. Twenty years from now you might hear your kids talking to a child one day and exclaiming: "Kermit's Story Maker! I grew up with Kermit's Story Maker." And the child will say: "Ah, yeah, I can tell." 🍏

watches

Miss Piggy watches in the jungle while Kermit flies in the plane.



to be done is to move the arrow to the top of the screen and click the the joystick. Then, pushing either the return or joystick button allows you to move the character chosen all over the screen using the keys or joystick. When the sentence is complete and your child is finished watching the acting out of his story he can move on to the next page.

And each action has its own special sound effect or music. You can turn the sound on and off by placing the arrow on top of the picture of the music note and clicking return. The colour of the note changes to tell you whether the sound effects and music are turned on or off.

At the beginning of the exercise the computer asks the child to give his name, hence it appears as: "A Story by Mark" and immediately delights the child into proud creative possessiveness.

Kermit's Electronic Story Maker provides

storybook setting all the words and many of the situations children will encounter as they play with the program.

As a child development key, then *Kermit's Electronic Story Maker* is a good buy. I think, though, even with its thousands of types of sentences that can be created, it will be quickly outgrown by the child within months, and I'm being quite liberal with that amount of time, so as investment for one child it would not be the best. For the first child

Kermit's Electronic Story Maker

Machine:	Apple II
Distributor:	OziSoft
Price:	\$49.95
Graphics:	65
Sound:	69
Music:	62
Presentation:	87
Documentation:	84
Overall:	71



Form-filling Appleworks Template

by John Mamutil

If you are reading this magazine then you most probably own an Apple computer and are searching for yet another raison d'etre for your machine. Well, that certain dreaded time of the year has arrived and what better use for the Apple than filling out your Tax Return on their own forms.

HAVING SPENT hours toiling over the Tax form, that is, valuable computer hours, I came up with a solution that will allow you to play with Appleworks, as well as complete your Tax Return enjoyably. Can your Tax Agent do better?

The filling of forms such as Tax Returns, Application Forms, etc is a task many people would readily perform by hand or typewriter rather than with a computer and printer for fear of destroying a rare or unique document. This seems to be a real shame when you consider that the typewriter is rapidly becoming extinct and handwriting an almost forgotten art. Besides, handwriting often detracts from the typeset quality of a "form".

Having thus far enticed you into feeling that the only serious way to print out your forms is with your speedy computer printer, I shall now describe a foolproof method of doing so without depleting the entire stock of Taxation forms before producing a presentable Return.

The template is created on an Appleworks spreadsheet file (FORMS.TEMPLATE) complete with the relevant printer options. The grid which I have enclosed is created on a separate file (FORMS.GRID) - more on this later. This exercise of printing with Appleworks is also an excellent example of the features of this versatile program.

The grid is printed out on your own printer, so that it duplicates all your printer's characteristics. The grid example shown was printed with an Imagewriter but whether this matches my original

will depend on its reproduction to scale. This grid is then transferred on to a clear acetate overlay (quite simply done with a photocopier and photocopying transparency film). The resulting overlay is allowed to dry for a few minutes otherwise smudging will occur.

The overlay with the grid is then placed on the "form" and the relevant blank spaces identified with the spreadsheet cells. The information pertaining to the blank spaces is then typed into the cells in the spreadsheet file (FORMS.TEMPLATE) and printed using the "Block" printing option. There you have it - the perfect copy! Add to this the bonus of having all this information stored on disk for records and duplication!

The following sections outline the procedures involved in creating the grid and template files.

Creating the grid

If you have an Imagewriter then it is a simple matter of copying the accompanying grid onto clear acetate, otherwise follow these simple steps.

1. Open a fresh Appleworks Spreadsheet file and name it FORMS.GRID
2. In Row 1, Label each of the cells from A to J by their corresponding letter. Cell A1 is labelled A1.
3. In column A, Label each of the cells from 1 to 88 (depending on the number of lines you want printed). Setting the maximum number of rows for A4 type paper allows greater leeway in

matching cells with spaces. If paper other than A4 is contemplated, use "lines per inch" for your calculations. Once again Cell A1 only is labelled A1.

4. The Labels are defaulted to Left Justify which is ideal. If the standard value of your label format has been changed then revert back to Left Justify.

5. Rather than draw vertical lines to delineate the cells, I found that Copying the column letter down the column serves a dual purpose: that of delineating the cell and as an easy cell reference label. Of course, one could go to the extreme of labelling each cell by Row and Column - a laborious task which could be simplified by using the "Copy" and "Kalculate" (sic) functions. But let us not digress into tedium.

6. In column K, we cheat a little by Copying into it - all of Column A and then changing Label A1 to K1.

7. Now we have everything except the horizontal lines, there is no underline function in the SpreadSheet (correct me if I am wrong) but there is a delightful little proviso in the Printer Options which allows you to Underline Text using the Special Codes option. This is where one pulls out that rare book, the printer manual, and looks up the Control codes for your Printer. For the Imagewriter this is "Escape X".

8. While we are on Printer Codes I also use Escape O to turn off the paper error detector as many forms involve lines very close to the bottom of the page. (I am sometimes even tempted to

Appleworks

A1	B	C	D	E	F	G	H	I	J
2	B	C	D	E	F	G	H	I	J
3	B	C	D	E	F	G	H	I	J
4	B	C	D	E	F	G	H	I	J
5	B	C	D	E	F	G	H	I	J
6	B	C	D	E	F	G	H	I	J
7	B	C	D	E	F	G	H	I	J
8	B	C	D	E	F	G	H	I	J
9	B	C	D	E	F	G	H	I	J
10	B	C	D	E	F	G	H	I	J
11	B	C	D	E	F	G	H	I	J
12	B	C	D	E	F	G	H	I	J
13	B	C	D	E	F	G	H	I	J
14	B	C	D	E	F	G	H	I	J
15	B	C	D	E	F	G	H	I	J
16	B	C	D	E	F	G	H	I	J
17	B	C	D	E	F	G	H	I	J
18	B	C	D	E	F	G	H	I	J
19	B	C	D	E	F	G	H	I	J
20	B	C	D	E	F	G	H	I	J
21	B	C	D	E	F	G	H	I	J
22	B	C	D	E	F	G	H	I	J
23	B	C	D	E	F	G	H	I	J
24	B	C	D	E	F	G	H	I	J
25	B	C	D	E	F	G	H	I	J
26	B	C	D	E	F	G	H	I	J
27	B	C	D	E	F	G	H	I	J
28	B	C	D	E	F	G	H	I	J
29	B	C	D	E	F	G	H	I	J
30	B	C	D	E	F	G	H	I	J
31	B	C	D	E	F	G	H	I	J
32	B	C	D	E	F	G	H	I	J
33	B	C	D	E	F	G	H	I	J
34	B	C	D	E	F	G	H	I	J
35	B	C	D	E	F	G	H	I	J
36	B	C	D	E	F	G	H	I	J
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75	B	C	D	E	F	G	H	I	J
76	B	C	D	E	F	G	H	I	J
77	B	C	D	E	F	G	H	I	J
78	B	C	D	E	F	G	H	I	J
79	B	C	D	E	F	G	H	I	J

```

File: FORMS.TEMPLATE          PRINTER OPTIONS          Escape: Review/Add/Change
=====
-----Left and right margins-----
PW: Platen Width             8.0 inches
LM: Left Margin              0.0 inches
RM: Right Margin             0.0 inches
CI: Chars per Inch          12

-----Top and bottom margins-----
PL: Paper Length             11.0 inches
TM: Top Margin               0.0 inches
BM: Bottom Margin           0.0 inches
LI: Lines per Inch           8

Line width                    8.0 inches
Char per line (est)          96

Printing length               11.0 inches
Lines per page                88

-----Formatting options-----
SC: Send Special Codes to printer      Yes
PH: Print report Header at top of each page  No
Single, Double or Triple Spacing (SS/DS/TS)  SS

-----
Type a two letter option code
File: FORMS.TEMPLATE          SC: SPECIAL CODES          52K Avail.
Escape: Printer options

-----
Current printer control characters are
Escape ! Escape B Escape O Escape E

-----
Is this OK? No Yes
    
```

Template file.

Printing is foolproof as long as the form is aligned in the same position as the Grid was when it was printed - this is why I recommend printing your own overlays.

Modifications

The size of the cells in the above files have been set to the Appleworks default 9 character size but this can be changed depending on individual applications. The default size is convenient in that it keeps everything standardised, also, you will then be able to store a number of form "pages" on the one file by storing Templates at AA1, BA1, etc and at A101, A201, AA101 and so on.

Difficult forms can be filled by moving the overlay so that the cells match the limits of the blanks.

Be careful to then align the form in the printer accordingly.

The use of either Autoworks or SuperMacroworks - both excellent macro enhancement programs - will greatly simplify some of the tasks involved in filling out the forms in the spreadsheet files.

Another benefit of using the Spreadsheet as the template is that formulae/functions can be assigned to various cells thereby carrying out calculations while you fill in the "blanks". There you have it - the perfect Tax Return Manager! 🍏

turn the error detector off permanently).

9. In Printer Options I also set the CI to 12, PL to 11 or whatever, LI to 8, PW to 8, Margins to 0 and Report Header to NO.

10. Align the top of the paper with the paper guide bar and then use this as a reference point for the top of all your forms. This is the absolute key to successful printing.

11. Print the grid created using the "Block" printing option. Did you know that instead of highlighting the word Block and then pressing Return, you can save a couple of keystrokes by just typing "B". This trick works with all Appleworks Commands.

Creating the Templates File

Creating the "templates" file is easily accomplished once the "Grid" file has

been setup. That is:

1. Open the "FORMS.GRID" file created above.
2. Change its name to "FORMS.TEMPLATE".
3. Use the "Blank" command to clear cells in "Block" A1 to K88. This gives you a blank Block which you can then coordinate with the Grid.
4. Change the Special Codes in the Printer Options by eliminating the "Underline Text" code and adding the "Boldface" code.

Armed with the Grid and Template, you are now ready to fill out those forms. The overlay is placed over the form and the blank spaces identified with the cells (I find that the transparency film has so much static that it clings to the forms without the aid of clips, pins or tape). The relevant information is then typed into the corresponding cells in the

BATTLES IN NORMANDY

by Gene Stephan

This is the fifth game from Roger Keating and Ian Trout that I have reviewed. Each one has been excellent, and their latest Battles in Normandy is no exception. In many ways in fact, it is one of their best so far.

64K Apple with Disk Drive
Cost \$40.00
Strategic Studies Group

THE GAME is the sequel to *Battlefront* which was reviewed in the last issue of the *Australian Apple Review*. However, while the game feels in many ways similar to *Battlefront*, it does have some enhancements. These are listed in the manual under Designer's notes and are **Figure 1**.

There were a number of things which I found either impressive or better treated than in *Battlefront*.

The first thing was that all eight scenarios deal with one set of battles. *Battlefront* jumped from one theatre to another and while I know that many wargamers — particularly those who sit in front of screens and like short and punchy games — like quick destruction, I prefer to concentrate on one area, or even one battle and get detail. *Battles of Normandy* allows for both. You can play manageable scenarios while at the same time learn about one unique page in the history of World War II and, like with all historical wargames, try to change it.

The scenarios are based on D Day and



battles which followed the Allied landings in France on the 5th June, 1944. **Figure 2** shows the types of units which are available to both sides.

The game does not attempt to recreate all the battles with the Gold and Juno scenarios omitted. However, this is definitely not to the detriment of the game. *Battles in Normandy* allows players to modify a large range of details in existing scenarios and has the capability to create new ones. With the map provided, it is not difficult (though not for the first-time user), and adds extra value to the game in being able to re-create those two British landings.

The second thing which impressed me was the map. Having fought over great expanses of table with chits, I have always found the maps which accompany most computer war games to be mediocre at best. The game designers probably feel that they've gone to the effort to put it onto the screen, so why bother with paper? Or worse, they include a flashy coloured card which just fits into the box

and appears to be there purely for decoration. A great example of this is one Roger Keating's earlier games which was published by SSI (before the Australian SSG was started) called *Southern Command*. The game is excellent, but the map is useless.

Not so with *Battles in Normandy*. The map is about 18 inches by 25 inches, is in full colour and has enough detail to be used strategically — as maps were meant to be. The map did not reproduce well and so I have not included a sample. However **Figure 3** shows a sample screen.

The third thing which impressed me, as with *Battlefront*, was the ease of play. True the manual will daunt some — it's about 80 pages long. However, the manual goes into history and provides insights into how to defeat the computer rather than into how to drive it. For this reason, the manual is interesting to read, rather than being a dreaded several hours before play.

Battles in Normandy uses the same

6. DESIGNERS' NOTES

Compatibility

The following is a list of differences between *Battlefront* and *Battles In Normandy*. They are mainly changes for design convenience. The implications for using scenarios created under the *Battlefront* system with *Battles In Normandy* are noted.

The new factor for climate has been introduced. Its effect will create different distributions of the four weather types. *Battlefront* scenarios will use their original system, now called European.

Units with no LOS will now have a chance at receiving resupply. This will make having no LOS less disastrous than before.

Scenarios may now start on any of the four turns on a particular start date. This turn will be the first player turn but will retain the appropriate turn number. Thus a scenario starting on the night turn will be considered to start on turn 4. *Battlefront* scenarios will start on the am turn as normal. Turn numbers for reinforcements or VPs will not need to be adjusted.

HQs have been given a separate movement allowance. *Battlefront* scenarios will continue to use the Mech. Min. value.

Artillery and OBS points now only function at full effectiveness when used in conjunction with assaults and exploits. At all other times it functions at half effectiveness. This may or may not make a difference to play balance, depending on the scenario.

An extra defensive combat bonus has been created for units with infantry, tank and anti-tank elements present. Units created as type 8, 9 or 10 should be checked to see if they qualify for this bonus.

Overall, compatibility works like this. *Battlefront* scenarios will run under *Battles In Normandy*. Artillery and OBS points may very occasionally need to be changed. A *Battles In Normandy* scenario will run under the *Battlefront* system with the additions being ignored. Any points of major interest will be noted in *Run 5*.

In short, no matter what combination of master and scenario/save game disks you use, your computer will know what to do.

Figure 1

method of play as *Battlefront* and for this reason, scenarios developed under either system will work with both. Orders are issued to each regiment under your com-

mand, and the battalions in those regiments attempt to implement your orders. The play is not slowed by having to address each battalion — but, on the other hand it is a different type of order which has to be issued as there is more at stake.

The speed of play is reflected in the shorter scenarios which take, according to the manual, about 90 minutes to play. I tried one of these and it took about two hours. However, this is still fast for a wargame — board games can take longer just to turn over the chits and separate them into the two protagonist groups. So, the type of play is as

Battlefront, a game which need never play the same way twice. A handicap system allows you to adjust the seasoned veteran to the galley cook, and creating your own scenarios means you can continue to fight well into France if you have an atlas and a good history book.

I found *Battles in Normandy* excellent in terms of playability and content. It's made in Australia by SSG which is a company second to none in the world when it comes to recreating battles on the computer. And, it is very affordable — far more affordable than a lot of the pricey US garbage which is heaped on our doorsteps.

But, be prepared. Wargaming is not everyone's idea of great entertainment. It does require skill and grey cells, as well as some tenacity, especially when a character is assumed.

My one gripe is minor. Manuals

SPECIFIC BATTALION ICONS
(VISIBLE ONLY TO CONTROLLING PLAYER)

<ul style="list-style-type: none"> <input type="checkbox"/> LEG INFANTRY <input type="checkbox"/> MOTORIZED INFANTRY <input type="checkbox"/> MECHANIZED INFANTRY <input type="checkbox"/> PARACHUTE <input type="checkbox"/> HEAVY WEAPONS <input type="checkbox"/> CAVALRY <input type="checkbox"/> RECONNAISSANCE <input type="checkbox"/> XX DIVISION HQ 	<ul style="list-style-type: none"> <input type="checkbox"/> ENGINEER <input type="checkbox"/> ANTI-AIR <input type="checkbox"/> ANTI-TANK <input type="checkbox"/> TANK DESTROYER <input type="checkbox"/> ARMOUR <input type="checkbox"/> ASSAULT GUN <input type="checkbox"/> ARTILLERY <input type="checkbox"/> H DIV HQ (AX/AL)
--	---

GENERAL BATTALION ICONS
(VISIBLE TO BOTH PLAYERS)

<ul style="list-style-type: none"> <input type="checkbox"/> ALLIED INFANTRY <input type="checkbox"/> ALLIED ARMOUR <input type="checkbox"/> ALLIED ARTILLERY <input type="checkbox"/> ALLIED ROUTED <input type="checkbox"/> PARACHUTE MODE 	<ul style="list-style-type: none"> <input type="checkbox"/> AXIS INFANTRY <input type="checkbox"/> AXIS ARMOUR <input type="checkbox"/> AXIS ARTILLERY <input type="checkbox"/> AXIS ROUTED <input type="checkbox"/> AIR LANDING MODE
--	--

AMPHIBIOUS MODE

A NOTE ON MONITORS AND SOUND

If you are using a black and white monitor, type Cntl(B) to enter monochrome mode.

If you don't wish to listen to the sound effects, type Cntl(S) to turn them off.

Repeat the keystroke to reverse the effect.

Figure 2

Figure 3

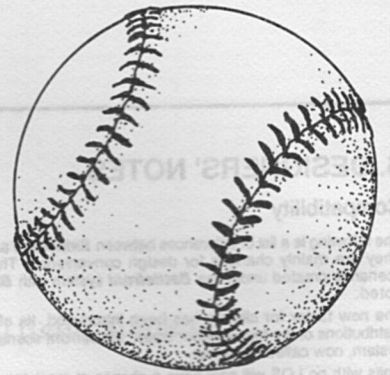
well suited to the novice as the content is for the seasoned gamer, or one who can't find a ready opponent.

The scenarios can also be modified or new ones created. This makes *Battles in Normandy*, just as

should be proof-read. I don't know if it was purposely done or not, but Section 8 - Winning the Game, stops in the middle of the sixth sentence and then moves straight to Section 9 — Tactics. Well, maybe Roger and Ian have a point there. 🍏

Hardball

by J. Mark Hunter



Hardball - what the Mafia used to threaten people with before they allowed swearing in the movies.

Hardball - what it actually feels like against your cheek.

Hardball - what happens to your gum when you try to save it till after.

Hardball - what biologists use to track gorillas through the jungle.

OKAY, we'll call it "hardball", it'll sell better than "hardbat". The executives continued on, and so we have it, *Hardball* from Accolade Software of Cupertino, California.

Anyway, the game needs an original

title, friends, because it is quite a unique piece of software. It's alive and kicking, and leaves a smirk of appreciative satisfaction on your lips long after the crowd has died and the freeway around St. Louis gets jammed with the fans' traffic in a Missouri summer night.

We're looking at fun here, amusement, interest and excitement. Here's how. Incredible *HardBall!* Gigantic in brilliant effects, just too cool for words - but I'll scratch them together as best I can.

Drop into centerfield, you're on deck, ready to bat, ready to throw that ball and home run your face off again and again.

No inanimate, sticklike figures coming out of the grain here, babes, or confusing sound effects in garbled Swahili.

We're talking wide-angle, on the diamond and gripping home plate in the Nikes like it's a rock in the ocean. The pitcher ... oh, get him outta here, he's just too mean! But he's lifting his arm up now, he's raising that leg, winding up, arching his back, the roar of the crowd is dying, they're waiting - the shot! What happened?! I don't know, I couldn't look.

And you'll soon find out with all the playing and managing you have to do, it's a good thing you have good com-

<p>Offspeed Slider Change-up Curve ball</p>	<p>K Batter Ready , Bunt</p>	<p>Inning: 1 Out: 0 Balls: 0 Strikes: 0</p> <p>McCall, Jerry ✓Champs: 0 All-Stars: 0</p>
---	----------------------------------	--

mand of the field because you need it.

A special manager's screen they've got etched into the program somewhere there gives you all the options any big-league manager has, starting with fielding the kind of team you want.

There are two twenty-five player teams for you and your opponents to choose from. Some of them will run the base paths wild, some having a batting order with no apparent weakness, while others have a pitching staff stacked with aces. When plotting strategy during the game, you're always aware of what any player on either team might or might not do in a given situation simply by consulting his profile and stats.

This is not the minor leagues, so if you blow it by bringing in your top reliever too soon and he burns out before the ninth inning it could cost you the game. When a fastball pitcher has his good velocity in *HardBall* he throws

smoke you can see. Some pitchers throw change-ups that you'll swear have strings attached to them. When a curve-ball is working it looks like its falling off the edge of a table.

In *HardBall* pitchers have their dog days too. Some afternoons, when batters are just plain outguessing them, they might begin to think they should be back in the minors no matter how good their stuff. Sure enough, when the pitcher loses his rhythm - the batters usually find theirs. So when that happens you'll start to go *HardBall* crazy.

In *HardBall* you can hit and run, steal, bunt, sacrifice, shift the outfielders, adjust the infielders, dive for the grounders and flyballs, make double plays, use pinch hitters and runners, select lefties or righties for the mound, issue intentional walks, throw out runners trying to stretch singles into doubles, make last second decisions on which

base to throw to or even decide if you want a designated hitter. And even if you haven't got the smoggiest notion of what the heck all that Yankee jive is all about, you get to learn. And get enrapt in some pretty hot on-screen computer play.

They're singing into major realism here, a choir of Pee-wee league angels above San Diego. Up to the plate and out of the ball park. Montreal Expos dancing to the American national anthem and singing it loud in French and Japanese.

Oh, can you just feel the emotion, the tension, the out-of-sight smash-hit devastation! I'm chilling, I'm warming, I'm into this game!

Get your mouse in gear and begin. When the pitcher is first displayed you see on the bottom left of the screen the four pitch types this particular pitch can throw. To select the type you wish to throw, move the mouse up or down until

Game All-Stars Champs

ACCOLADE-INC.

	1	2	3	4	5	6	7	8	9	R	H	E
Champs:	0									0	0	0
All-Stars:										0	0	0

All-Stars

- ✓ Allen, Bobby Sw 2b 283
- Jose, Guy Lf CF 279
- Miller, Ricky Rt C 305
- Lorenzen, Moose Rt 1b 275
- Laws, Louis Rt 3b 281
- Bautista, Monte Rt RF 280
- Mattrick, Donny Lf LF 271
- Doggett, Mickey Rt SS 268
- Peers, Jesse Rt P
- P:** Peers, Jesse Rt P

Champs

- ✓ McCall, Jerry Rt CF 308
- DeSoto, Kyle Lf RF 317
- Contos, Hank Sw LF 319
- Barnes, Willie Lf 3b 270
- Rawlings, Chuck Lf 1b 269
- Morra, Jackie Rt C 211
- Mills, Franky Lf SS 256
- Darien, Freddie Sw 2b 243
- Williams, Eric Rt P
- P:** Williams, Eric Rt P

Press Space Bar to Play Ball

your desired pitchtype is highlighted, then hit the mouse button.

Post pitch-type selection and selecting what the batter wants happening against his cultured wood, you see a "tic-tac-toe" (Aussified = "noughts and crosses") grid. By moving the mouse around you can move the black rectangle throughout the grid. If the grid is in the middle, the pitch will go to the middle, if it's to the left, the pitch hikes it to the left - etc. etc.

Pressing the mouse button when you get to the box corresponding to where you want to throw the pitch allows you to continue moving the mouse around to "fool" your opponent. The pitch will be thrown when you release the mouse button.

After the ball has been hit, either the left side or the rightside of the field will be shown, whatever has the ball bouncing through at the time of transmission. The fielder who will be chasing after the ball will be flashing and the tic-tac-toe gridwill again show up at the bottom of the screen. The fielder will automatically run in the direction selected by moving the black rectangle without requiring any mouse button action.

Once the fielder has caught the ball, a cross type of grid comes up on the screen

with numbers 1, 2 and 3 and letter H. Move the mouse in the direction of the base you want then, and press the button.

A couple of things to keep in mind:

— as a pitcher gets tired, the probability of him throwing you a strike goes down, and so does your anxiety factor.

— check out the players stats, certain pitchers will be stronger in some pitching types.

— if the pitch is not in the strike zone, the batter can swing but can't hit the ball.

— when the ball is hit, the fielding screen is displayed and unless it is a foul ball when the play is completed, the Manager's Decision Screen will be displayed momentarily before returning to the pitching/batting screen.

— when bunting with two strikes against you and the ball goes foul, it is considered your third strike.

— runners have the option of running to the next base upon reaching a base after a hit.

— subsequently, if you tell a runner to steal a base and the batter doesn't hit the ball, then the catcher will attempt to throw the lead runner out.

— and get this, you may change the flag on the Manager's Decision Screen by pressing Option A for an American flag, or Option C for a Canadian flag.

Bob Whitehead, the designer, has "all bases covered", you might say. Yes, he's got it covered from the graphics point of view and the sound.

Excellently animated, superbly replicated in every quirky American detail. From the chewing of a humongus wad of gum, to the kicking of dirt around the base. I'm impressed, and don't want to click the 'Quit' mode for quite some time.

Delicious in activity and mind-pleasing in strategy of play, *HardBall* is the kind of talk you're wanting to hear. 🍎

Game:	HardBall
Graphics:	94
Sound:	92
Music:	79
Presentation:	94
Documentation:	87
Overall:	90
Distributor:	OziSoft
Publisher:	Accolade
Machine:	Apple II Macintosh
Price:	Apple II \$49.95 Macintosh \$69.95

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 BBS
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 Hours: 24 Hours EST

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 User Group BBS
 Phone: (08) 271 2043
 Hours: 1000-2200CSTWe &Hols

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 Hours: 24 Hours
 Sysop: Peter Hallgarten
 Access: \$5 MEMBERSHIP
 Machines: CP/M TURBO

System Name: AM-NET BBS
 Phone: (03) 366 7055
 Hours: 24 Hours EST

System Name: Andromeda RRAPL
 Phone: (02) 764 3598
 Hours: 24 Hours
 Access: Public

System Name: APPLE HACKERS
 UNITED
 Phone: (03) 762 1582
 Hours: 24 Hours
 Sysop: John Forbes
 Access: RESTRICTED
 Machines: APPLE

System Name: Apple Users' Group
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 Hours: 24 Hours
 Sysop: Matthew Barnes Andrew
 Riley
 Access: Mem/VA

System Name: ARROW KBBS
 Phone: (02) 451 2660
 Hours: 24 Hours
 Sysop: Mark Sinclair
 Access: VIS/MEM
 Machines: Commodore

System Name: ATLANTIS
 Phone: (03) 277 6824
 Hours: 24 Hours
 Sysop: John Edwards
 Access: OPEN
 Machines: RBBS-PC

System Name: Augur TBBS
 Phone: (02) 661 4379
 Hours: 24 Hours
 Sysop: Mark James
 Access: Reg/VA

System Name: Ausborne
 (Osborne) RCPM
 Phone: (02) 95 5377
 Hours: 24 Hours
 Sysop: Daniel Moran
 Access: Public

System Name: Ausborne Users
 Group RCPM
 Phone: (02) 568 2791
 Hours: 24 Hours
 Sysop: M. McGlynn-Worthington

System Name: AUSOM
 Phone: (03) 877 1990
 Hours: 24 Hours
 Sysop: Grahame Willis
 Access: OPEN 7 CLUB MEMBERS

System Name: Auzline
 Phone: 636 9027
 Hours: 24hrs
 Sysop: Rasterman
 Access: Mem/VIS

System Name: Auzline BBS
 Phone: (02)688-1006
 Hours: 10-5 WD 10-8 WE
 Sysop: Chris Pattison
 Access: Free
 Machines: Commodore

System Name: Balmain RCPM
 Phone: (02) 660 8182
 Hours: 24 Hours
 Access: Reg/VA

System Name: Basic Users Group
 of Melb (BUGM) RCPM
 Phone: (03) 500 0562

System Name: Bert
 Phone: (02) 211 0855
 Hours: 24 Hours

System Name: BEX 11 RCDM
 Phone: (07) 395 1809
 Sysop: Rik Dalley

System Name: Beside Omen
 Phone: (02) 457 8281
 Hours: 24 Hours
 Sysop: Geoff Arthur
 Access: Public

System Name: Brisbane
 Commodore User Group BBS
 Phone: (07) 808 2125

System Name: Brisbane
 Experimental RCPM 11
 Phone: (07) 395 1809
 Hours: 24 Hours EST

System Name: Brisbane Microbee
 User Group RCPM
 Phone: (07) 38 4833
 Hours: 24 Hours EST

System Name: C S A C E (Atari)
 Phone: (02) 529 8249
 Hours: 24 Hours
 Sysop: Larry O'Keefe
 Access: Reg/VA

System Name: C-64 BBS
 Phone: (03) 489 4557
 Hours: 24 Hours
 Access: \$20 PER 6 MONTHS
 Machines: CP/M SYSTEM

System Name: C-64 BBS (Vic)
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 Access: Mem
 Machines: Commodore

System Name: C.C.U.G.Q BBS
 Phone: (07)808-2125
 Hours: 24 Hours

Sysop: Ray King
 Access: Mem
 Machines: Commodore

System Name: Cairns & District
 IBBS
 Phone: (070) 51 3582
 Hours: WD 1800-0800 24H WE

System Name: Canberra IBBS
 Phone: (062) 58 1406
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System Name: Canberra RBBS
 Phone: (062) 88 8318
 Hours: 24 Hours EST

System Name: Canberra User
 Group
 Phone: (062) 54-7365
 Hours: 24 Hours
 Sysop: James Hacker
 Access: Free
 Machines: Commodore

System Name: CLUB AMIGA BBS
 Phone: (02) 521 6338
 Hours: 24 Hours
 Sysop: Ross Kellaway
 Access: VIS/MEM
 Machines: COMMODORE AMIGA
 & C64

System Name: Club-80
 (SYDTRUG) RTRS
 Phone: (02) 332 2494
 Hours: 24 Hours
 Sysop: Michael Cooper
 Access: Mem/VA

System Name: Colour Computer
 Link
 Phone: (075) 32 6340
 Hours: 24 Hours EST

System Name: Comet 64
 Phone: (02) 599 7342
 Hours: 24hrs
 Sysop: Eric
 Access: Ultra-Term/Rterm
 Machines: Commodore

System Name: Comm Link BBS
 Phone: (02)875-4817
 Hours: 24 Hours
 Sysop: Micheal Hayter
 Access: Mem
 Machines: Commodore

COMMUNICATIONS

System Name: Comm-Link
Phone: (043) 413 135
Hours: 24 Hrs
Sysop: Jeff Campbell

System Name: COMMBOARD 068
Phone: (068) 47-1197
Hours: 24 Hours
Sysop: Gary Edwards, Colin Swan
Access: Members
Machines: Commodore

System Name: Commodore 64
KBBS
Phone: (02) 664 2334
Hours: 24 Hours
Sysop: Graham Lee
Access: Reg/VA
Machines: Commodore

System Name: Competron IBBS
Phone: (07) 52 9498
Hours: WD 1700-0800/WE24HES

System Name: Computer Ventures
BBS
Phone: (08) 255 9146
Hours: 24 Hours CST

System Name: Computer-Cations
Phone: (03) 482-1271
Hours: 24 Hours
Sysop: Joshua Duffy
Access: Free
Machines: Commodore

System Name: Computers Galore
BBS
Phone: (03) 561 8479
Hours: 24 Hours EST

System Name: Connect 64 BBS
Phone: (07)393-5352
Hours: 24 Hours
Sysop: Craig Upton
Access: Free
Machines: Commodore

System Name: Contact RCPM
Phone: (02) 550 0984
Hours: 24 Hours
Sysop: Steven Williams, Ron Lynch
Access: Mem/LVA
Machines: All (Amiga Section)

System Name: CUSTOM
PROGRAMMING SERV.
Phone: (03) 848 3331
Hours: 24 Hours
Sysop: Alan Williamson
Access: \$12 p.a.
Machines: IBBS

System Name: CYCOM
Phone: (03) 727 1018
Hours: 24 Hours
Sysop: Darren Haysom
Access: SEMI-OPEN
Machines: FIDO

System Name: Datacomm KBBS
Phone: (02)643-1220
Hours: 24 Hours
Sysop: James Butler
Access: Mem
Machines: Commodore

System Name: DECUS
Phone: (03) 63 9133
Hours: 24 Hours
Sysop: Jay Ondracek
Access: LIMITED PUBLIC
Machines: FIDO

System Name: Dick Smith RIBM
Phone: (02) 887 2276
Hours: 24 Hours
Sysop: Steven Engel
Access: Public

System Name: DOWN UNDER
SOFTWARE
Phone: (03) 429 5819
Hours: 24 Hours
Sysop: Greg Hudson
Access: OPEN
Machines: FIDO

System Name: Dreamtime FRP
BBS
Phone: (02)93-5225
Hours: 9.30pm - 7.30am
Sysop: Chris Geddes
Access: Free
Machines: Commodore

System Name: East Ringwood
RCPM
Phone: (03) 870 4623
Hours: 1600-000EST Weekdays

System Name: EASTCOM FIDO
Phone: (03) 288 0775
Hours: 24 Hours
Sysop: Maurie Halkier
Access: SEMI-OPEN
Machines: FIDO

System Name: EASTWOOD RCPM
Phone: (03) 870 4623
Hours: 24 Hours
Sysop: Mick Stock
Access: REG. \$10
Machines: CP/M - OS9

System Name: Edge of Darkness
Phone: (02)522-7919
Hours: 7.30pm - 3.00pm

Sysop: Andrew Levell
Access: Free
Machines: Commodore

System Name: ELECTRONIC
CROSSOVER
Phone: (03) 367 5816
Hours: 24 Hours
Sysop: Stephen Paddon
Access: SEMI-OPEN
Machines: FIDO

System : Electronic Oracle IBBS
Phone: (08) 260 6686
Hours: 24 Hours CST

System Name: FORTRESS
Phone: (03) 589 1692
Hours: 24 Hours
Sysop: The King
Access: OPEN Adventure
atmosphere
Machines: Custom Software

System Name: Frontier Systems
RIBM
Phone: (02) 875 2606
Hours: 24 Hours EST
Sysop: John Stanton
Access: Public

System Name: Futex - C64 BBS
Phone: (07) 283-2034
Hours: 24 Hours
Sysop: Paul Salanitri
Access: Free
Machines: Commodore

System Name: Galaxy (Apple)
BBS
Phone: (02) 875 3943
Hours: 24 Hours
Sysop: Chris Nelligan
Access: Public

System Name: Gippsland RCPM
Phone: (051) 799 2001
Hours: 24 Hours EST

System Name: Goblin Sound
RMAC
Phone: (02) 660 8182
Hours: 24 Hours
Sysop: Ned Whitford
Access: Reg/LA

System Name: HARBOARD - 64
Phone: (03) 587 2504
Sysop: Dave J. Harbour
Access: \$10 REG.
Machines: C64

System Name: Hi-Tech CBBS
Phone: (07) 38 6872
Hours: 24 Hours EST

System Name: Hisoft BBS
Phone: (03) 799 2001
Hours: 24 Hours EST

System Name: Hotline BBS
Phone: (07) 353 3718
Hours: 24 Hours
Sysop: Lionel Theunissian
Access: Free

System Name: Illawarra BBS
Phone: (042) 84 4354
Hours: 24 Hours
Sysop: John Simon
Access: Mem/Vis
Machines: All

System Name: Infor-Centre BBS
Phone: (02) 344 9511
Hours: 24 Hours
Sysop: Paris Radio
Access: Mem/VA

System Name: INNER SANCTUM
Phone: (03) 233 8346
Hours: 24 Hours
Sysop: Robert Swaab
Access: SEMI-OPEN
Machines: OPUS ONLINE GAMES

System Name: Irata BBS
Phone: (02) 600 9041
Hours: M/F1800-0000 24H W/E
Sysop: Paul Sommers

System Name: Keeboard TBBS
Phone: (02) 629 2230
Hours: 24 Hours
Sysop: Phillip Keegan
Access: Public

System Name: MACBOARD BBS
Phone: (03) 435 9152
Hours: 24 Hours
Sysop: AUSOM Inc.
Access: OPEN
Machines: MACINTOSH

System Name: MAGIC PUDDING
Phone: (03) 428 2178
Hours: 24 Hours
Sysop: Rupert Russell
Access: OPEN
Machines: OPUS

System Name: Mail-Bus
Phone: (051) 27 7245
Hours: 24 Hours EST

System Name: Manly BBS
Phone: (02)977-6820
Hours: 24 Hours
Sysop: Chris Patten
Access: Free
Machines: Commodore

COMMUNICATIONS

System Name: Melbourne Micro
Computer Club CBBS
Phone: (03) 762 5088
Hours: 24 Hours EST

System Name: Melbourne
Microbee User Group RCPM
Phone: (03) 873 5734
Hours: 24 Hours EST

System Name: Mi Computer Club
RCPM
Phone: (02) 662 1686
Hours: 24 Hours
Sysop: Your Computer Mag
Access: Mem/VA

System Name: MICOM CBBS
Phone: (03) 762 5088
Hours: 24 Hours
Sysop: Peter Jetson
Access: LIMITED VISITORS

System Name: Micro Design Lab
RCPM
Phone: (02) 663 0151
Hours: 24 Hours
Sysop: Steven Jolly
Access: Public

System Name: MICROBEE RCPM
Phone: (03) 82 1571
Hours: 24 Hours
Sysop: Mike Thompson
Access: LIMITED VISITORS
Machines: MICROBEE

System Name: MICROLINK
Phone: (03) 233 0230
Hours: 24 Hours
Sysop: Micro-Drunks
Access: OPEN
Machines: TRS-80

System Name: Micropro
Computers RCPM
Hours: 24 Hours EST
Sysop: (03) 568 8180

System Name: MIDNIGHT FROG
Phone: (03) 569 1589
Hours: 24 Hours
Sysop: Scott Enwright
Access: SEMI-OPEN
Machines: FIDO

System Name: MIKES
BULLBOARD
Phone: (03) 459 6439
Hours: 1800-0900 weekdays
Sysop: Mike Lewis
Access: SEMI-OPEN

System Name: MIN-NET BBS
Phone: (054)41-3013
Hours: 24 Hours
Sysop: Mal Fields
Access: Mem/Vis

System Name: MOTEL
INTERNATIONAL
Phone: (03) 509 9611
Hours: 24 Hours
Sysop: Kim Graton
Access: SEMI-OPEN
Machines: PBBS

System Name: MS-RBBS TRRS
Phone: (003) 34 0911
Hours: 24 Hours
Sysop: Mike Scott

System Name: Multiple BBS
(Multi-BBS)
Phone: (08)255 5116
Hours: 24 Hours

System Name: NATIONAL
Phone: (03) 25 6904
Hours: 0600-1900/1930-0400
Sysop: John Blackett-Smith
Access: SEMI-OPEN FIDO
NETWORK Machines: OPUS

System Name: Newcastle
Microcomputer Club RCPM
Phone: (049) 68 5385
Hours: 1700-830wk24HrESTwe

System Name: Nexus Education
Dept BBS
Phone: (08)243 2477
Hours: 24 Hours

System Name: Oasis BBS
Phone: (09)383 1480
Hours: 24 Hours
Sysop: Computer Oasis
Access: Vis/Mem
Machines: All

System Name: Omega Line/
Breskie Omen
Phone: (02) 457 8281
Hours: 24 Hours
Sysop: Geoff Arthur
Access: Public

System Name: Omen II RTRS
Phone: (089)27 4454
Hours: 24Hours

System Name: Omen II RTRS
Phone: (09)279 8555
Hours: 24Hours

System Name: Omen IV RTRS
Phone: (03) 846 4034
Hours: 24 Hours EST
System Name: Omen RTRS
Phone: (02) 498 2495
Hours: M-F 1630-900F-M24Hrs
Sysop: Ted Romer
Access: REG/VA

System Name: Omen V RTRS
Phone: (08)243 2477
Hours: 1800-0700 Daily

System Name: Oracle TBBS
Phone: (02) 960 3641
Hours: 0000-1800wd0000-0600
Sysop: Rowan Evans

System Name: Outback RCPM
Phone: (089)27 7111
Hours: 24Hours

System Name: OUTER LIMITS
Phone: (03) 725 6650
Hours: 1700-0600M-F 24Hr W/E
Sysop: Captain Kirk
Access: OPEN Science Fiction
Machines: FIDO

System Name: PACIFIC ISLAND
Phone: (03) 890 2174
Hours: 24 Hours
Sysop: Craig Bowen
Access: OPEN
Machines: GBBS/APPLE

System Name: Palantir C-64 BBS
Phone: (02) 451 6576
Hours: 24 Hours
Sysop: Steve Sharp
Access: Free

System Name: PC Connection
BBS
Phone: (03) 528 3750
Hours: 2100-1800WD/24HEstWE

System Name: PC DOMAIN
Phone: (03) 789 8918
Hours: 24 Hours
Sysop: Daryl Clayton
Access: SEMI-OPEN
Machines: FIDO

System Name: PC-CONNECTION
Phone: (03) 528 3750
Hours: 24 Hours
Sysop: LLOYD Borrett
Access: REG
Machines: IBBS

System Name: Perth RMPM
Phone: (09)367 6068
Hours: 24 Hours

System Name: Phantom Land
KBBS
Phone: (02)399-7716
Hours: 24 Hours
Sysop: Bob James
Access: Free
Machines: Commodore

System Name: POVERTY
Phone: (03) 309 0192
Hours: 24 Hours
Access: SEMI-OPEN
Machines: BBS - AMIGA

System Name: PROFIT
Phone: (03) 529 8749
Hours: 24 Hours
Sysop: Andrew Hooper
Access: OPEN
Machines: FIDO

System Name: Prophet TBBS
Phone: (02) 628 1930
Hours: 24 Hours
Sysop: Larry Lewis
Access: Public

System Name: Pursuit KBBS
Phone: (02) 522-9507
Hours: 24 Hours
Sysop: Warren Hillsdon
Access: Mem
Machines: Commodore

System Name: RCOM BBS
Phone: (02) 667 1930
Hours: 24 Hours
Sysop: Simon Finch Ian Allen
Access: Members
Machines: Commodore

System Name: Red CentreRCPM
Phone: (075)32 6340
Hours: 24 Hours

System Name: RUNX Unix System
Phone: (02) 48 3831/4871860
Hours: 24 Hours
Sysop: Mark Webster
Access: Mem/LVA

System Name: S.C.U.A.
Phone: (03) 754 5081
Hours: 24 Hours
Sysop: David Woodberry
Access: MEMB. TO SCUA
Machines: ROS

System Name: SA Commodore
BBS
Phone: (08)371 0435
Machines: Commodore
System Name: SAMS BOARD
Phone: (03) 563 1117
Hours: 24 Hours

COMMUNICATIONS

Access: SEMI-OPEN
Machines: OPUS

System Name: Sentry BBS (VIC 20)
Phone: (02) 428 4687
Hours: M/F 2100-0600
Sysop: Trev Roydhouse
Access: Public

System Name: Skull Apple ABBS
Phone: (02) 529 89750
Hours: 24 Hours
Sysop: Les Ayling
Access: Reg/VA

System Name: SMUG BBS
Phone: (02) 607 7584
Hours: 24 Hours
Sysop: Bob Fryer
Access: Reg/VA

System Name: Software Tools RCPM
Phone: (07) 378 9530
Hours: 24 Hours EST

System Name: Sorcerer Computer Users ASSOC. CBBS
Phone: (03) 434 3529
Hours: 24 Hours EST

System Name: Sorcerer RCPM
Phone: (02) 387 4439
Hours: wd 1800-0800 EST
Sysop: John Woolner
Access: Mem/VA

System Name: SOUTHERN CROSS
Phone: (03) 690 7220
Hours: 24 Hours
Sysop: D. Harvey et al
Access: OPEN
Machines: GBBS

System Name: Sydney PC User Group RIBM
Phone: (02) 238 9034
Hours: 24 Hours
Sysop: Geoff May
Access: Reg/VA

System Name: Tandy ACCESS RIBM
Phone: (02) 625 8071
Hours: 24 Hours
Access: Reg/VA

System Name: TARDIS RCPM
Phone: (03) 67 7760
Hours: 1800-0800M-F 24hr W/E
Sysop: Malcome Miles
Access: OPEN
Machines: RCPM

System Name: Tardis RCPM
Phone: (03) 67 7760
Hours: 1800-0900Wd/24hWe/E

System Name: TELEGRAPH ROAD
Phone: (03) 743 6173
Hours: 24 Hours

Sysop: KIT
Access: SEMI-OPEN
Machines: PBBS/APPLE
System Name: Tesseract RCPM
Phone: (02) 651 1404
Hours: 24 Hours
Sysop: John Hastwell-Batten
Access: Reg/VA

System Name: Texas Instruments (TISHUG)
Phone: (02) 560 0926
Hours: M-F 1900-0700 we24h
Sysop: Shane Anderson
Access: Reg/VA

System : The Eagle's Nest BBS
Phone: (02) 451-0535
Hours: 24 Hours
Sysop: Phillip Dean
Access: Mem
Machines: Commodore

System Name: THE REAL CONNECTION
Phone: (03) 288 0331
Hours: 24 Hours
Sysop: Carla Miller
Access: SEMI-OPEN
Machines: FIDO

System Name: TI BUG BBS
Phone: (07) 263 6161
Hours: 9pm-6am Weekdays

System Name: Tomorrow Land's DIRECT
Phone: (02) 411 2053
Hours: 24 Hours
Sysop: John Thwaite
Access: Reg/VA

System Name: TOMORROWLAND -RBBS
Phone: (03) 523 6981
Hours: 1700 - 2100
Sysop: David Laloum
Access: SEMI-OPEN
Machines: RBBS

System Name: Tomorrowland Direct
Phone: (07) 394 2300
Hours: 24 Hours EST

System Name: Twilight Zone
Phone: (046)25-0309
Hours: 24 Hours
Sysop: Peter Hewett
Access: Free
Machines: Commodore

System Name: Video Connection
Phone: (03) 754 4203
Hours: 24 Hours
Sysop: Robert Kroes

System Name: VIDEOTEX 4000
Phone: (03) 741 3295
Hours: 0700 - 2300 Mon-Fri
Access: SEMI-OPEN
Machines: VIDEOTEX

System Name: Yarra Valley BBS
Phone: (059)64-3126
Hours: 24 Hours
Sysop: Frank Connor
Access: Free
Machines: Commodore

System Name: Zela Remote TRS-80 System
Phone: (02) 627 4177
Hours: M/F24HrsW/e1900-0700
Sysop: Nick Andrews
Access: Reg/VA

System Name: ZENITH C64 BBS
Phone: (02) 477 7509
Hours: 24 Hours
Sysop: Tony Callahan
Access: OPEN
Machines: Commodore

System Name: ZOIST - RBBS
Phone: (03) 467 2871
Hours: 24 Hours
Sysop: Bob Fletcher
Access: OPEN
Machines: RBBS-PC

National PAMS Directory Registration Card

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System Name : Abbreviation:

Telephone : (.....)..... Hours :

Sysop 1 : Sysop 2 : Access :

Machines :

Voice Number : (.....).....

Postal Address :

Suburb : Postcode :

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The Worm in the Apple



THIS WORM has some strange and devious friends who supply information on all sorts of interesting matters.

Regard then the future of the Motorola central processing unit on which Apple have hung their fortunes. As we all know, the Motorola is in direct head to head competition with the Intel series of chips which are used, if you will excuse the expression, in PCs.

Intel have recently been in severe financial strife and they are betting on the sales of their new super whizz bang, gee whiz ma look no hands 80386 chip to save them from the poo. Sadly they are being sued by another company which believes it has the right to compete head on with Intel in the manufacturing of this chip.

This is called, in the United States, second sourcing, and although my trans Pacific cousin Aloysius T. Worm explained it to me three times I still didn't understand it.

All I can understand is that the second sourcer is suing Intel for a sum not unadjacent to US\$1,000,000,000 which is about one and two thirds billion Australian dollars. To this humble Worm that is a serious amount of money.

To add to Intel's problems they cannot produce enough of their new super chip to meet the demand and their users - Compaq, IBM et al - are somewhat less than happy. Miffed might be the word you are looking for. Further, it would appear that Intel have decided that the 80386 is the end of the line in that style of chip development and are now moving to fresh woods and pastures new in their search for more speed, more computing ability.

But this is not the route Motorola are taking. Their 68000 was a success for the Macintosh. They followed this with the 68020 which is in the Macintosh II and runs faster than greased weasel water.

The news I have is that a Motorola 68040 is currently in an advanced stage of design which means that Apple with the Macintosh have the clearest of upward paths laid out for them. All of which seems perfectly reasonable. But the other night my bulletin board whispered to me that Apple are experimenting with transputers as a way of making future models go much faster yet. As I have the greatest difficulty coping with the potential speed and memory and power of the Macintosh II I will let that pass for the moment.



LAST WEEK I was telephoned by an anxious parent who said his children were using Apples at school and he wanted to buy an Apple for the home. He was trying to work out whether to buy an Apple GS or an Apple IIe.

In the course of the conversation he let drop a minor bombshell. He said that the school had told him that if he had a note from the teacher he would be entitled to a substantial reduction on the price.

Can this be true? Is it available to all of us? I have several teachers who are willing to sign their names to anything for a few glasses of the cleansing amber fluid. If this lurk exists than this Worm wishes to be in it.

Editor's note. After checking with Apple it would appear that the parent is labouring under a misapprehension. There is an educational scheme whereby schools get Apples at the right price. And there is a scheme which allows teachers who are involved in giving the good word to ankle biters to get a discount and not pay sales tax. But this has to be sorted out by the headmaster of the school especially in view of the problems relating to sales tax. Nice try but no cigar.



THIS WORM found himself in some strife with a newfangled piece of machinery. Not being very bright in the technical end I called the Stately Pleasure Dome in Ryde where Apple, for the nonce, resides and asked for technical support. I was put through to a lady who would appear to have been trained by the British Post Office in the handling of enquiries. She told me in brisk, glacier-like terms to refer to my dealer as Apple did not handle customer's technical enquiries direct. I asked her for the name of her department and she told me it was called "Customer Support". As I said to her, in that case God help the customers.

Several times before I have written about the problems outsiders have in dealing with some - not all - members of Apple's staff. Each time this has been taken amiss by Apple management who have let me know in no uncertain terms that they do not like it. That my sniping attacks - a phrase they used in one of their missives - were hurtful to their staff. So for over a year I have forborne mentioning in print this problem which is real and which exists.

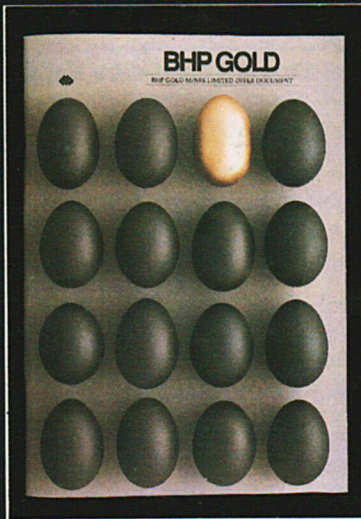
I can quite see that Apple management have to restrict the access to their technical support people. Otherwise the telephones would be jammed forever. Almost every other major computer company does so.

But they should also recognise that the friendly soft answer turneth away wrath. And that Apple users - the most loyal computer using group in the world - built Apple's fortunes, made the company what it is today. Daft to say that the customer is always right.

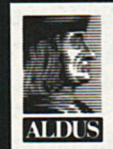
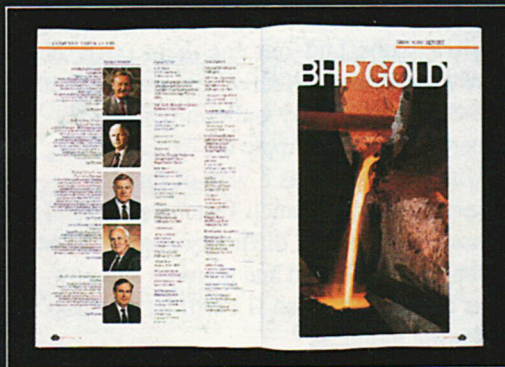
But true to say the customer is always important. 🍏

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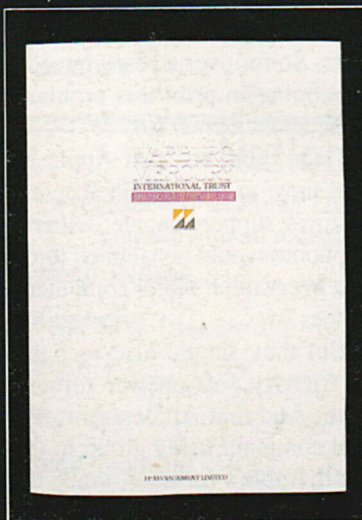
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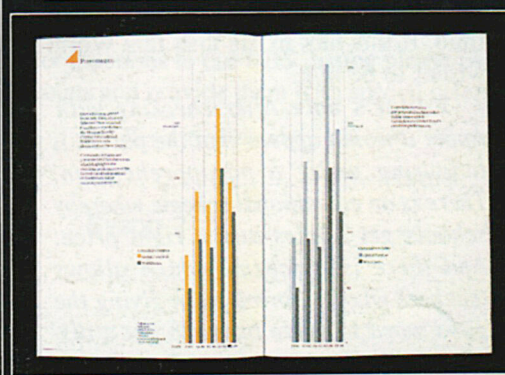
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Warburg Mercury International Trust Prospectus



ACI Packaging Quarterly



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