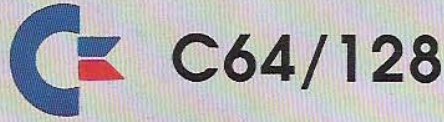


The Australian COMMODORE and AMIGA REVIEW



World of Commodore Show Report



C64/128: Geocalc ● Memory Game ● Typing Practice ● Basic Tutorial ● Epyx Fastloader ● Game Hints & Reviews

Amiga: Lights! Camera! Action! ● Pro-Sound Designer ● Deluxe Photo Lab ● Neriki Genlock ● C Tutorial ● Three Stooges ● King of Chicago ● Best of PD

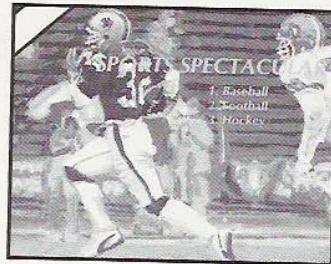
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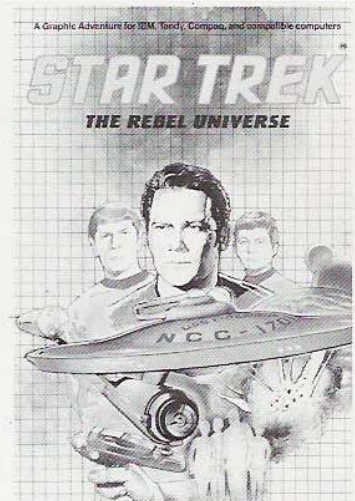
These are just a few of the many titles available in the **KEYPUNCH** software series. They are a real breakthrough in value for dollars with a retail price of only

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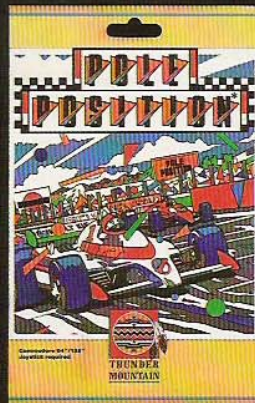
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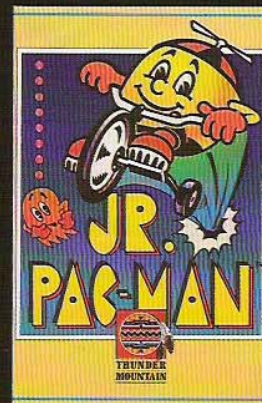
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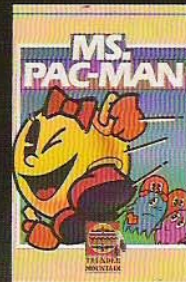
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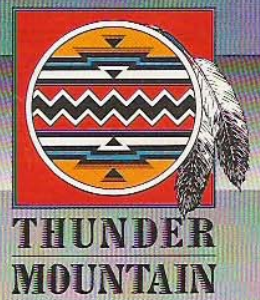
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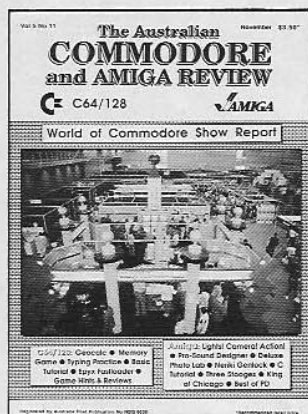
November 1988

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Editorial

"Where do you get your news from?" was a common question asked by visitors at the World of Commodore Show. "Not from Commodore," was the answer. Well, at least not much. So, it was a fresh change to sit down and interview Dieter Preiss, head of the German engineering division of Commodore, and to get some answers.

That interview appears on page 12.



Local news is hard to come by. Few software companies provide us with regular updates, press releases or preview copies of games. Part of being down under in the real sense of the words.

All, though, are very helpful in providing copies of recently released programs for review - to which we are very thankful - as the cost of buying every new program would be prohibitive.

One smirk inducing media release that did manage to find its way to my desk was titled "WORLD OF COMMODORE - WINS GOLD DISKS BUT NOT AT THE OLYMPICS BUT DOES CREATE WORLD FIRST". Need, we say more. A drug induced reaction to upper management's plea for more interesting media releases. Shame the steroids affected the BUTs so heavily.

News arrives by word of mouth, by overseas BBSs, by overseas magazines, by paying large sums of bribe money to underpaid Commodore executives, by . . . oops. It's a full time job just finding out what's really believable and what's pure gossip in the pages of some publications.

We hope that you find us believable. If the statistics are true, then we have nothing to worry about. According to a recent survey, 95% of all respondents named us as their favourite magazine. What they do with it is another question.

My complimentary copy of *Palette* arrived a few days ago. Impressive stuff. It's a three disk set magazine style publication aimed at graphics enthusiasts. On it was a list of all the articles ever published on animation and a guide to where they've appeared. Can you believe there was not one mention of the various write-ups on animation we've done!

I look at it this way. Australia is a relatively small place. To a certain degree we've all got to look after each other. We're the only Australian paper magazine for Commodore computers, and yet some people don't even know we exist. So how about making sure your friends know we're out there, and supporting a local product.

The reasoning is simple. The more people that buy or subscribe to the magazine, the better we can make it! ■

Andrew Farrell

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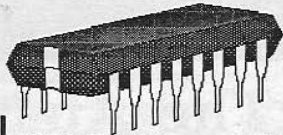
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RAM Rumbles



Commodore announces record 1988 Sales

Commodore Computers announced increased sales world wide for the fiscal year ended 1988. World wide they have a sales increase of 13%, with sales growth from \$806m to \$871m. A world wide profit of \$55.8m appears very favourable, with a net income of \$28.6m.

Chairman and Chief Executive Offi-

cer, Irving Gould, stated, "Increased profitability in the quarter was due to sales growth in all our major markets including Europe, North America, and Australia, and resulted from growing market penetration, distribution, and shipments of the Company's Amiga and PC compatible microcomputers."

Some product highlights in Australia included improved performance in C64 sales of over 30%, and a meteoric rise to over 28,000 Amiga A500s being sold into the market place, since their release in August of last year.

Mr Serra concluded by saying that, "We are making a determined effort to ensure that our product is targeted to the

right consumer. The fact that we have become the second largest micro computer supplier in the market place (Compass Research, March), is indicative of the success of our efforts. We are looking at a bigger market share, and throughout this fiscal year we will be putting together another plan of product and marketing strategies, to ensure continued market penetration, both in existing markets and the markets that Commodore will address with product and price in the future.

"Commodore is one of the few computer companies that has a range of products that cover three technologies 64, MS DOS and Amiga DOS, catering for the home and business market." ■

c64ers . . .

New from BEST!

BEST have announced the release of several new packages for the C64 and 128. BEST Project Planner plus Modules for Debtors, Creditors, General Ledgers, Stock, each costs \$75.00 for these machines. For details contact Don or Joyce on (02) 816 3700.

Aussie made floppy disk box

Every decade or so there is a real need for a storage system for the latest entertainment craze.



In the 60's we had THE RACK for the storage of those "45" records which were usually spread all over the lounge room floor creating a minor health hazard! The

70's saw the invention of indexed drawers to store audio cassettes which were otherwise stacked like Eiffel Towers and forever falling over. The computer age of the 80's has among other things produced the "FLOPPY DISK" and in turn the need to store same.

Enter COMPUTEC the Australian made storage unit made of polystyrene. The Computec offers storage capacity for 100 x 5 1/4" floppy disks and features high impact base in fashion grey with smoked plastic lid. The two way hinge enables the lid to be flipped back or removed completely if desired for easy access. Also the base can be nested in the lid to enable more table room. Once stored it is important to be able to retrieve the desired floppy disk quickly and the unique three position index system dividers with snap on label tabs are designed specifically for this purpose.

Until now professional and enthusiasts alike have had access to more expensive imported units only and with a recommended retail price of around \$17.98 from K Mart and Super K Mart Computec should sure clean up!

C128 Debtors - Australian written

Sherlock & Watson Software Super Sleuths present a debtors package designed especially for small business with maximum versatility.

The *C128 Super Debtors* for the C128 personal computer includes full Sales Dissection system and is fully integratable with Sherlock General Ledger. It supports 1700 or 1750 RAM expansion modules with full 80 column colour display. No need for swapping disks, programs and data can coexist on single disks, creation of custom data disks is also possible with 500 debtors per disk and no limit to data disks in use!

This Point of Sale system can be fully integrated with Debtors or stand alone if required. A Stock and Sales system or Fuel Sales system is also integratable with a choice of Open Item system or Brought Forward system.

The *C128 Super Debtors* supports Commodore compatible dot matrix printers and has a fast operation which is easy to learn and to use. The screen enquiry facilities are extensive as are the reporting facilities to both screen and printer.

With a pop-up calculator and memo pad, full Sales Tax or Prescribed Payment Tax system, *C128 Debtors* will fill all your software needs.

Notepad Notepad

Special Report : World of Commodore Show

Estimates as high as 30,000 people seem a little optimistic. Nevertheless, there were a good number of visitors to Sydney's Darling Harbour. Amiga owners were not disappointed - although C64er's felt a little left behind.

As predicted, the Amiga 2500 stole the show demonstrating *Interceptor*. Even Channel Seven's Morris Parker - of early *WonderWorld* fame - found Amiga's graphics impressive. He was a little short on words when the nine screen display wall didn't work for the cameras, although a new big screen did provide excellent footage.

Later in the day, the wall of nine kicked off, and proved to be a big winner. Commodore rolled the only Amiga video more times than I care to remember. Viewers were impressed, and hopefully, a few converts were made.

A number of new products were announced at the show by visiting representatives from the USA, as well as a number of local companies. In particular Gold Disk (*Professional Page*) and Brown Disk (*Critics Choice*).

Critics Choice is a combination package consisting of *Kindwords*, *MicroFiche Filer* and *Analyse!* We were hoping to review the package this issue, but the man from Brown Disk slipped away before leav-

ing a copy for us to play with. An Australian distributor should be announced soon, and we will be taking a close look at *Microfiche Filer* then, in particular.

Gold Disk products

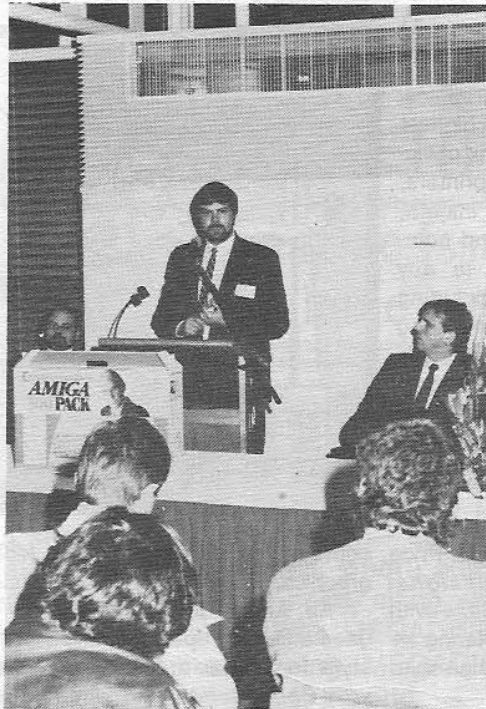
Gold Disk Inc. announced a whole swag of products. Please note, the following notes are based on press release information, not writers' opinions. Full reviews of these products will appear in coming months. For Australian release dates, add about six to eight weeks.

PROFESSIONAL

DRAW - A structured drawing package for the Amiga equivalent to *Adobe Illustrator* on the Apple Macintosh. *Professional Draw* offers unmatched control over colour structured images - from concept to full colour separations.

"*Professional Draw* is an extremely high-powered graphic arts

Morris Parker (far left) looks on as Channel 7 films Interceptor ace, Andrew Farrell demonstrating the Amiga's fabulous graphics.



Tony Cuffe, Commodore's National Sales Manager, expounds on Commodore's future marketing strategies and new products.

varied assortment of powerful drawing tools including circles, ellipses, rectangles, polygons, and bezier curves. Import IFF files or ham images and transform them into fully editable structured drawings using 4-point continuous beziers, user-

tool that will become a standard design instrument for any Amiga user - from the novice artist, to architects and planners, to the most discriminating advertising professional", explains Kailash Ambwani, President of Gold Disk Inc. *Professional Draw* is the ultimate colour illustration and graphic design solution".

Professional Draw offers a

definable line weights and fill patterns, and a virtually unlimited range of colour. Or use built-in clip-art and text character macros.

Sophisticated transformation features including mouse-controlled rotation, scaling, shearing and distortion of images provide for high-calibre results. *Professional Draw's* macro features allow recall of



Notepad

Special Report : World of Commodore Show

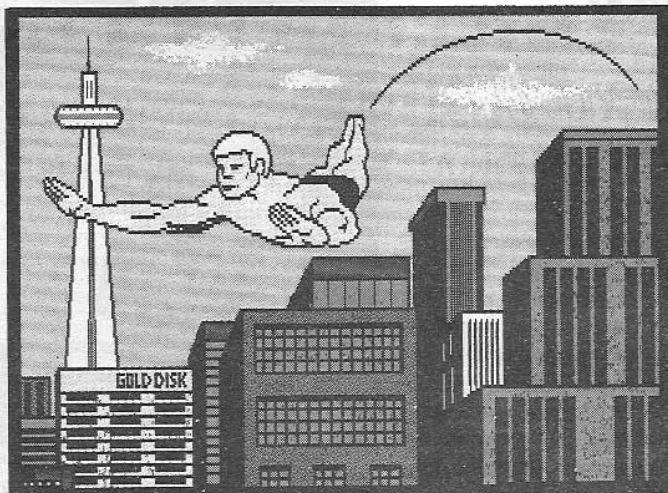
a previously designed image at a single keystroke.

Output detailed graphics, with no jaggies, to the highest resolution of dot matrix devices, including: 24-pin printers, colour printers and inkjets, and HP LaserJets and compatibles. Or output to any PostScript device including high-resolution typesetting equipment for professional results. *Professional Draw's* built-in colour separator will prepare your colour graphics for mechanical or process colour offset printing.

Professional Draw released in October, 1988. Price \$199.95 US. *Professional Draw* will be compatible with *Professional Page*, offering an unbeatable colour design solution on the Amiga.

COMICSETTER - This unique creation provides the user with a new generation of graphic layout tools designed to create great colour comics. "We saw the tremendous potential of the Amiga for a program like *ComicSetter*," said Kailash Ambwani, President of Gold Disk Inc. "The Amiga's graphic capabilities are perfect for a program such as this."

ComicSetter generates high quality colour comics using the standard comic book elements. Any number and size of panels may be placed on a page with speech balloons, characters, and backgrounds dropped into the panels. *ComicSetter* provides the user with a library of characters and backgrounds that can be readily transported into any scene. Or powerful design and drawing tools allow for customized drawings, even for those who "can't draw". Of



course, you can import IFF graphics.

All Amiga fonts can be used including special comic-style fonts that are supplied with *ComicSetter*. And when complete, each comic can be printed by a variety of printers with a great deal of flexibility. There is no limitation to comic size other than memory and disk space.

"This program combines the fun elements of games with the creativity of art and literature," explains Dr. Arno Krautter, Development Manager at Gold Disk. "We've gone to great lengths to make sure every key element was included and perfected so the user would develop his or her creative skills while retaining interest for years to come. *ComicSetter* is a program that will be enthusiastically received by the entire spectrum of Amiga users: artists, technicians, hobbyists,

Explaining the intricacies of digitising providing live demonstrations.

kids, educators, and even developers."

To complement *ComicSetter*, Gold Disk is also releasing *ComicArt* modules. Each module focuses on a particular theme and contains two disks packed with backgrounds and characters designed for comic use. The first three modules focus on super heroes, science fiction, and funny figures, and are being released simultaneously with *ComicSetter*.

ComicSetter is shipping. Suggested list price: \$99.00 (US, \$134.99 (CDN). Requires Amiga with 1 MB memory and

a single disk drive. Additional *ComicArt* modules retail for \$34.95 (US), \$44.95 (CDN) each.

DESIGN-3D - *Design-3D*, a modelling package for the Amiga of unmatched speed and ease of use, was released by Gold Disk Inc. in October, 1988.

"*Design-3D* contains features which meet the demands of designers, artists, architects, and engineers, while captivating the Amiga home user and hobbyist," says Dr. Arno Krautter, Gold Disk Product Development Manager. "This is a very strong stand-alone product which also interfaces quite well with other Amiga programs."

Model in wire frames with six line types and 16 colours (with dithering to emulate additional colours), and with the fastest flat shading on the Amiga. *Design-3D* provides four views - top, side, front, and perspective - with four light sources. Axial extrusion allows for incredibly fast modelling of symmetrical objects. Objects may be imported from *VideoScape 3D*.



Support for 3D text (fonts included) adds a creative edge to *Design-3D*. The program's built-in font editor provides tremendous control over this unique feature.

Design-3D allows you to work in high-resolution, interlace or non-interlace, in any unit of measure - inches, centimetres, etc. The ANIM format is supported to import images into *PageFlipper Plus* or animate within the program in real time.

Design-3D was released in October, 1988. List Price: \$99.95 US., \$124.95 CDN. Requires: Amiga with minimum 1MB and one drive.

FONT UTILITY - Gold Disk Inc. is distributing a utility allowing *Professional Page* owners to create metrics for Amiga fonts, improving output on dot matrix devices.

This convenient metric utility for Amiga fonts was designed by Ed Scherer. *Professional Page* desktop publishers may use Amiga font packages such as Gold Disk's *FontSet 1* to create appropriate metrics for screen letter spacings and dot matrix output using this utility package.

This metric utility is available from Gold Disk through major bulletin boards including CompuServe (ID :: 73657,2104), BIX (ID : gold-disks), and People Link (ID : gold*disk). Registered *Professional Page* owners may receive this utility by contacting the Gold Disk Order Department, P.O. Box 789, Streetsville, Mississauga, Ontario, L5M 2C2, 1-800-387-8192. There is a \$10.00 shipping and handling charge. Registered owners on Gold Disk's Extended Support Program receive

the utility free of charge.

For further information on this Amiga font metric utility contact Patrick Roscoe, Technical Support Department, Gold Disk Inc., 1-(416)-828-5636.

MOVIESETTER: WYSIWYG AMIGA ANIMATION - Gold Disk Inc. announces another first for the Amiga - *MovieSetter* - a true What-You-See-Is-What-You-Get animation program.

"*MovieSetter* is so incredibly easy-to-use, a novice animator is able to create action cartoon sequences, with full stereo sound, in just a matter of minutes," says Derek Grime of Beyond Graphics (Toronto). "This program approaches animation for the conventional animator's perspective. You move the characters and objects around your scene and actually watch your sequences develop."

The carefully-designed, simple-to-use interface makes *MovieSetter* an Amiga animation package of unprecedented speed. *MovieSetter* allows you to rapidly produce complex animation sequences of several minutes duration with only 1 Megabyte of memory.

Use built-in, professionally drawn movie-clip files, or create your own 32-colour images within the program. *MovieSetter* will also import IFF

graphics from popular Amiga programs including *Deluxe Paint II* and *ComicSetter*. Simply use the mouse to change positions of characters and objects over static or scrolling backgrounds. Generate sounds within the program altering duration, pitch and volume . . . even attach stereo sound to characters and listen to them move from one side of your Amiga's monitor to the other.

Special features such as colour cycling, playback at up to 60 frames-per-second and linear and elliptical guides help you create special animation effects. And full video overscan allows you to save feature length productions to your home video library.

"*MovieSetter* allows amateurs to produce professional quality results, while offering a classic approach to animation that will attract professionals," says Kailash Ambwani, Gold

Disk President. "Home users, educators, hobbyists, communicators, and even professional animators will enjoy using this dynamic and extremely versatile package."

MovieSetter will be released in October, 1988. List Price \$99.95 U.S., \$124.95 Cdn. Requires: Amiga with minimum 1 MB memory, 1 drive.

SPECTRASCAN - A major breakthrough in pre-press colour image processing has happened on the Amiga with *SpectraScan*.

The *SpectraScan* package takes full advantage of the powerful Sharp JX 450 scanner. Software controlled variable screen densities, edge emphasis or dulling, thresholding, and user-defined colour maps are selected with the click of a mouse button.

This incredible package allows Amiga desktop designers and publishers to store images in four settings: 1-bit monochrome, 3-bit in 8 colours, 8-bit true grey scaling, and 24-bit planes offering an unprecedented 16 million colours.

Combined with the mechanical and four colour process separation capabilities of *Professional Page*, this advanced colour scanner support offers the total pre-press colour processing solution on the Amiga.

SpectraScan will be available for use with *Professional Page* and the Amiga early in 1989.

Nathan Cochrane (centre) of Computer Mart no doubt preaching the virtues of Superbase.



Notepad

Special Report : World of Commodore Show

For further information contact: Burton W. Robson, Gold Disk Inc., (416) 828-0913

Perry Kivolowitz, ASDG Inc., (608)273-6585

Commodore Computers, (02) 427 4888.

Other new products appeared from numerous suppliers including:

BEST!

This is the complete BEST package, called *BEST Mini* (rec. ret. \$295), with limited file sizes. The system allows both 25 Debtors and 25 Creditors, 55 General Ledger Accounts and 150 Stock Items. Users can upgrade to the full package as files are compatible by paying the difference between retail values. *BEST Mini* MS-DOS version is available ex-stock, the Atari/Amiga version should be available in October.

BEST also announced the availability now of *BEST Version 2* for \$495 (rec. ret.) However, *BEST Version 4* (\$595 RR) is a new version incorporating arguably the most flexible invoicing and the best sales tax reporting system in Australia. Existing data files will automatically transfer to this version, with no data loss. This version will be the BEST flagship with a host of new features including new low cost stationery as well as a manual and ring binder in top quality vinyl. *BEST Version 4* is also expected around October 1988.

Stationery for both the US and Australian versions will be available at lower prices to all registered users, at each product release date.

An amnesty for purchases of the US version was also de-

clared for a fee of \$195. Also just around the corner is *BEST Budgeting* (\$99.00 rec. ret.) and *BEST Payroll* (\$99.00 rec. ret).

To order telephone Don or Joyce on (02) 816 3700 or fax your order through on (02) 817 4129.

Software for the handicapped

Cerato Association Inc. Software have a range of programs specifically designed for people with intellectual disabilities. To date Cerato has developed 16 programs which are now available for sale. These will benefit both the individual student and the teacher.

Cerato is a nonprofit, Government sponsored organization, funded to produce computer programs that will enhance the independent living skills of people with intellectual disabilities. Their programs provide an image enhancing learning context where students can work independently at each lesson. Also, effective individual instruction based on task analysis is provided and allow the teacher to individualize the lesson for each student.

All the programs accord with Department of Community Services and Health policy and the spirit of the New Disability Services.

Cerato chose the Commodore Amiga computer range. The Amiga provides the

unique features that are necessary for a Cerato program such as speech, colour graphics, large data storage and a touch screen.

Cerato can provide the total solution from the fully documented software to any hardware you may require together with In-service Training for staff and students.

Additional information and appointments can be obtained by writing to:

The Project Co-ordinator, Cerato Association Incorporated, P.O. Box 849, Geelong, 3220, Telephone (052) 48 5758.

Artscape - training

Artscape Studios are a professional computer graphics organization which specialises in computer aided communication and Amiga instruction and are currently of-

fering the following Amiga Tutorials :-

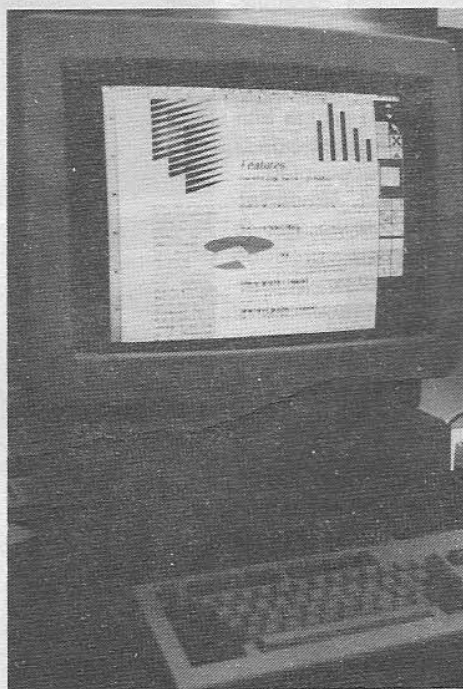
- 1) **Familiarization** - for the new user, covering Workbench, CLI and a kickstart with whatever software you have purchased with your Amiga.
- 2) **Deluxe Paint II** - intensive coverage of *Deluxe Paint II*.
- 3) **Sculpt Animate 3D** - raytracing techniques and three dimensional object and animation creation.
- 4) **D.Paint/Director** - creation of page flipping animation/slideshow presentation.
- 5) **Digi-View** - image digitization and global and specific editing of images using packages such as *Digi-View*, *Pix-mate*, *Photon Paint*, *Digi-Paint* and *Deluxe Paint*.
- 6) **Design Your Own Course** - Call Artscape Studios to discuss your needs.

Classes consist of two students and all tuition is with hands on experience. Call instructors Graeme Whittle and Lai Tjiyan for more information on (02) 977 1829. There you are guys, . . . how's that for a plug.

GP-Term

Hiding in one corner of the Commodore stand was the ever smiling Greg Perry demonstrating the latest version of *GP-Term*. The program now incorporates additional features in the area of transfer protocols, and looks set to become a very strong influence in

Professional Page running on the super large Mitsubishi screen.



the communications software arena. For details on order contact GP Software on (07) 366 1402. Recommended retail is \$99. Special deals may be available with a modem.

MAST Technology

Showing off their Tiny Tiger in the raw, RAM expansion and other goodies, kept them busy throughout the show. Norm Jackson is providing much of the input and design on these new products, and as usual, they are well thought out reliable products. By the way, Memory And Storage Technology (02 436 2976) is also up and running in the USA, and doing well at that. Congratulations guys. Few Australian companies make it over there, and we wish you all the best.

X-Specs 3D

Computermate didn't make it, as originally listed in our show guide. However, their new wonder product called *X-Specs 3D* did, on the United Computers Stand. So don't blame us for the change... they were there. How could you miss them?

Hot Disk

"Er... would you mind leaving please lady... I think you're in the wrong suburb." The Commodore executive may have used different words, but the result was the same. The lady from *Hot Disk*, a new disk magazine for those partial to a little nudity, made her way to the exit. Outside she sold a number of copies to unsuspecting IBMers, who then had to promptly purchase an Amiga to view the contents. And the number to ring?... Sorry, guys, this is a family magazine. Enquiries to:- Hot Disk, PO Box 751 Manly. Single issues are \$20.

Amiga-Live!

On show for the first time at the WOC Show, issue one hit the streets. Better late than never, we said. Better never late. And without further ado, they sold like hot cakes, receiving all the success deserved by this new fab publication on a disk.

Amiga-Live! is our own Amiga maga-

zine on a disk that actually looks like a magazine. We managed to cram around 35 screen pages onto the first disk. The next issue will be even better, with more behind the scenes news, down to earth interviews, and hard hitting editorial. We are accepting orders now for the Holiday edition, to be published mid-November. Call (02) 817-0011 for details.

Wrap-up

So, that was the World of Commodore for 1988. Another is already being talked. This time Commodore hope to get a few more of the details right - like the visiting hours, and opening days. A weekend time would be great, and evenings are a must. Here at the *Review* we particularly like the style of Ami-Expo in the states.

Tom, from Microcomputer Spot, will be reporting on the latest US edition on this great expo next month. So stay tuned!

Other News

Virus Infection Protection

Discover Software International announces a breakthrough in viral protection. Can it be they've come up with something better than our own \$8.95 Anti-Virus Disk? They think so. Judge for yourself. Here's the blurb:-

Virus Infection Protection (V.I.P.) is a much needed and cost effective preventive solution to viral disk infection. "You've heard the expression, 'an ounce of prevention is worth a pound of cure', well that's *V.I.P.* in a nutshell," Rick Ross, president of Discovery Software International said. "*V.I.P.* works like a vaccination to safeguard a user's entire library before a virus hits."

Viral disk infection occurs when short programs infiltrate a disk's boot sector and copy themselves onto new disks, overwriting already existing code on the boot block. By the time a message from the virus appears, the software may have already been damaged. According

Update

Have I been a busy little bee or what?

I have so many new programmes that I really don't know where to start, but I think I will begin with some Amiga news for you.

All our Amiga books are now in stock including *AMIGA SYSTEM PROGRAMMERS GUIDE* and *AMIGA FOR BEGINNERS*. *AMIGA DOS INSIDE AND OUT* should be here within 14 days, as will *PROFESSIONAL DATA RETRIEVE*, or so I have been promised, which has been getting rave reviews worldwide.

We have just received three fantastic new games for the Amiga - *MORTVILLE MANOR*, a detective story with speech; *MACH III* with digitised music and voice and *SUPERSKI*, and by next month I will have another 4 or 5 new Amiga games to tell you about. By the way, please note that *EXPRESS PAINT* the new version 2.2 is now available and brilliant.

On the Commodore front we have 20 new C64 games in the fabulous Key-punch range which will be priced from \$19.95. I will tell you more about these next month, but some of the titles to whet your appetite are *STAR FIGHTER*, *SPACE GAMES*, *COMBAT ZONE*, *VIPER PATROL* and for the immoral amongst you - *ADULT POKER!*

On the educational and children's games side I have some brilliant programmes like *SWISS FAMILY ROBINSON*, *TREASURE ISLAND*, *THE WIZARD OF OZ* and twenty new educational titles for grades 3 to 7.

And on top of all of these we will shortly be releasing some fantastically priced business programmes, some of which are undoubtedly the best ever written for the Commodore.

Last but not least, in addition to *WHEEL OF FORTUNE*, *FAMILY FEUD* and *CONCENTRATION* we now have **!!? STAR TREK ?!!**.

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Notepad

to Ross, unauthorized data manipulation has occurred frequently on other types of computers.

Responding to a growing concern in the computer industry about the threat that viruses pose both to customers and manufacturers, Ross set the development of *V.I.P.* as a major priority for Discovery Software. "We must stop viruses from threatening the Amiga as they have done elsewhere," he added.

The broad appeal of the program is evident in some of its more impressive features, such as its intuition based, multi-tasking interface and high density data storage. In addition, *V.I.P.* is compatible with all Amiga models and operates in different languages, including English, German, Danish, French, and Spanish.

According to Ross, *V.I.P.* will spare users the expense and trouble of replacing their software or having it restored. "It will benefit the dealers, because customers often come to them first when they have virus problems. Also, it is going to benefit the software manufacturers, who are losing thousands of dollars through the destruction caused by viruses," Ross added.

Virus Infection Protection is available from Discovery Software International direct (some local dealers may have it). The suggested retail price is US\$49.95.

Still trying to judge? We're not. The program allows you to archive boot blocks. Good idea ... but it's already been done thanks to Dutils. And as for protecting disks from future infection, System Z on our

Ant-Virus Disk II does the trick.

New Anti-Virus PAK

Here comes the cavalry! There we were on the brink of releasing an update to our own Anti-Virus collection when an all singing, all dancing version ready to roll, arrived at the local post office.

And at last, an Anti-Virus program that does more than fix infected disks. System Z Detector actually stops new viruses from breaking loose. It is just one of the dozen programs included on this new disk, which was compiled by the Alliance - to whom we are eternally thankful.

How does it work? System Z installs onto your boot disk, and automatically checks out the scene when you power on. Future warm boots are accompanied by a flash of colour and a brief tune - letting you know that all is still well. Insert a virus infected disk, and a requester appears letting you know about it, with the option to install the disk, or ignore it.

Example text from all known virus strains are included as well as warnings about future versions. This disk has got to be the complete answer to getting rid of the latest outbreak of DASA, Byte Bandit and friends.

And don't think you're immune! At the World of Commodore show, our computer managed to pick up three virus strains - two of which we hadn't yet seen. It happens quickly! Before long it had spread to a number of valuable disks - and important data was lost. That was before we

got System Z on our own Workbench.

SCA was a pain, but these new guys are plain ugly. They literally destroy hard work. Now that is sick. Why don't these mishaps of the computer world crawl back under whatever rock they came out from, and stay there!

If you'd like a copy of the Alliance disk, it's now billed as our official Anti-Virus Disk II. Updates are \$5, and the disk price remains at \$8.95 plus \$2.00 postage. Cheques, Bankcard or Mastercard accepted. Call (02) 817-0011 to order, or mail to Prime Artifax, 23 Bonnefin Rd, Hunters Hill, 2110.

By the way, other programs on the disk include: Bootcontroller 1.2, Dutils 1.1, Tristar Killer 1.1, SCA Protector, Viewboot, Odin Killer, FIG Killer, ASS Anti-Virus, AIDS Detector, Blizzard Protector and Check File Maker.

1.3 Update

A world-wide release of 1.3 was planned to happen in early October. However, at the time of writing, the manuals were only just making their way to Australia, so we expect the release will be early November.

Despite initial news to the contrary, there will in fact be a ROM upgrade (for Kickstart 1.3) available from COMM-CARE centres, for a cost of around \$80. Once again, only really an essential purchase for A2000 owners with the 2090A auto-boot drive controller.

We are told that A1000s will get Kickstart on disk. This will enable autobooting from

the recoverable RAM drive - greatly speeding up recovery from that interminable guru.

Dual Format Amiga/Atari disks

A new development among European software companies is the release of programs in a special dual format disk. These programs are only just starting to reach our shores. Initial reports are that they are very unreliable and if you happen to get one - make a backup straight away. The problem is, how to make a backup!

This format is one of the toughest to duplicate. Not fair! And to top it off, some Atari games are going cheaper than their Amiga counterparts - even though the disk and documentation is the same. Work that one out.

Neriki clean out!

Let it be known that things have changed at Neriki. A few cobwebs have been dusted out, new products are hitting the market (see review in this issue), and the mishaps of yesteryear are being explained away out in the open.

Overseas, through the distributing arm of Telmak, Neriki products are starting to make an impact. Next month we'll have an interview with the guys behind this new wave of success - and perhaps they can explain past mistakes for others to learn by.

The shifts and shuffles include a goodbye to Craig Schuettrumpf, and hello to Kevin Dennis, previously with Polaroid, now managing director.

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Commodore Germany - Interview

IN THE LAND of in-house Commodore development there are two teams.

One is located on the East Coast of the USA and the other in Buromaschinen, Germany. Managing the German operation is Dieter Preiss. I ended up interviewing this towering gentleman only hours before he headed home, amidst the chaotic aftermath of the World of Commodore Show.

As the rest of the WOC stands packed up, Dieter gave us a run down on what's happening in Germany. They concentrate on the Commodore PC range and the A2000 system add-ons such as the bridgeboard. It all started with the PC10 about two years ago.

For brevity CR stands for *Commodore Review's* editor Andrew Farrell, and GE for German Engineer, Dieter Preiss. His answers had to be expanded from brief notes - so they're not word for word - but I'm sure you'll get the meaning.

CR: What new projects are the German team currently working on?

GE: Transputers, the PC 60, and a new bridgeboard.

CR: Can you tell us more about the transputer? (See last month's *Notepad* for an explanation of what they do/are. - Ed)

GE: Yes. It is to be officially launched at the end of October. Helios (the operating system developed for the transputer) is up and running in a stable condition. It was developed by the company Perihelion Soft run by Dr. Tim King who wrote AmigaDOS . . . he did a lot of the work. It is very new.

The only reason we have not released the transputer sooner is due to lack of software that would take advantage of it yet. So, one year ago development of the operating system software started. In one

year we have it all working.

CR: That's certainly a very impressive achievement. How will the transputer work with current applications?

GE: Using the transputer will replace or improve some current applications such as databases or where huge power for number crunching is required. For example in image processing. A single chip cannot cope with the work load as well as 100 chips.

(The basic principle of a transputer is parallel processing - with enough transputers connected you could well end up with more number crunching power than a small mainframe.)

CR: What about applications involving networking? How will this work?

GE: To do networking you simply use the PC bus to draw power and also as a mechanical holding device. A root board would then sit in the 2000 side. Connection between each transputer is via a direct cable. A transputer in a different Amiga (you can link them) is viewed the same as a transputer in the same machine.

Potentially this could give you a maximum of 170 Mips using 16 transputers at four transputers per machine and a 17th acting as the root.

CR: . . . and Helios would handle all the handshaking between each computer and each transputer?

GE: Oh yes! Helios is a whole new system. It can share CPU's. The biggest difference is that it thinks in parallel. It can spread tasks over several CPU's or share a single CPU. You see Helios thinks in objects. Objects may reside on one or more transputers in a network. *(An object is just a simple task).*

Various objects may intercommunicate via channels - logged channels. Helios handles all the routing.

Using FFT (Fast Fourier Transformation) the processing takes place at 100 Khz. Each additional transputer in the network may be up to 30 metres apart. Beyond that, speed will start suffer. But it is still possible to go up to 500 metres.

Another limiting factor is propagation of the cable. Using optical links makes this less of a consideration - they are very reliable and very fast.

Helios looks at the pool of transputers available rather than actual Amigas. The computer itself is just a point of access.

It looks at who is idle and balances the work load. You can set minimums - rights of use - private sections - access permits and so on. Helios will pass tasks on to relevant transputers.

A job that would take two hours on mainframe, or a day on PC would take a few seconds using transputers. Using 45 transputers a ray traced image of 1K x 1K size could be processed in from 5 - 45 seconds.

CR: Amazing stuff! . . . What's happening with bridgeboards? What improvements can we expect on the new AT version?

GE: There are improvements. Text output is faster, tasks may be called from one side to the other. For example the CLI may call a PC task, or the PC may call an Amiga task. So a user can use the services of one side from the other side - there is full handshaking between both sides.

CR: So we have a a true hybrid operating system - passing data in real time program opera-

tion.

GE: Yes, the service called is also just an abstract object - called by a name - regardless of where the service actually is - it is user transparent.

Also the PC side can now boot from an Amiga hard disk and the PC can use the mouse.

CR: What future plans are there for this type of technology?

GE: ...in the future we will have new processors - 286 and beyond 386... and then we go more than 16bit.

CR: How does the 68020 board work?

GE: It overtakes system control completely. It will work fine with WB and provide up to four times faster speed increase.

CR: What about the A3000? Is it really under development?

GE: ...yes, based around the 68030, but it is still a long way off. We have

many goodies in the engineering stage. Work is being done - but specifications are still being hammered out. We want to maintain compatibility. We're looking for bigger performance that still enables old software to work.

CR: Why did Commodore drop the A1000? Will we see a new version of this machine?

GE: The A1000 had many market hassles. It was priced just out of the home buyer's reach. It was a compromise that was not so good. That is why we have the A2000/500.

We now have a low cost and a high cost solution.

CR: Can we expect to see products from Commodore to expand the A500 externally?

GE: No. The A500 is as is. It will get third party support only.

Dieter actually spent most of the interview mapping out on paper just how

transputers talk to each other. I followed most of it - he is very good at explaining these things. When we get our hands on one of these brilliant devices, we'll go into it in further detail.

Transputers look set to change the face of computing in ways we cannot begin to imagine. The sheer number crunching power that will become available is totally unprecedented on a price/performance basis. For home computer users, the transputer may be the sort of thing that makes the Amiga a machine that will last a long time. Good news for all that hard-earned outlay.

Imagine user group meetings where members join machines to produce animations in a few second that would take a few hours on their own!

Thank you, Dieter Preiss! We look forward to seeing you at the next World of Commodore . . . you will come back, won't you? We need someone to tell us what's going on. ■

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LETTERS

TO THE EDITOR

Mini Office II/1541 disk drive problem

I own a Commodore 64, and I have a certain problem. I have made several lists using *Mini Office II*, of my software, books, etc. *Mini Office* then sorts these into alphabetical order. I can then print these listings out on my printer.

However, the printouts are only in one column, leaving the rest of the page blank. What I want to do is print these records in columns on the same page. Can this be done? Or can I get any software to handle this type of format?

One other problem is my 1541 disk drive. Sometimes the drive makes a loud humming noise. To stop the noise I usually give it a bang, and this stops it! What causes my disk drive to have these symptoms? I do not leave the disk drive on for long periods of time, and have no problems reading or writing using the disk drive, so should I still get it checked?

I'd be most grateful if your could solve my problems.

**Darren Lee
Canberra**

P.S. In your August issue there was an advertisement by Commodore for a Viatel adapter for \$79.80. I ordered this some weeks ago, and still haven't received it yet. Is there anyway I can get in touch with Commodore to see what happened to my order?

You can contact Commodore on (02) 427-4888. As for your drive, it sounds like it may need some lubrication. Try using graphite if oil worries you.

It is possible to place a list in

two columns. You would need to output your database as an ASCII file (SEQ file), and then read it in using a small BASIC program which reads two records and then prints both on the same line. There's no quick and easy solution I can think of outside of that. Any ideas, readers? - Ed

Printing GEOS with a Citizen 120D

In reference to Jennifer Widders cry for HELP! *AC & AR* Vol. 5 No. 6 re "Printing GEOS with Citizen 120D". When one makes the work disk according to the *GEOS* book, a copy is made of the Applications disk.

There are no printer drivers on this disk. Just pop the system or system back up disk in and drag the Comm. Comp. icon down to the border, close the disk, reinsert the work disk and put the icon up on the desk top and follow the directions.

When you finish your typing just open "file" click on "print" and away it goes after a short delay whilst the computer organizes itself. The *GEOPaint* also prints O.K. if you don't use the right 3/4 side of the page in your layout. The Citizen 120D can't cover this part of the page in the Paint module.

Make future work disks from this one. The only thing I couldn't print with the Comm. Comp. drive was the part on the systems disk which said "Read Me". I copied it to a work file and found Epson JX-80 printed it.

One last thing, the manual doesn't tell you to put the disk back in that you just copied the file from

to drag the icon back on the desk top. I found it pays to do so. I would be pleased to pass on to Jennifer a work disk that works on my Citizen if she wishes.

**T. Woodwell,
Garran, ACT**

Mr Woodell also suggest that you read the readme docs on the system disk. Many people miss this important item. I agree! Most of the questions we get over the phone could be answered if people persevered with the index, and read the manual first. - Ed.

What's the difference?

Could you assist me in the following matter? If not, perhaps one of your staff can, or even give advice as to whom I could write to.

I require information as to the differences between the Meridian software M64 and the new M128 (General Ledger and Debtors). I bought the five disk package over three years ago and it's proved quite adequate for our business. Both myself and my manager own C128's and feel the M128 programs should be an improvement over the 64 versions.

I have contacted Microcomputer Spot and though being polite, they were unable to help as no one there had run or seen M128 running.

I look forward to your reply and trust this doesn't take too much of your time.

**E. Johnstone
Hobart**

We're not sure on the differences there, however there is an alterna-

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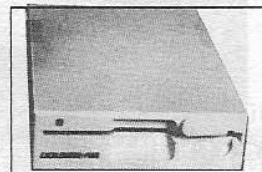
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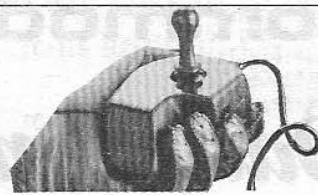
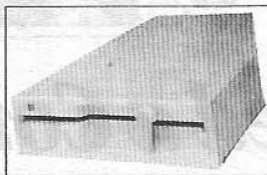
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Nov. 88

ive package that's just been released which is far superior. Most M64 users with C128's have been upgrading to this program. It's called Sherlock and Watson C128 Super Base. (See "C64'ers" on page 4. For information call (043) 244 929.)

Pen Pal

I would appreciate it if you would include my name in your letters column as wanting pen pals who own a C64. I have a disk drive and printer and I am interested to hear from anyone who has anything to do with the C64.

Simon Harpley
177 Deboos Street
Temora N.S.W. 2666

AMIGA Letters

Amiga vs Atari!

Atari's brochure is only slightly incorrect, the Amiga 1000 has a frequency response max. of 7-8 kHz. Now I am not an expert but I will try to explain.

The Amiga 1000 can handle a sampling rate of approx. 16 kHz but the physics of it state that the frequency rate is half that of your sampling rate. Therefore about 8 kHz is max. frequency rate.

One of the minor changes on the Amiga 500 and Amiga 2000 series is the ability to switch off one of the filters (indicated by the power LED dimming or switching off) allowing the Amiga to have a max. sampling rate of about 21 KhZ (so I am told) this allows a max. frequency of about 11 kHz.

The Atari brochure is suspicious by the way it tippy toes around the Amiga to bludgeon the Macintosh to death. But it specifically attacks the Amiga by stating "The ST includes a three voice sound chip with a range from 30 to beyond the

20,000 Hertz. The Amiga and Macintosh are limited to a maximum of 7000Hz."

But it neglects to state that the Amiga series has a four channel STE-REO processor and can achieve its max. frequency rate while using the stereo capabilities of the machine. Also each of the Amiga sound channels can have an independent customized wave form.

The other bit they forget to mention is that although it is nice to a frequency in excess of 20 kHz (if you can hear it, human hearing stops at about 17 kHz, at \$799 it is an expensive dog whistle) to do this you would require a sampling rate of 40 kHz now roughly translated that means 40 kB of memory per second.

On a 520ST (512k) that means max. 12.8 second of sound (providing you can do it without putting a program into memory). Gem memory expansion for it, you say, still a grey area for any computer with the current ram shortage, but even blacker when the machine isn't intended to be expanded.

What's the advantage of more kHz? Simply put, the more khz the finer the sound quality. To give you an idea, a compact disc player has a sampling rate of about 44 kHz, I believe.

Anyway keep the Amiga section growing. I await to see your new format.

Patrick Ryan
Computerscope Blacktown

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Entertainment Roundup

by Andrew Farrell

HERE I WAS wondering what to write about, when in the space of a week, over twenty new titles came to my attention. We also caught up with a few new titles we had been expecting for a while, along with preview copies of several others.

As the Olympics fade out of the T.V. ratings battle, a veritable mass of track and field events, swimming, climbing and just about any other imaginable sport, made its way onto our screens. Just in time for summer too. This month, Eric Holroyd reviews a few of these games, whilst Phil Campbell takes a front row seat to the Cinemaware's latest releases.

Only one other company has followed the movie type scenario to the full, and that's Infogrames. Next month we have an interview with one of the main guys behind this company to see just where they're headed. Meanwhile, you can whet your appetite on the descriptions of *Rocket Ranger*.

C64 games are still being churned out by a few companies. Both the Amiga and C64 can expect to see a healthy array of fresh material in time for the New Year. So stay tuned for all the latest!

C64 - just released

Final Assault (Epyx, Questor) — Grab your spiked boots, cold weather gear, axe and rope and hit the slopes. Six different trails, with three difficulty levels, offer plenty of challenge. Graphics rate well with other Epyx games, although you won't get too much edge of the seat action, it can be pretty hard going. Reviewed in this issue.

The Games

(Epyx, Questor) — The Summer edition, just when you thought the urine testing Olympics was over, and the steroid doctors had gone back into hiding,

Epyx brings back the memories with yet another Olympic program. A whole string of new events. If you liked the others, you might as well have this one too! Full review in this issue.

Garfield

(The Edge, OziSoft) — From the original creator of this fluff ball comedian comes the computer game by the same name. Garfield stars in the "Big, Fat, Hairy Deal". It's an action adventure of sorts, that takes a while to get into. The instructions are a bit scarce, but graphics, music and antics are tops. Full review next month.

C64 - coming soon

A few other titles you can expect soon include *Bubble Ghost*, *Power At Sea*, *Salamander*, *Soldier Of Light*, and *Star Trek - The Rebel Universe*. Watch for our special summer holiday guide to the best C64 games next month.

Amiga - just released!

By the time you read this, *StarGlider II*, and *Impossible Mission II* should both be hitting the streets. Well, we played *StarGlider II*, and it's fabulous to say the least. Graphics are fast, and action is furious. You can now fly along huge tunnels through the planets centre, or venture into outer space and explore other planets. And there's all the above ground action too! A top rating program - full review next month.

Others to watch out for are *Rocket Ranger* and *Skychase*. *Skyfox II* is also about - but it ain't that good, folks. Graphics are chunky, jittery and animation is hard to like. The jet handles more like a boat. Another clunker on its way is *Offshore Warrior* from Titus, the same guys who did *Crazy Cars*.

With my programming experience, I would say they've used the same routines as in *Crazy Cars*, but different graphics! Cheap thrills, guys - how about some real games. Don't waste your money folks. Well, this month is a little short - because of the W.O.C. report (something had to be shorter!). Next month we'll have a real big entertainment roundup.

Hot Rumour : Not only is *Out-Run* about to be released, but a second version with more improvements such as parked cars, contraflow systems, and oil slicks, is set to follow. It's called *Outrun Europa*. US Gold also have a winner up their sleeve with *Thunderblade* - more on that one soon.

Amiga - coming soon

Elite (Firebird, Questor) -- This one promises to be a bit hit. The C64 version was a huge success, and PC versions have since added filled graphics rather than the original vector drawings. No doubt the Amiga version will follow suit. A top class strategy/space adventure/trading game.

Take your pick. Most of them are excellent pickings. There's a few clunkers though. Check out our reviews in future issues. Starting from January, we'll be using the multi-view game write-up. This method was pioneered by Zapp magazine some years ago.

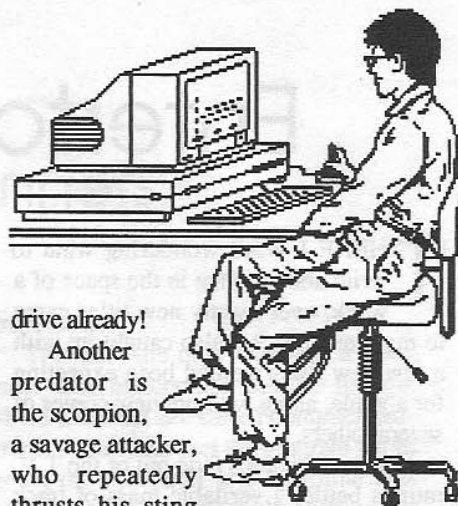
It can be a real hassle getting a game in front of several people in order to get their opinions before the month's out - but we're going to give it a try. The idea is, if you tend to agree with one writer more than another, then you have an opinion you can relate to. Since games are very much a matter of personal taste, this will enable our reviews to be more objective. Hope you like it! ■

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ECO

JAMIGA

by Tony Smith



drive already!

Another predator is the scorpion, a savage attacker, who repeatedly thrusts his sting into you when he is lucky enough to catch up with you.

The animation has to be seen to be believed. The bipeds particularly have a very strange gait, like miniature John Cleeses going around with their arms swinging back and forth most realistically - for vector figures they really have personality.

Sex rears its ugly head and you must mate before you die. Approaching another creature, you select the sexes icon and as the creatures blend you are transported to a blueprint type scene with a large DNA molecule and three views of your critter on grid screens. You are asked to

THE VERY FIRST thing I did when I finally obtained my Amiga was to spend three days playing all those fantastic games which I had only heard about.

Then I thought I would just duck in and sort out this CLI thing - how wrong I was. Nobody said that you couldn't use spaces in file or disk names. On the fourth day I figured that out, after eight million 'invalid file name' messages.

But the thing that caused the greatest delays to my new learning scheme was a game called simply *ECO*. From the producers of many fine games for the Commodore 64, Denton Designs, comes this amazing piece of software.

The game loads up and you are blasted by some incredible music which, in my case, came pouring out of my old ghettoblaster, resurrected and now connected to the audio output ports on the back of the new machine. With the expansion module in place this particular game would not load. I tried 'nofastmem' but the disk is self booting so the ram is back after the reset, out came the extra memory and in went *ECO*.

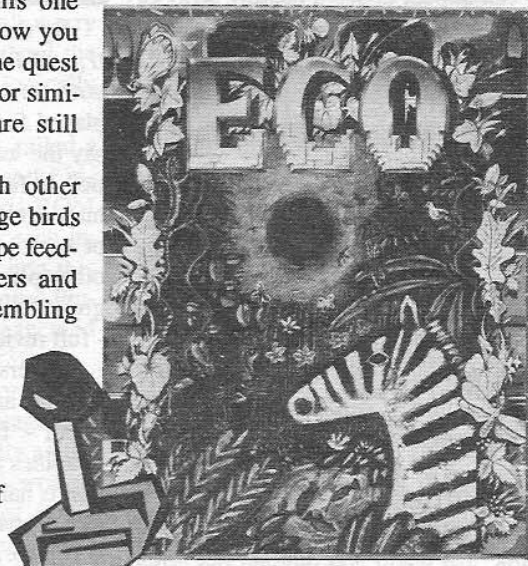
Following the music comes an intro screen with options for turning on and off the music, selecting sound effects, a help option and starting the game. I took the plunge and selected start. I was not prepared for what happened. A DNA molecule was spinning on the screen and a picture of a planet appeared with the word 'temperate' under it. As the spin-

ning molecule came to a halt, a spindly-legged insect appeared on an alien landscape with strange plants and pyramid shaped rocks here and there.

The mouse moves the pointer in the icon section of the screen, there are icons for forward and backward, left and right movements, and on another icon picture there is a symbol of a knife and fork, obviously for food. Pointing to the food icon, the critter turns until it detects food, wormlike creatures sticking out of the ground. Approaching the worm, your critter dissolves it and the strength indicator rises.

Flames licking at the bottom of the life indicator show your age, the higher the flames the less time you have left. Having obtained food, another icon appears on the right hand control opposite the food symbol - this one stands for the two sexes, so now you can breed! The next part of the quest is to find another of the same or similar species, that is if you are still alive.

This world abounds with other creatures, flying insects, strange birds which strut around the landscape feeding on the worms and spiders and slugs. Weird quadrupeds, resembling dogs, some large, others small. Pterodactyls glide through the skies and lanky bipeds roam aimlessly often stepping on poor defenseless ground dwellers. If I had a dollar for every time I have been stepped upon, I would have my second



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select a gene to alter and this seems random in its effect. Following gene selection you can change the position of the gene in the DNA molecule.

The effects of this are immediately obvious, by clicking on a 'dice' icon your critter could change radically or may change only slightly, you may be fitted with wings (handy for avoiding the clumping feet) or maybe a larger carapace

or biting jaws.

When you are satisfied with your changes the return to game icon is selected and off you go with your new features. Sometimes you can choose to return as a plant but this ends your life as it is a retrograde step. (Although if you are frustrated it can be restful to just stay rooted to the spot and watch the world go by.)

Invariably death overtakes you and you are given a post mortem result and a score sheet with your statistics on it, how many generations, how many meals etc.

This game has kept me away from the CLI for much too long but you just have to have one more go.

Youngest son Jim came home from school and said "Are you still playing that game, Dad?" From someone who has just inherited dad's old C64 and can't stop playing the Giana Sisters, that's a real put down.

I would recommend this game to anyone - in this scenario you can advance from a lowly slug to a speedy, funny-walking biped. That is if you are lucky enough and nimble enough to survive. ■

Final Assault *by Eric Holroyd*

**JAMIGA
c64**

ET IN THE European Alps, this is a mixture of arcade action and adventure simulation in which you play the role of a mountain climber attempting various peaks.

Programmed by Infogames and published by Epyx, it was written by people who know Europe and the mountain regions so the situations in the game came over as being quite realistic. Crevasses, snowy slopes, rocky cliff faces, glaciers etc. They're all there waiting to test the climber's skill.

When starting out you get a choice of practising on the training course before attempting one of the six courses proper. I didn't do this and quickly came a cropper as the courses are treacherous and need preparation. Maybe it was because I chose Intermediate instead of Beginner when selecting the Terrain. There's an Advanced option too but that's a long way ahead for me yet.

All good climbers carry their gear in a rucksack and in the Final Assault you equip yours from a list of over 50 items to help you survive. Lots of food items like tea, sugar, meat and beans etc. Clothing such as woolly gloves, socks and mittens; survival gear like a snow

shovel, stove, gas cylinder and so on are all on the list along with aftershave, champagne, a stereo and even a microwave. One obviously needs life's little luxuries now and then, but don't forget you have to carry the rucksack all the way and it'll only hold so many things anyway . . .

The action happens on a split screen, half arcade style action (with somewhat blocky graphics on the C-64 version I reviewed) and the other half showing what's in the rucksack, also what you're carrying separately by way of climbing equipment: pitons, ice pins, ropes, chocks etc. Temperature, time of day and altitude are also shown as well as the physical condition of the climber. There's certainly lots to think about when you're climbing and judicious use of your selected gear is a must.

I found this to be an interesting game and due to the variety of situations I think it would have some lasting interest. Background music is nice and there's a Save Game feature to let you carry on climbing another day.

The six courses have three difficulty levels (as well as interesting names like Knucklehead and Footloose!) If you plan



properly, pack the rucksack with the right gear, choose the right departure time and season, then throw yourself at Mother Nature's feet you might do better than I did when making the Final Assault and finish up by planting your personal flag at the top. ■

**RRP: C-64 \$34.95 (disk)
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AMIGA
c64

the THREE STOOGES™

LEONARD MALTIN, Movie Reviewer of *Entertainment This Week* fame, claims that the world is made up of two kinds of people - "those who laugh at The Three Stooges, and those who wonder why." Perhaps so. I always thought that the two kinds of people in the world were the simple fools who thought there were only two kinds of people in the world, and those who did not.

Love'em or hate'em, The Three Stooges are back. Having conquered Vaudeville, Movies and T.V., Larry, Moe and Curly are launching a computerised comeback in the latest "Cinemaware" program for Amiga and Commodore 64 - and even IBM computers. Cinemaware programs claim to be "interactive movies" - movie quality games in which you control the action. *The Three Stooges* almost makes the grade.

The opening sequence - which includes the best "sight gag" in the whole game - is excellent. The digitised title graphics are an exact replica of their movie counterpart. Sound effects from the Stooges have been digitally recorded too - including their original voices uttering such mem

orable lines as "let's scam."

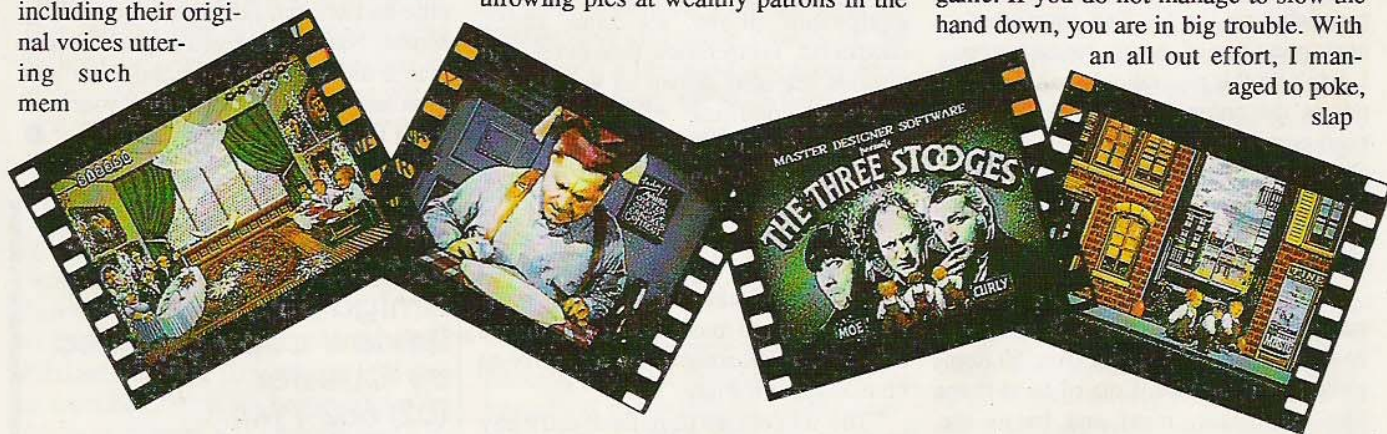
Play begins outside a run-down orphanage. The evil banker has foreclosed on the mortgage, and the Stooges volunteer to save the residents - a sweet little old lady and her three beautiful daughters - from eviction. They have 30 days to make \$5,000. The action pivots around a "map" of six icons arranged across the screen. A hand moves back and forth at ever increasing speed - press the fire button to stop on the one you want. From here, you move to one of five "arcade style" games - or, if you are unlucky, get your fingers caught in a mousetrap. Four snaps of the trap, and the game is over.

There are also "bonus" and "trivia" icons - just like an animated combination of *Monopoly* and *Trivial Pursuit*. The arcade style games are brief - only 60 seconds at a time. This is frustrating, because they are fun. In the Pie-Fight sequence, for example, you earn cash by throwing pies at wealthy patrons in the

"Hoiti Toiti Club," a swank restaurant. Using the joystick, the aim is to make each of the Stooges duck or throw at exactly the right moment.

The Hospital game reproduces a scene from the classic movie *Men in Black*. In effect, this is a simple "car race" - control the Stooges as they race through the hospital corridors avoiding nurses, patients and other obstacles. Your joystick becomes a steering wheel, accelerator and brake. The animation in this sequence is smooth, and I would have enjoyed playing it for much longer than the mandatory minute. Unfortunately, there is no choice - back to the control screen, and pick another icon.

Martial arts make an appearance in the "Slapping game." This time, you are not playing for cash. Instead, if you do well you can slow down the hand pointer on the control screen. In practice, this sequence is the key to success in the whole game. If you do not manage to slow the hand down, you are in big trouble. With an all out effort, I managed to poke, slap



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and kick Larry and Curly often enough to slow the game down a little. Again, joystick and fire button control all the ac-

tion.

The Boxing sequence features nice graphics, but has absolutely nothing to do with boxing - and I have not yet made it to the cracker eating contest. The sequence is illustrated on the box, and looks like fun.

The Three Stooges is a strange game. But what did you expect? It is a hybrid - part board game, part action. On my Amiga, graphics and sounds were great, but the game play was stifled by constant disk access. Every section is loaded indi-

vidually, and it seems like you spend almost as much time waiting as playing.

Increasing the time allowed in the action sequences would make the game much more attractive. IBM users who install the game on their hard disk will be much better off, though CGA graphics do not really do justice to the game. What you really need, of course, is an Amiga with a super-fast hard disk. As we all know, there is no such animal. Such is life. ■

King of Chicago

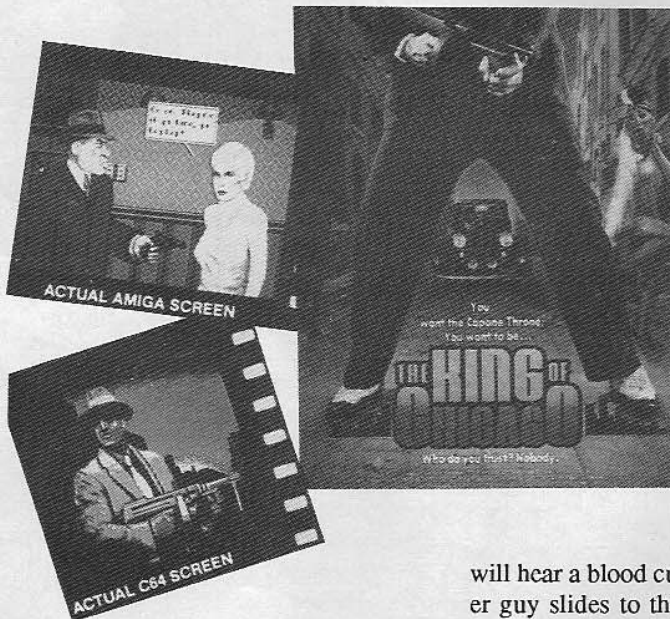
by Phil Campbell



Chicago, 1932. Al Capone has finally been put in the slammer - 12 years in the state pen for tax fraud. Can you fill his boots? Have you got what it takes to become the new "King of Chicago"? Or will you wind up "pumped full of lead"?

If you've always been too polite to indulge your criminal desires, now is your chance to sample the gangster lifestyle. *King of Chicago*, the latest release in the famous Cinemaware series, is distributed in Australia by YPA Holdings (Ph (02) 899 2277). At present only available for the Amiga, this is a game with real panache.

Cinemaware do not produce games. Instead, they make interactive movies. Open the package, and you find two disks, marked "Reel 1" and "Reel 2". Insert them in your computer - without two drives you will definitely go bananas - and sit back while the titles roll by against a silhouette of the Chicago skyline. The effect is dramatic. By now, your mouse pointer has been replaced by a blowfly, buzzing around in front of the screen. Buzz up to the menu in the corner



of the screen, and select "Start the Movie".

You are ready to play the part of Pinky Callahan, a small time hood with big ambitions. And a remarkable resemblance to Paul Keating. With Capone out of the way, Chicago is wide open. All it needs is somebody with courage, brains and style to make the right moves. It's up to you.

This is a game of strategy and deci-

sion making, but there are action segments thrown in to keep you on your toes. Showdowns are dramatic - move your gunsight and press the mouse button before the other punk ices you. If you win, you

will hear a blood curdling yell as the other guy slides to the ground. Otherwise, the show is over, and the credits roll.

Naturally, it pays to have a quick trigger finger - but you also need good judgement. Should you give the boys a raise? If you are too soft, they may rebel. If you are too hard, they will probably bump you off. And what about Lola? Should you buy her that new Ford or not? She is as cold as ice - but if you treat her right, she can be very helpful.

At crucial points like these you are given a number of options on the screen.

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Review copy from YPA Holdings (02) 899 2277 Amiga RRP \$79.95

Choose the one you want by pointing to it with your mouse and clicking the button. Unfortunately, this is a silent movie - all the dialogue is printed in comic-book style text balloons. But detailed animation accompanies the text - the words are silently mouthed by the characters. Pinky's poor old momma even sheds life-like tears.

King of Chicago took two years to develop. And it is easy to see why. The graphics are beautiful - highly detailed, and evocative of the era. The music and

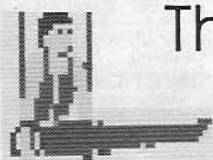
sound effects are excellent - the Honky-Tonk piano soundtrack on the Amiga version sets the scene perfectly. And incredibly, there are over 1,000 million different combinations of characters, elements and events.

Unfortunately, though, I completed the game in just three or four hours. Maybe I struck it lucky. Or perhaps I have the makings of an excellent crook. I was left with the taste of sherbet in my mouth - very pleasant, but a bit of a fizz at the end.

This is not something that happens often. In fact, the last time I got all the way through a computer game was back in 1983. That was *Neoclyps*, on the Commodore 64.

So will I ever want to play the *King of Chicago* again? Probably - I have yet to meet up with Tom Malone, my childhood friend who is now a cop. Nor Andy, the kid who supposedly hangs round headquarters. And what about all the scenes on the box that I have not even set eyes on?

This is a game I have to recommend. So far, it is the best Cinemaware release. It does exactly what it promises to do - it puts you in the picture. It looks great, it sounds great - but it's over all too soon. Just like Lola says when Pinky bites the dust; "He really had something - just not enough of it. ■"



The Games: Summer Edition

by Eric Holroyd

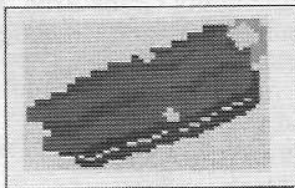
c64



OVER THE PAST few years the Epyx company has become the sports simulation leader with such titles as *Summer Games I & II*, *Winter Games*, *Championship Wrestling*, *World Games*, *California Games* (one of the hottest-selling titles ever, apparently, and soon to be released for Amiga).

In fact, *Summer Games* prompted me to buy the C-64 back in 1984, and when I loaded it up again for a bit of nostalgia after seeing this current one I was still knocked out by the graphics and action of it all. Epyx has maintained that high standard set then and in many ways has surpassed it with recent offerings.

This one, *The Games: Summer Edition* (there's also a Winter Edition, similarly priced) has been produced to mark the Seoul Olympic Games and in fact is endorsed by the 1988 USA Olympic Team. The packaging tells how former US ath-



letes helped to design the "incredibly realistic events", a description with which I do agree after playing through them.

The opening screen shows a map of Korea which is gradually overlaid with very well-done graphics windows showing local scenes to create atmosphere. Then comes the menu, an aerial map of the Olympic Village with icons of the events. Using the joystick you guide the pointer (a flaming Olympic torch) to select an event. By the way, the opening graphics, nice as they are, may be bypassed when loading simply by pressing the fire button.

Once again, the action is almost all joystick controlled and you need a good one to stand up to all the "stick-wagging" involved. I know it sounds like an ad for Epyx, but it really is a sheer coincidence that the joystick I prefer to use (both for

endurance and accuracy of control) is the hand-held Epyx 500XJ. (My favourite arcade games include *Emerald Mine* (*Boulderdash*) and *Footman*, and my best results on both have been with that stick).

The events are well done and are enhanced by the nicely presented manual which has a page of "Memorable Moments" relative to each of the events telling of their history, and some Olympic titbits too. The manual also has a bit of "Chalk Talk" or tips on each event which helped me to understand the niceties.

Summer Edition comes on two double-sided disks and each event is loaded separately when selected, so some form of fast-loader is useful. My trusty Cockroach TurboRom was compatible with



everything (as usual) and I imagine that a Fast Load Cartridge would be too, being made by the same people. If you don't have a fast loader it wouldn't worry you of course, it's just that with any disk-intensive software I'm more conscious of load speeds.



Diving was the event I tried first, and after following the instructions to make the diver's upward spring higher off the board (hold the joystick down just prior to him/her landing on the board) I was able to execute some quite acceptable dives. I didn't break any world records though.

Dives can be Backwards or Forwards with many variations like the Swan or Forward Twist and over a dozen others. The diver floated vertically in the water awaiting the judges' scores. His shoulders kept going under and it was most lifelike.

In Velodrome Cycling there's a choice of Tournament (for two players) or Computer Opponent for a single player and after selecting this you go straight into the action. The screen is split three ways, the right side showing an aerial map of the Olympic Velodrome with lighted dots showing the racer's positions. The left side of the screen is split into two (like *Pit-stop II*) to show each rider from the rear.

Manoeuvres in this event include riding up the banked slope to gain acceleration and "drafting" or slipstreaming your opponent. Each rider's "fatigue factor" is shown under the picture as a coloured bar so that you know how tired both of you are and can plan race tactics accordingly. There's much more to Velodrome Cycling than I'd thought until I played this one!

The Archery section asks you to imagine standing at one end of a football field and shooting arrows at a target on the opposite goal line. That's what Olympic archers approximate in the 90 meter event. In this one the screen opens a window in the top left corner to show first of all the degree of pull on the bowstring (you actually see a head and shoulders shot of the archer pulling the bow) then a view of the target through the bow-sight to take aim. After shooting you get a full screen shot of the target to count your hits (or in my case - the misses).

My favourite was the Uneven Parallel Bars where the female gymnast came bounding on screen and hit the springboard to bounce up onto the bars when I hit the firebutton. As I put her through her paces on the bars a blond female observer alongside the mat cheered her along. A window shows points as they're being scored along with a running commentary of the moves being made by the gymnast.

One of my manoeuvres finished up with a SaltoBackward then a HalfTwist before doing the Dismount whereupon the gymnast flung her arms in the air in the classic "applause pose" and she'd scored quite well. In my next attempt she finished up with what they called a SplatFall flat on her back and

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when I looked at the observer she had her head in her hands. Excellent attention to detail, I thought, and it's things like this that really make a good piece of software.

The other events are every bit as good and I've no hesitation in thoroughly recommending that you buy this one for your games library. ■



Diving



Uneven Parallel
Bars



Rings

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Marshall Bravestarr

c64

by Phil Campbell

EVEN THE CASUAL toy shop visitor will be familiar with Marshall Bravestarr. This six centimetre plastic hero has taken over where good old G.I. Joe left off - albeit half the size and twice the price, Bravestarr is even more popular than the action men of my youth. It may have something to do with the multi-media blitz that accompanies toys these days. Watch the cartoons, buy the toys - and now play the computer game.

Marshall Bravestarr is a cosmic cowboy - a laser toting Sheriff who patrols the deserts of New Texas on his android pony. New Texas is a mining planet, rich in Kerium ore. Naturally enough, the planet is "hard and unforgiving", and Kerium is the "single most important substance in Earth's empire".

Here we have the beginnings of a good story - and perhaps even a plot strong enough to hang a game upon.

Unfortunately, the Commodore 64 version of *Bravestarr* has failed to rise to the occasion. The game is boring, hard to control and generally indistinguishable from many other games of its ilk.

When the game has loaded from disk - a process which is mercifully quite fast in this case - you are faced with a screen divided into three panels. One panel shows the sun rising and setting on the horizon, quite a novel way of measuring elapsed time. Gameplay takes place over nine "computer-days".

The next panel displays a scrolled parchment map; a single building is marked in the centre of the map. This is presumably the place where the evil Tex Mex has imprisoned your old friend Shamen. It is your task to rescue him.

The remainder of the screen - the lower half of the display - is the playing field. This is where you shoot it out with the bad guys. A Jail, a bar, and numerous other buildings scroll by as you search the town for clues.

Desert dogs are constantly on the attack, as are the wicked henchmen of Tex Mex. Well placed shots from your blaster usually clear your path, although at times you are forced to jump over obstacles.

This is supposedly a game where wits are useful too. From time to time you will find objects on the ground, which can be collected and exchanged for money at the Exchange Office. A few well placed bribes at the Bar will then provide you with all the information you need to find the nasty Tex.

Now, I am the first to admit I am a slow learner when it comes to computer games. But it seems to me that there is something badly wrong with a game that shows you a picture of the man at the Exchange Office Desk, then tells you there is nobody there when you try to talk with him. Unless, of


course, he is meant to be a public servant.

Add to this the frustration of being unable to enter any of the buildings without making three or four attempts - due to poor programming - and you find the game quickly loses all appeal. The instructions say "Enter a building by running to a doorway and pushing up or down on the joystick". It sounds simple enough, until you try it.

Graphics are average, with none of the little touches that might make the game stand out from the crowd. Sound effects and musical backing are also ordinary - although they can be switched off at the start of the game.

Bravestarr is not a program for the discerning gamer. On the other hand, if your place is already full of Marshall Bravestarr action dolls then the game may find a ready audience. But probably only for the first ten minutes. ■

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*RUNSOFT is a games club

Game hints - C-64

Parallax

To stop all the Aliens attacking you and all sprite to background collision

POKE 5796,96:POKE 63927,96 SYS 319

Infiltrator (Disk Version)

Turn your disk to Side B and place it into the drive and type LOAD:OUTPUT",8,1 (return)

When the program has loaded type in the following:-

For infinite bombs - POKE 7252,234:POKE 7253,234:POKE 7254,234 (return)

For infinite spray - POKE 3337,234:POKE 3338,234:POKE 3339,234 (return)

For infinite time - POKE 9383,234:POKE 9384,234:POKE 9385,234 (return)

Now type SYS 2176

Living Daylights

Load the game and reset the computer. Now enter this for unlimited lives - POKE 4390,173:SYS 4352

Ice Palace

Load the game and reset the computer before entering -

POKE 12755,173:POKE 13416,173

SYS 3200

The game will now start with unlimited energy.

Space Harrier

Reset and then type -

POKE 6060,60:SYS2128

To enable you to fly straight through the trees and other obstacles.

Future Knight

Hold down the keys -4, 7, 9, E, U, T, M. The title screen and the border should go grey and *Future Cheats* should be displayed instead of *Future Knight*. Now press fire to start the game with infinite lives.

Cauldron II

Load the game, then reset, now type

POKE 40318,65 (return)

POKE 40319,208 (return)

SYS 32777 (return)

Iridis Alpha

When the game begins press F1 to get into another game. Use M and N keys to play. If you want to see something strange, try pressing *!

Mermaid Madness

These pokes stop all sprite collisions but you can still collect the objects. Load then reset, type -

POKE 21244,208

POKE 21250,240

POKE 21290,234

POKE 21291,234

POKE 2,54

SYS 16384 - Starts game.

Bombjack

Load the game and reset, then enter these pokes to disable sprite collision -

POKE 5693,255

POKE 5694,255

POKE 5695,255

To return to the game - SYS 2096

Bombjack 2

Load the game and then reset and enter the following pokes for infinite energy -

POKE 10715,234 (return)

POKE 10716,234 (return)

POKE 10717,234 (return)

and to start the game type - SYS 15146 (return)

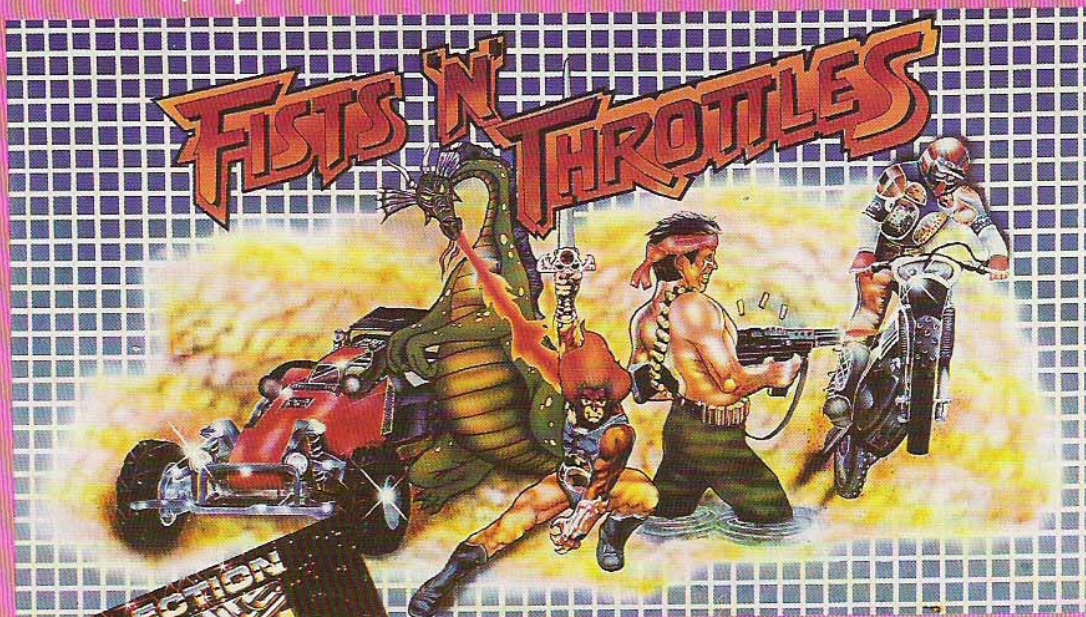
Mercenary - the Second City

This tip is for getting into the author's cheat rooms. Once inside you can amass millions and millions of credits and automatically have every key to every door, get out of the prison if you end up there, put as many craft as you like in your hands, easily get an intergalactic ship.

Buy the dominion dart as usual. Fly to above 350 metres. Level out, obtain a speed of 1,781 kph, fire a missile, when it gets very close to you press "T" to pick it up and fly back down to the ground to location 08:08. Pick up your crashed intergalactic craft and fly to the elevator at 08:06. Now go underground, leave your ship and walk towards the triangular door. Not the usual "locked" response, but a hum as you walk in. Now it is up to you to make a lot of money and get the ship you want. ■

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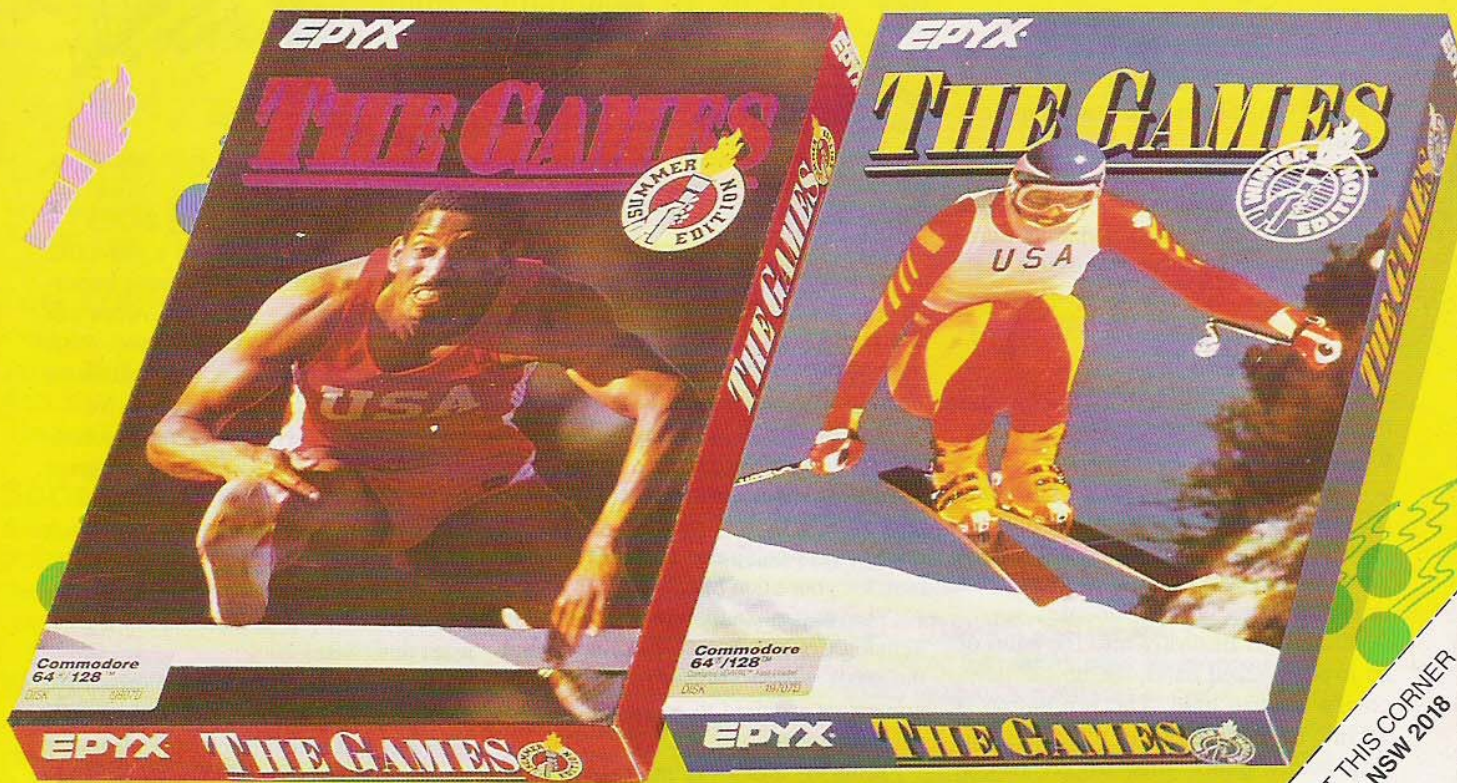
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Joystick roundup

Phil Campbell

MY FIRST JOYSTICK died after just two weeks. It was obviously designed to self-destruct. With a flimsy plastic stick and paper thin metallic switches, the only question was which would give way first.

The designer obviously did not realise that saving the world from *Space Invaders* can be quite an athletic business. In heated moments the humble game controller - or "Gear Stick", as my four year old son calls it - can suffer quite a battering.

At last, manufacturers are coming to grips with the problem. The new breed of sticks have set a high standard of durability, often backed by impressive warranties.

Epyx 500XJ

The EPYX 500XJ, priced at \$39.95, has a five year, 10 million shot guarantee.

This model, distributed by Questor, (02) 697 8666, takes a unique design approach. "Ergonomic" may well be the most overused adjective of the decade, but this stick certainly earns the label.

Shaped to fit neatly into the palm of an average sized hand, the unit is quite comfortable to hold. The fire button is set into the curved side of the casing, fitting neatly under your trigger finger. Other contours are provided in exactly the right place for the average thumb and the average middle finger - any extra digits should wind gracefully round the narrower stock of the casing. If you are average.

Your other hand is now free to control the movement of the stick, in this case a four centimeter steel shaft encased in moulded plastic. The compact size of the mechanism ensures a "shorter, faster

and more precise throw, and a better feel".

Cruiser

The "Cruiser" is another high quality contender in the computer "gearstick" stakes. My test unit was supplied by MicroComputer Spot in Burwood. (02) 744-8809, and retails for \$49.95. The name is corny, the blue and red colour scheme is tasteless, and the styling can only be called "60s kitsch". On the box, the Cruiser is photographed floating above a mysterious planet - with strong hints of a scene from the *Thunderbirds*, or *Fireball XL-5*. Fortunately, it performs better than it looks.

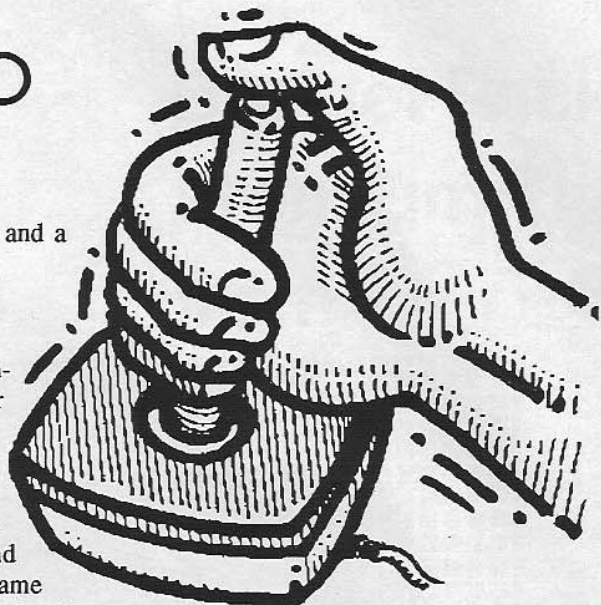
Adopting a different design philosophy to the hand held Epyx unit, the Cruiser has four high powered suction pads on its undercarriage. These plant the stick firmly on any smooth surface in front of your computer, and give a stable base for your alien blitzkrieg.

The unit also features a "Variable Tension Control Ring" - a collar around the shaft which adjusts the degree of movement required to activate the internal mechanism.

Both joysticks use micro-switches, giving precise control and a satisfying "click" on each activation. In play, however, they have remarkably different characteristics.

Performance

I tested both models in battle conditions. Playing *Insanity Fight*, a high powered and fast moving space shoot-



out, my average score with the Epyx 500XJ was 12,260 points. With the Cruiser, I scored an average 24,325 - a dramatic 98.4% increase. In a game like this, the fire-button is the most important control of all - and the Cruiser can pump out almost twice as many shots per minute as the Epyx. The button on the Cruiser is delightfully responsive.

On games that required fine directional control with the joystick, the reverse was true. Playing *Tetris*, for example - a game where you have to neatly stack falling shapes - the Epyx came out on top. Movements were precise and accurate - a liability if you panic, but a great asset otherwise.

Both the Epyx and the Cruiser are impressive new joysticks - they will probably last considerably more than two weeks. On the other hand, with switches guaranteed for 10 million activations and a firing rate of 500 shots per minute, you could find your joystick worn out after only 13.9 days of continuous play. But addiction like that is a serious problem. ■

Uncle Pete's latest Crossword Puzzle

AMIGA #2

Hello, crossword fans.

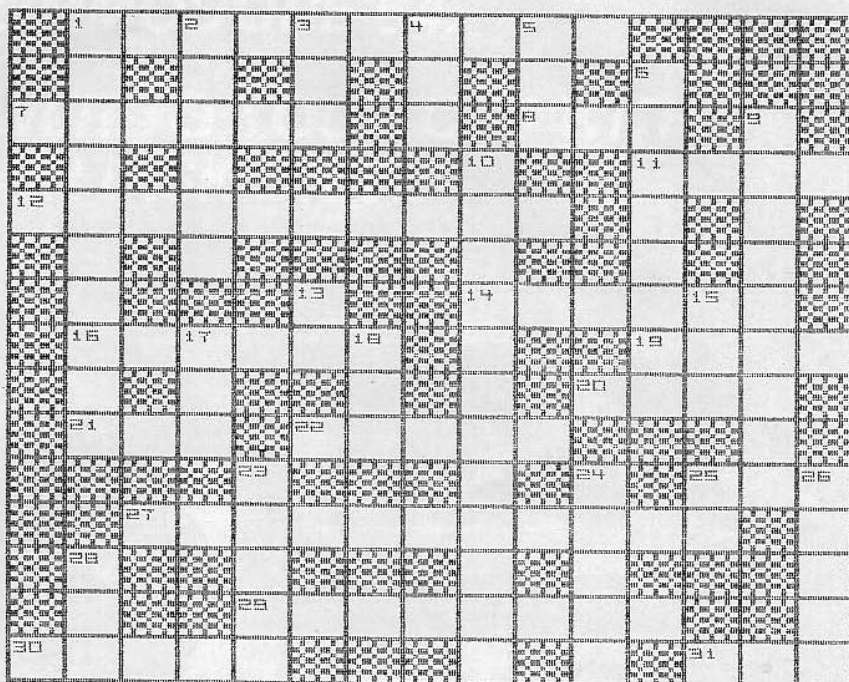
I have some great news for the Amiga owners out there who can tear themselves away from their keyboards long enough to do a crossword, but first, the winner of the last competition is Red Dog from Townsville Qld. Thanks for the little message, Red Dog, your disk is on its way. Thanks also to Jan Rogers of Carlingford, one of my more regular contributors, for the sample crosswords she sent for me to do. Paul Vines of Epping was also very close, better luck next time.

There is a special treat in store for Amiga owners. Russell Spencer of Spengat Computers in Newcastle has kindly donated some prizes of Amiga software for the winners of future crossword puzzles. This means that this month's puzzle will carry two prizes, a surprise disk for C64 owners and the Spengat prize for Amiga owners this month - a rather off-beat simulation called *Racter*, which allows you to 'engage your computer in mean-

ingful conversation??'. Sounds very mysterious to me, so keep your eyes open for a review in *Commodore and Amiga Review* shortly.

Keep watching for some more great software prizes from Russell and his team at Spengat. Don't forget to tell me which computer you use when you send your entries. Good luck.

Send your entries to: P.O. Box 4, Wallsend, 2286.



Across clues

- | | |
|-----------------------------|----------------------|
| 1. Screen symbols | 20. Distort |
| 7. Bring from elsewhere | 21. First lady |
| 8. Extinct bird | 22. Custom microchip |
| 11. Wound mark | 25. Got to know |
| 12. Steering by the stars | 27. Talk to another |
| 14. Young man's title | 29. Rugged soldier |
| 16. Empty disks, tapes etc. | 30. Common lizard |
| 19. Work | 31. Mangy mongrel |

Down clues

- | | |
|----------------------------------|---------------------------|
| 1. Suitable for use | 13. Everything fine (abb) |
| 2. Beautiful youth | 15. Long time |
| 3. Perform | 17. Melbourne newspaper |
| 4. Beverage | 18. Drink slowly |
| 5. Male sheep and storage | 23. Artist's garment |
| 6. Ancient means of data storage | 24. Sweet treat |
| 9. Plug in program | 25. Yourself |
| 10. Multi-cultural | 26. Egg clock |
| | 28. Writing fluid |

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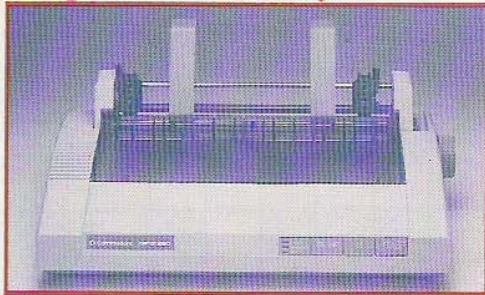
EXPIRY DATE.....

SIGNATURE.....DATE.....

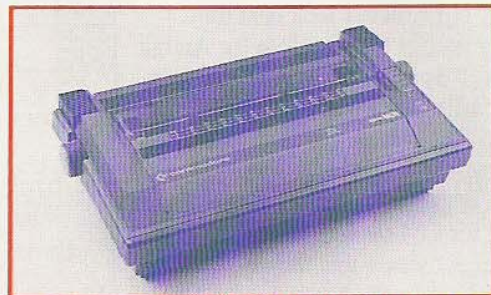
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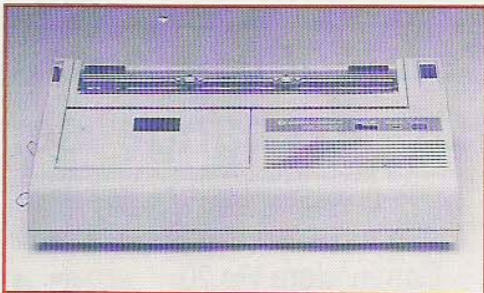
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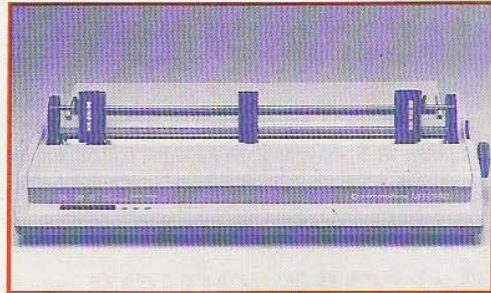
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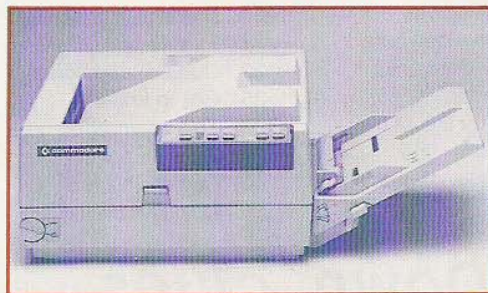
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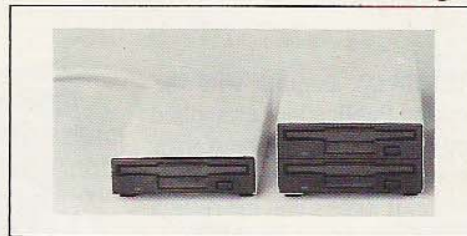
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Lights! Camera! Action!

by Eric Holroyd

I WAS ALREADY familiar with the term "Desktop Publication" as applied to hardcopy production via the Amiga but hadn't heard the term "Desktop Presentation" before. It means that the Amiga can now be used to produce graphic presentations complete with music and sound effects too.

Lights! Camera! Action! is the software that lets you do all this and it's produced by Aegis Developments. They've made it compatible with other programs in their range like: *Videoscape 3D*, *Draw Plus*, *VideoTitle*, *Sonix*, *AudioMaster*, *Images* etc as well as Electronic Arts' *DeLuxe Paint II* and with any program supporting the ANIM, SMUS or IFF file formats.

This means that you can create animated presentations or slide shows from a variety of graphics with musical scores and sound effects. Draw the pictures yourself or use pictures from your library of data disks. Same with the music, write it yourself or use an existing tune from one of your data disks. Sampled sounds created with *AudioMaster* are easy to make and use so here's a chance to use your imagination.

The excellent *Lights! Camera! Action!* manual takes you through all the steps of creating a video presentation from formatting the data disk, through loading sounds and scores, loading and manipulating frames (set animation and transition speeds etc), linking a displayed image to a specific point in a musical score (great for emphasizing a point in a sales presentation), using different transitions such as Flip/Fade/Dissolve/Collapse/Diamond Wipe and more to sus-

"Create animated presentations or slide shows from a variety of graphics with musical scores and sound effects."

tain interest between "graphic events" as they call them.

The whole thing is referred to as a "Script" which is really a file containing all the information on the pictures, sounds and music scores you've chosen to link together for showing/playing. Also, if you already have the SuperGen Genlock graphics device there's a section showing how to use that with *Lights! Camera! Action!* to produce really professional graphics presentations.

Included on the master disk is a module called ShowLCA which allows you to make a disk with your presentation on it for distribution without the *Lights! Camera! Action!* program itself. An al-

ternative idea for distribution is to record the presentation onto videotape for those unlucky folks who don't have an Amiga. The ShowLCA module is stated to be "not a Public Domain program, but freely distributable by registered owners of *Lights! Camera! Action!*".

I ran the "sample script" on the master disk to check out what *Lights! Camera! Action!* had to offer and watched some neat animations accompanied by Scott Joplin's *Bethena*. This was suitably impressive and I played around with this script file to rearrange things and "get the feel" of the software. This was done of course on a copy of the script which I'd saved to a data disk first. Best not to wreck the original, I thought. Messing around with an already-created script showed how easy it is to make a video of your own and as the whole thing is menu-driven anyway it's all relatively easy to do.

The *Lights! Camera! Action!* manual tells us that all the various Amiga display modes are supported, i.e. Interlace, Overscan, Lo/Med/Hi-Res, HalfBrite, Hold and Modify etc etc and goes on to explain in simple terms (as if it had been written just for me!) what they all mean and do. Great.

All in all I found this a fascinating piece of software and the results were well worth the effort. If moving pictures with sound and music are your bag then have a look at this.

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Pro-Sound Designer

A review by Eric Holroyd

THIS IS A very good software/hardware setup for producing top-quality sound samples on any Amiga model so far produced. The hardware device plugs straight into the parallel port and has a socket to take an input lead from your sound source. Included in the kit is a "gender-bender" adapter so that the unit can be used on the A-500, A-1000 or A-2000 computers.

The accompanying instructions guided me through how to set it all up, what to use for a sound source (I used the ear-piece output on the Walkman) and what to do with the sound once I'd captured it.

My only grumble with the entire outfit was that the otherwise excellent manual was written for both Amiga and Atari ST and I kept reading the wrong bits (even though the relevant paragraphs were clearly marked). Apart from that little whinge I really enjoyed recording and manipulating sounds, then playing them back through the ghetto blaster I've got hooked up to the Amiga.

Screen controls

Screen controls for record and playback are similar to those on a tape recorder so I got familiar with them pretty quickly. Other controls were nicely laid-out (very clear graphics too!) and easy to operate, with F- keys 1-8 used to hold and locate the samples in memory.

Other icons at screen right let you Magnify a marked section for very accurate editing, use a Sound Monitor to listen prior to sampling, set Automatic functions etc etc. I found it very easy to point and click with the mouse on these icons whilst following the manual's pictorial guide to the various operations.

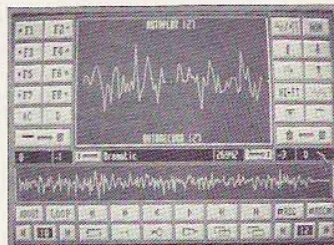
I believe *Pro Sound Designer* to be a very powerful sampler. It can play four



samples at once, or two if they're played in stereo (a stereo sample uses two channels, one for left and one for right hand sounds). It'll hold up to eight samples in memory at once, or four if they're recorded in stereo. Once recorded, the samples can be played forwards or backwards and/or Looped continuously. Playback volume may be increased or decreased as well as faded.

Mix and match

Pro Sound Designer uses memory buffers to hold the samples which is very useful as it lets you copy bits of one sample to another for "mix and match" effects. Buffer contents may be inserted at any point in another sample, and as the sounds are represented graphically on the screen, location of the exact insertion point is easy by first playing the sample on screen. Buffers can also be saved to any valid AmigaDOS device with RAM: being the default.



Graphic representations are as sound waves and there's a system of "marking off" a section of the sample if you want to trim a bit off, save just the middle bit or some other such manipulation. It's a bit like marking a range in your word processor and in fact you can "cut and paste" bits of the sound samples in much the same way.

There's a Merge function too which you use like copying a marked section to a new position except that with Merge the sample opens up where specified for the new section to be merged into it. I got some good effects with all this, particularly with the option to Reverse a marked range. When the completed sample was played back it sounded really weird where I'd reversed part of it.

The software is compatible with *Future Sound* and *Perfect Sound* hardware so owners of those systems can expand their sound horizons with *Pro Sound* too. An optional extra is Pro Midi Plus which allows you to take samples recorded with *Pro Sound Designer* or these other two systems and play them via a MIDI keyboard as an instrument voice. It allows up to 10 samples in memory at once with full control over which part of the sample is used and how it's played. No further details of this option were available at press time.

This is a good system for sound buffs and would be useful either "just for fun" or for serious work along with desktop presentation software to create sound effects for games or for adding to animations and slide shows etc.

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The Neriki Genlock

by Adam Rigby

Putting the stunning graphics available on the Amiga on to video has been a problem that has hindered the progression of the Amiga into an area for which it seemed almost designed.

THE MAIN CAUSE for concern was the quality and stability of picture - if you take the picture straight from the Amiga itself it is just plain awful and totally unacceptable for professional uses.

This is where a genlock comes into the picture. A genlock converts the RGB signal into a composite video signal that allows the image to be recorded onto video.

Even though the earlier version of an Amiga genlock worked, the quality was not quite up to scratch, especially when you consider that the end result will be at least one generation on from the original.

When any video production is undertaken it is usually laid down onto 3/4" videotape. The majority of the footage that is going to be used is put down on a tape which is called the wild reel.

Then it is edited together onto a master. From this it goes onto the various dubs - here is where you start to lose quality - if it goes down on to 1/2" format (normal video) then you will start to notice

a drop in quality.

So it is quite obvious that the Genlock has to give out a very stable or strong picture so it survives long enough to make it to the end product.

Well, this is all very interesting you may well say, but how good is the Neriki? To find out I called up Neriki distributor - Telmac - and tried to arrange a genlock for review.

To test the genlock I had organised with one of Australia's most well-known corporate production company, Polymedia Presentations, to set up the system

in their edit suite. Lugging along my Amiga 2000, genlock and many ideas I set up shop in the suite.

To put the genlock through its paces we set it up to mock various effects that would normally be done by character generators and dedicated machines.

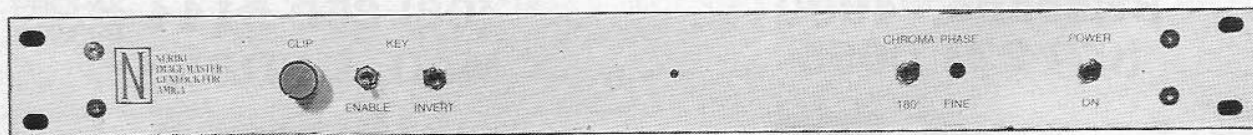
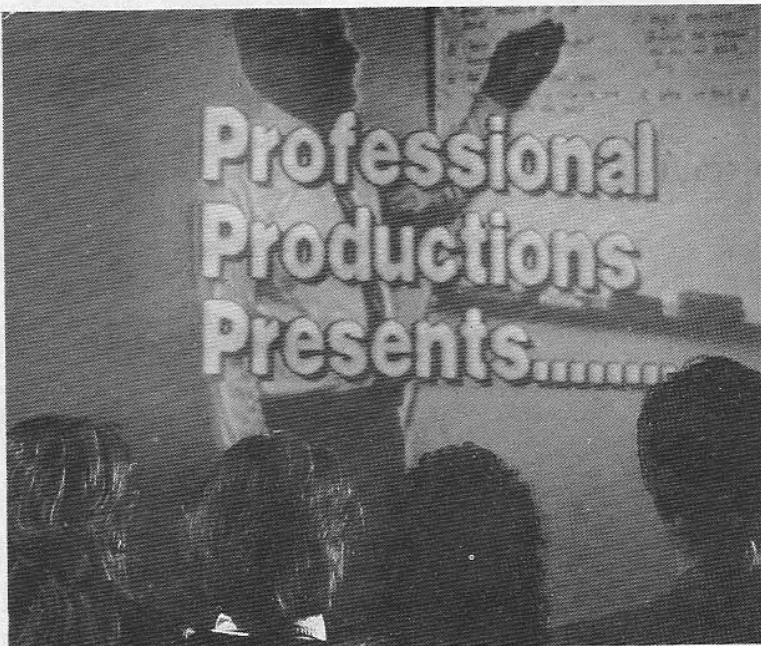
After talking to various editors and producers I was under the impression that the Amiga put out a very good quality picture and saved a lot of mucking around.

For example, to include a logo into a video you have to get a bromide of the logo and have it filmed using what is called a graphics camera. This takes a lot of fussing around and you end up with a result that can only be one colour.

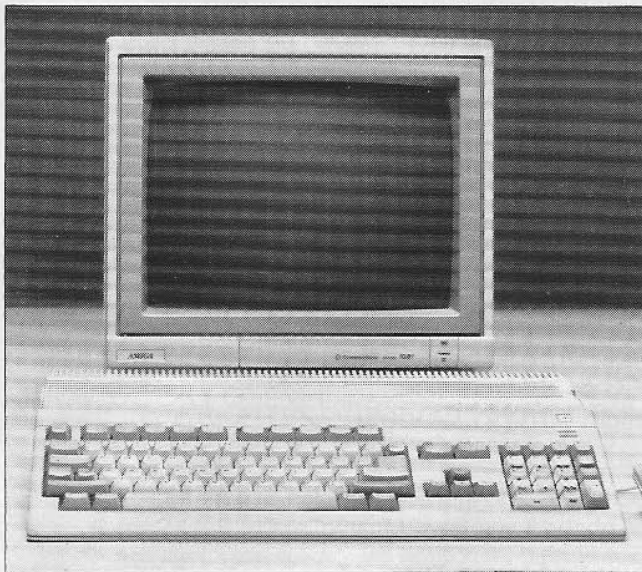
With the Amiga and a program like *Dpaint II* you could knock up a logo in varying colours, change the size and position very easily and even the angle. Drop shadows and other effects are not available when you are shooting from a bromide either.

So I had to get to work creating various logos and titles that were to be used on our mock video. Whilst in the middle of creating simple logos etc. the producer asked if we could come up with some extra effects such as an animated swirls of colour and other simple animations.

These were no problem - we almost did every-



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thing in real time using *Dpaint*. It would have been nice to have done 3D animations with *Videoscape* as I am quite familiar with it - but to get the right effect you really need a single frame controller that allows you to record in single frames - this little beastie costs \$6000 and up.

The next step was to put everything down on to video. The results surprised many sceptics - the quality was very good, no obvious colour bleeding and the colours seemed quite strong and the picture rock solid.

The Neriki Genlock is being used all over the world at present everywhere from Channel 2 studios to a company in

“A genlock converts the RGB signal into a composite video signal that allows the image to be recorded onto video.”

Canberra that produces simple advertisements using the Amiga.

There are two ways of connecting the Neriki Genlock, one is for a stand - alone system - the other is to hook up to an edit suite. Since the genlock works by taking a sync signal and timing in the computer's signal with that, the quality of the picture is understandably much better when you have connected up the genlock to an edit suite - but the beauty of this genlock is that it gives quite a decent picture when just using a camera as a sync source.

This means the person in the street can make his own video without too much equipment . . . The documentation is very good and covers everything from setting up the Neriki to fine tune adjustments.

Staff at Neriki were very helpful and even offered to have one of their technical people come and install the genlock in the edit suite.

Overall the Neriki Genlock performs without a hitch and produces a signal that is high enough quality for professional use.

Distributed by Telmac (02) 745 3466, RRP \$2695 ex tax. ■

ISSUE
2

Amiga - Live!

A monthly two disk set magazine-on-a-disk.

Over fifty pages of news, hints and help, game and product reviews and more are included on disk one. The second disk, included free, is *"The Best of the Rest"*.

A compilation of *animations, utilities, programs, games and music* selected from latest developments from Australia and overseas - most of these programs are available in the Public Domain.

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Features of Issue Two - Summer Fun Edition

- ⇨ **Amoeba** - Classic arcade copy of Space Invaders
- ⇨ **Backgammon** - Strategy one player versus computer game.
- ⇨ **Moose** - Mac owners eat your heart out! This comical little character is now at home on the Amiga.
- ⇨ **Amlbug** - Watch him walk across the screen just when you least expect it.
- ⇨ **Uedit** - Word processing on the cheap! Lots of features - edit 100 documents at a time.
- ⇨ **Browser** - Looking around your disks is easy with this neat utility.
- ⇨ **Dir Master** - Keep track of what programs you have on which disk.
- ⇨ **Undelete** - Retrieve accidentally erased files.
- ⇨ **Pictures** - by Emanuel Staffenou.
- ⇨ **Editorial** - Software piracy - what are the companies really doing about it. Software support - is Australia getting a raw deal.



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Deluxe PhotoLab

There have been many contenders in the graphics arena for some time. Electronic Arts have just added yet another player to the ring. Our recently retired assistant editor, Adam Rigby, now a graphics wizard in his own right, checks it out.

DIGI-PAINT and *Deluxe Paint II* are the industry standard that everyone else is aiming for. The question you are probably asking yourself right now is what makes *Deluxe PhotoLab* different that would cause the very people that produce *DPII* to release it. And does it match up to the likes of *Deluxe Paint II*?

Deluxe PhotoLab was designed, as the name suggests, for complex picture manipulation in the video mode called HAM. For all those that aren't in the

know, this means Hold And Modify and allows the total of 4096 colours to be on screen at once.

Well, we can already do this on *Digipaint*, is this all that *PhotoLab* can do? No, not only do we have the ability to work in HAM mode but in every other video mode as well. This until now has not been available to Amiga users in one neat graphics package.

Three graphics tools

Deluxe PhotoLab is a collection of

three power graphics tools in one parcel. Each of the three programs - Paint, Colours, Posters - offers a comprehensive solution for painting, image processing and poster printing.

Paint lets you paint in every Amiga display mode, including Hold And Modify Interlaced. The ability to paint in 4096 colours allows you to produce photo-real pictures, or you can touch up and combine digitised images without sacrificing resolution or colour. You can even work on multiple screens in different dis-

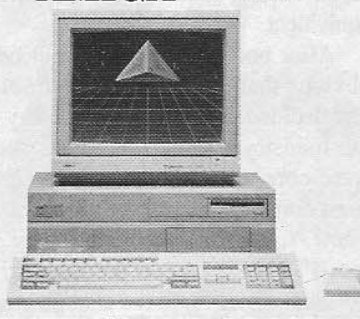
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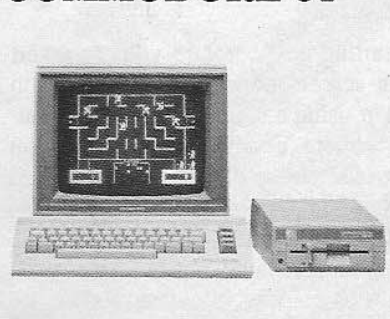
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play modes simultaneously, and your pictures can be as large as your computer's memory can accommodate.

Colours helps you process your existing pictures. Whether you need to change the colours, convert display modes, or resize the picture, Colours makes it straightforward. You can upgrade your art from Low Resolution to HAM without any fuss.

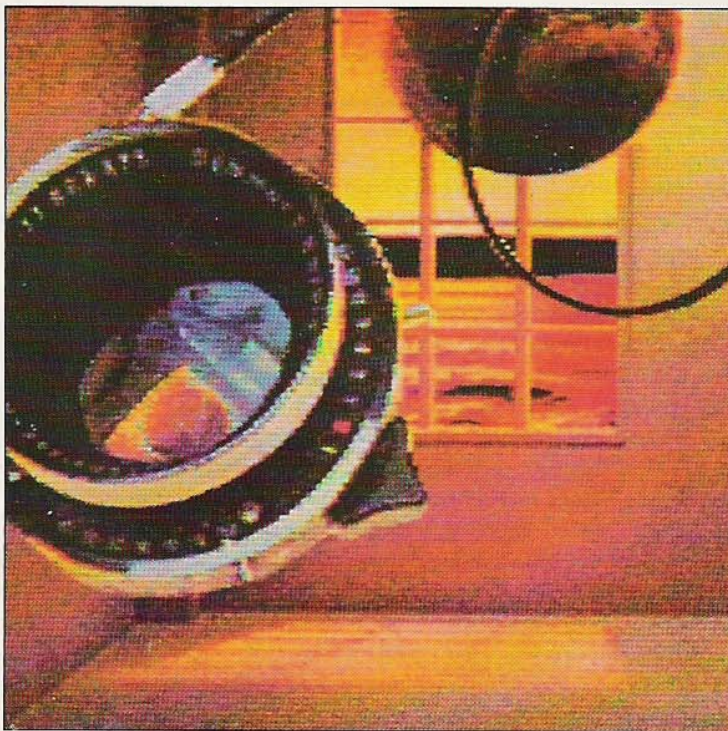
Posters prints your pictures in any size up to 100 square feet (what is that in metric?), and it can anti-alias while it prints.

Deluxe PhotoLab needs a minimum of one megabyte to run but like most graphics programs it prefers more.

Since page size and length can be any size depending on the available memory, it is advisable to have about 2 Megabytes to allow maximum flexibility with this program.

Starting up *PhotoLab* you are asked which screen mode you would like to work in using a simple requester that allows you to choose from any of the Amiga's screen resolutions, depending on the memory available. *PhotoLab* also supports Extra-Halfbrite mode which allows an additional 32 colours for a grand total of 64 colours in low resolution.

Extra-Halfbrite uses a trick to increase the numbers of colours available on the screen. The Amiga supports only 32 colour registers directly, but the extra-halfbrite uses a sixth bitplane to indicate the extra 32 registers that don't really exist. The first 32 registers are standard colour registers; the second 32 are halfbrite equivalents. Pixels that use halfbrite colours point to one of the standard colour registers and indicate that the colour should be displayed at half its normal intensity. This means that the second 32



pixels are not independent of the first 32; you can change the colour values only in the first 32 registers, and the change is automatically reflected in the half-brite equivalent.

After booting the program it became obvious that the designers of *PhotoLab* had decided they would try to stay close the industry standard as far as controls were concerned. The overall panel and most conventions stay faithful to *Deluxe Paint II*. This is obviously a very smart move as most people are familiar with *DPaint* and will find the change painless.

The included tutorials are very well written with the aim of introducing the user to the more powerful and interesting commands at his disposal. Coverage of such things as removing and replacing colour from a complex HAM picture along with wrapping brushes around spheres and other simple shapes were covered in the manual. These simple exercises help the user to become more at ease the added features of *Deluxe PhotoLab*.

Major additions

Deluxe PhotoLab's major additions are in the area of colour manipulation. Here everything from mixing colours to stripping colour out of the picture can be achieved with ease - this is particularly useful when working in HAM mode.

One of the other features of the Paint program is that it allows multiple picture to be edited at once with ease - just like working on multiple documents using most word processors. This is quite reasonable on memory, I was using 1Mg and managed to work on three different pictures at once.

Since the package comes from Electronic Arts you could almost bet your life

that the manual is one of high standard. Sure enough it is full of helpful diagrams, straight to the point explanations and even a comprehensive index - what more could a user want?

One thing that I found absent from the package was the ability to create stencils.

Overall Digital Creations have done a fantastic job with this package. It covers all of the video modes including extra halfbrite mode. It has the ability to create Posters of very large proportions and has amazing colour manipulation on hand for the budding artist. This has one of the nicest brush manipulations of any program I have seen on the market.

Review copy from ECP (075) 96 3488, RRP \$229. ■

Adam Rigby has been involved with the Amiga for two years, and now runs his own desktop video/publishing bureau. You can contact him at Select Innovations on (02) 906 1921.

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**C64
DISK + CASSETTE**

Epyx Fastload

- the most underrated cartridge of all

WAY BACK IN the dark old days of computing, I was seeking to expand my 64. I had in mind a cartridge of some sort or other to speed things up a bit, also possibly a machine code monitor to assist me in that never-ending quest of breaking into programs.

I had already fitted my 64 with a reset switch, mine was one of those built with the right connections in the serial port. Many of them need to have the reset on the user or the cartridge ports.

Alternatives

I examined in minute detail the Final Cartridge MK1 but it cost in excess of \$100 so it would have to be really good. The monitor sounded great, bidirectional scrolling etc. The screen dumps were not needed at the time due to lack of a printer. The reset button was also unnecessary but the program backup facility sounded fine for putting some of those tape games over to disk.

Reading the fine print, I realised that while the Final Cartridge would back-up many of the games on the market, it would not play them back without the cartridge being plugged into the board. This seemed very poor to me, imagine backing up your entire collection of games and then something goes wrong with your cartridge. It would cost you another \$100 before you could play them again.

The Power Cartridge was also available at almost \$150 - sure it could do just about anything, but again only the cartridge will load its own files.

There was also available the Epyx Fastload cartridge. It claimed to load faster from disk, supplied some utilities for file management and copying and contained an excellent machine code monitor. For \$35 it was mine and I still use it practically every time my 64 still works.

by Tony Smith

The only things incompatible with it are a few games with special loaders and the brilliant Australian communications program *GP Term* from Netcomm. The communication program uses the timing and data lines, which are affected by the cartridge and it quickly tells you to turn off and remove it.

After much experimenting with the Epyx, I found that it would reset any program, even the unstoppable ones, and eventually I fitted the cartridge itself with an on/off switch so I could turn it on or off without unplugging it. Of course it can be re-enabled when it has been reset with sys57194. The disk editor resident in the cartridge is also an easy to use utility with full editing facilities.

Uses

My greatest use for the cartridge is for peeping at other people's programs, looking for messages, sys numbers, music routines and cheat modes.

Music is one of my favourites, to get the music from a big name game up and running and still retain control of the computer is a very satisfying experience. To take the music out as an independent program, get it running and then use the monitor to change the tune as it is actually playing can produce some dramatic effects. Many of the demos on the *Commodore Review* Disk Magazines lend themselves particularly well to this type of exercise.

Apart from the previously mentioned features, the Epyx Fastload offers all the usual DOS commands for loading, saving, force loading, and directory of course. The disk tools menu, obtained by pressing the pound sign, contains six options with the COPY option leading

to six more options, the File Utility contains a further seven more options, certainly a well featured tool kit.

Monitor

The exclamation mark (!) leads you to the Monitor, and here I would like to say that apart from a few bytes which are changed in the first page of \$C000 the memory is left undisturbed. The ROMS can be turned off by changing the value in location \$0001 and all memory can be examined in M/C, hex, hex and Ascii or just Ascii. Hunt is accomplished quickly and efficiently and you can specify a range for individual bytes which is a very powerful feature.

Calculations are performed in hex or decimal and this includes things such as 'and', 'or', 'xor', 'plus', and 'minus' - sure makes it easy on the brain sometimes.

All I/O operations are easily handled with monitor loads showing the starting and ending addresses, simply specify the starting address for force-loading some of those tricky boots and loaders into more manageable sections of memory to find their jump addresses and vector settings.

I hope I'm giving some readers some ideas, because I have had a lot of fun exploring the C64's ample memory reserves. Not many people are aware of the features of this fine piece of hardware which is still available in some of the better stocked computer shops, I found mine at Grace Bros but the Commodore Shop at Belmont NSW had some fairly recently.

Definitely the most underrated cartridge of all, the Epyx Fastload deserves much more praise than it gets. For quietly and unobtrusively getting on with its job it gets my vote, I don't know where I'd be without it. Look for it in a huge plastic video style box, just plug it in and forget it. ■

Suite 64

Disk Magazine 12

by Andrew Farrell

IT'S OUT AGAIN, another disk filled with goodies. What's it all about? Read on to find out.

Each month we publish a double sided disk of programs, and editorial. Some of what you'll see are programs that have appeared in this magazine. To save you typing them in, you can buy them ready to run. The rest are from all over the place. Utilities, games, updates, graphics and music.

What's more, in some instances we've compiled our own published BASIC programs to make them run faster - something we couldn't print in the paper version! On this month's disk there's a good example. *Appointment Manager* has been improved and updated - now it has a search and print option. Just what you asked for, right? It's compiled and ready to go.

This month you may have noticed a slight decline in the number of articles dedicated to the C64. Well, that is likely to fluctuate. However, on our disk magazine, every issue is dedicated to you - the 64 user.

Feedback from readers at the World of Commodore Show was excellent. Everyone seems to like ADOS, so we won't be changing that dramatically. What we would like to know is would you like to see more editorial? At the moment we only include around 14 screen pages of text. They serve to explain very briefly what each program does, and any little tricks to watch out for.

We're also looking for contributions. Programs or pictures are sought after. Please contact us soon if you think you can help. We would very much like to include more Australian programs.

Next month, Issue 13, will be a bumper issue. There's a whole swag of utilities, two adventure games (one with

over 350 screens), and much more.

On Issue 12 there's a few goodies too. Here's a quick rundown on what you can expect to find.

Appointment Manager 2.1

If you missed this one originally, here's an update. You can now print our your calender, and search for specific details. The program was written in BASIC and then compiled using Blitz. We also added a routine to stop garbage collects, so the end result is a strong reliable program.

Term

A communications program with plenty of bells and whistles. Ideal for the beginner. It's simple to use. Most options are menu driven. There's room to enter a directory of often called numbers too. Recommended!

Panes

Ever wished you could put windows in your own programs? Here's the program that originally appeared with a story by Andrew Baines in the July issue of ACAR, and again in the September issue. Using a SYS command, you can display a window that may be a menu, or just a text display.

Atlantis

Let's be honest. This one came from a UK disk magazine. It was so good we couldn't resist putting it on ours. The program appears to be written using routines from some top selling games. We reckon the guy who wrote this must work for one of the software companies over there. Anyhow - it's pretty wacky.

You see, you're a fish - and you shoot bubbles. It's fast and furious.

Time Crystal

Jim Sachs would have to be one of the most famous C64/Amiga artists around. Here's a game he nearly wrote. The title screen happens - impressively too. The game itself never got past the next section where you must land your time capsule safely using the joystick. Great graphics, and animation that is good (except for a few bugs). Nevertheless, well worth the look and limited play.

Circle Navigation

How fun to Kalamazoo? Well, if you know the latitude and longitude, this program will fairly accurately work it out. Not perfectly though! A good program to learn about BASIC from.

Commodore education programs

There's five this month - all slightly upgraded to the C64 from the PET. Educational, well written. built in documentation and help screens.

Music for your games

Many thanks to Eric Holroyd for his contribution to this month's disk. If you have a BASIC program that needs a boost, why not add some music. Copy this file to your disk. LOAD and SYS to it, and you'll have music to your ears.

GEOS

Upgrades and bug fixes. Ready to go. Just insert this disk from GEOS.

Until next month, enjoy! ■

Part 1

Basic BASIC, a tutorial for beginners

by Oben Candemir

HELLO, AND WELCOME to a whole new series of articles on learning how to program in BASIC. This series is aimed at anyone who wants to learn to program the Commodore 64 in Beginners All Purpose Symbolic Instruction Code - that's what BASIC stands for, pretty long, eh!

Before I start however, I'll have assumed that you're familiar with typing on the 64's keyboard and that you know how to operate your disk and/or tape drive(s). So if you don't know how - read your manual to find out!

Programming

The computer is not a genius or a superbrain as is sometimes thought by people. The computer itself is literally quite stupid and dumb. It can't do anything more than what it's been told to do by a programmer. That's why it's important to be very exact and unambiguous in the commands we give.

What we must first of all realise is that a computer doesn't have the faculties of imagination and thought as we do. To illustrate this let me give you an example. What does "I see a woman on the beach with my glasses" mean? That's a stupid question, you may mumble, but that simple sentence carries with it the following messages:

1. It could mean "I see a woman on the beach, and I also see my glasses on the beach."
2. Or it might mean "I see a woman on the beach who has my glasses."
3. It could even mean "Looking through my glasses I see a woman on the beach."

A human listener could sort through the possibilities from the context of the statement and hopefully make sense of it. A computer not programmed to consider

all three possibilities would probably mess up. See what I mean about clarity?

So our first lesson should never be forgotten and it is that "Computers are STUPID and we should always be precise when giving them instructions." Don't be afraid of experimenting though, just as long as it gets the job done in the end.

So realise now that you can't just tell a computer to "go to the kitchen and make me dinner"; each step must be spelled out exactly. The process must be broken up into small modules like 1. "Go straight 2 metres", 2. "Turn right", etc. Each individual instruction may not accomplish a miracle but when they are combined they do a hell of a lot.

How the computer understands us

The instructions of BASIC are supposed to be 'user-friendly' i.e. mean something to the user. However the raw computer can't understand any of the instructions such as PRINT (don't worry we'll come to this in a sec) without the aid of an interpreter. This is logically called 'the BASIC Interpreter'.

On the 64 we have what is called a resident interpreter, meaning that the interpreter is always in memory via ROM chips. The interpreter translates each instruction it comes across and relays this information on to the CPU (Central Processing Unit), and these are executed promptly.

This method of the computer understanding BASIC has the advantage that programs can be modified easily as the program always remains as it is written, but it has the disadvantage of being slow. This is because each instruction is individually processed each time the pro-

gram is run.

This isn't the only way that a computer can understand BASIC though. There are what are called compiler programs which interpret the program we've given the computer into 'machine language' in one go. Machine language is the native language of the computer and doesn't require an interpreter as the CPU understands it perfectly well.

Machine language is extremely fast, up to one thousand times as fast as interpreter driven BASIC. This means that 'compiled' BASIC programs are very fast as they're already interpreted. However compiled programs are difficult to edit unless the source code is kept.

Why exactly should I learn Basic

The answer to this question is totally up to you. You may have found that you need a customized program to catalog your coin or stamp collection. Or maybe you need to do repeated calculations for maths for which no commercial program exists (even if it did it might be too expensive so why pay when you can do it yourself). Anyway whatever your intention, learning to program can be extremely rewarding. It teaches you discipline along with creativity.

Some people may also be wondering why they should learn 64-BASIC when they probably won't be able to use it on any other computer. The reasons are simple, firstly if you own a 64 then you'd be mad to learn the vagaries of APPLE-SOFT BASIC for the Apple II when you own a Commodore 64 ; and secondly BASIC although slightly different for each brand of computer retains basic principles which are common to all computers.

Now we know all the facts about BASIC save the actual programming itself. I feel that the facts above must be known by any serious pupil of BASIC and I congratulate you for having gone through it. In such a short time, believe me, that you have learned much, and are now hopefully on the way to learning BASIC.

I recommend now that you get your Instruction manual which came with the computer and if you have it your Reference guide. These can be used together with the instructions given in this and following articles. Before starting I also recommend that you try (which means actually type and execute) all the program examples I give. And always remember to experiment on your own, the computer won't hit you if you get something wrong!

Each month we'll learn more and more commands and techniques so don't rush or be hasty as this could ruin your progress. Be content with what you learn and try to do as much as possible with what you have.

The first step:

Print, Run & List Commands

The Commodore 64 has two modes of operation. One is called the immediate or direct mode and the other is the program or deferred mode. Don't be confused by these as they are really quite simple. You are automatically in the immediate mode whenever you issue a command without a line number.

When line numbers are specified the computer waits until a RUN command is given and then proceeds to execute the program, line by line in their line number order. This will be clear to you after the following section.

The Immediate Mode

PRINT: This command does exactly what it says. It 'prints' something to the screen. First of all let's see what PRINT does in the immediate mode.

Type: PRINT 123 [Press RETURN]

The result should be:
123

See how the interpreter recognized there was no line number and 'printed' the number 123 to the screen immediately. This can also be done for letters but they must be inside inverted commas.

Type: PRINT "HELLO, I'M YOUR C-64" [Press RETURN]

The result should be HELLO, I'M YOUR C-64 displayed on screen. If this isn't the case then try once more. Remember you won't damage anything by typing on the computer's keyboard.

While we're experimenting with the immediate mode let's see how certain things can alter the PRINT statement. [Note: after all commands ALWAYS remember to press RETURN].

Type: PRINT "HELLO"; " I'M YOUR C-64"

It should be the same as the last thing, right? So we see that putting a semicolon between two sets of inverted commas tells the computer to print the second thing straight after the first thing. A comma can also be used to separate the things to be printed.

Type: PRINT "HELLO"," I'M YOUR C-64"

Get the difference? The two things to be printed should be further apart this time. This space is always constant ie. whenever the interpreter sees a comma in a print statement it always leaves the same amount of space between the two statements.

Something else which is quite useful anytime is the colon. It can be used to create a 'multi-statement'. All this means is that you can put more than one instruction on one line by separating the instructions by a : For example:

Type: PRINT "HELLO"; PRINT "I'M YOUR C-64"

Did it work? It wasn't meant to, you should have got:

```
?SYNTAX ERROR
READY
```

Syntax means 'the rules of expression'. With the error message the interpreter has told us that we've expressed something incorrectly. Do you know what it is? If you said that we've put two commands on one line without separating them with a colon then go to the top of the class! Now try this:

Type: PRINT "HELLO";: PRINT " I'M YOUR C-64"

It should now work, and display the message we got earlier.

We can also do calculations using PRINT in the immediate mode.

Type: PRINT 6+8

The number 14 should be displayed. If you like you may try other numbers and arithmetical operations now. Just remember that multiplication is represented by * on a computer, and division by /. A handy tip which might be useful sometimes is that PRINT can be replaced by a ? (question mark). Try: ? "HELLO" It works, doesn't it?

The Program Mode

Print is mainly used in the program mode as a means of displaying messages to the user. All the syntax (rules of expression) we learned of PRINT in the immediate mode apply in the program mode also.

The step we're about to take now will be a landmark for you, if you are an absolute beginner, as you're about to write your first program! A program is just a whole sequence of instructions which the computer executes when we're ready for it to do so; unlike the immediate mode in which the computer executes the instruction as soon as you hit RETURN.

A point to remember now, is that after each line you type in the program mode you must hit RETURN to put that line into memory.

Another point to note is that each line in the program must have a line number before it. The computer will run through these lines in the order the numbers are in, not the order they're typed in. It is a good idea to type in your line numbers in steps of 10, this allows you to insert other line numbers in case you miss something important or decide to upgrade your program.

Remember also that you must not assume anything. Spell each thing out to the computer no matter how trivial it seems (remember the example I gave earlier?).

If you don't understand something or something doesn't work then try it once more or read it once more. Patience is the key!

Now let's type in the following program (a point of warning, don't confuse O and 0). Before typing in any program type the command NEW which clears all BASIC programs previously in memory.

Type: NEW [Hit RETURN], then type the following program exactly as it is printed here

```
10 PRINT "THIS PROGRAM"  
20 PRINT "IS MEANT"  
30 PRINT "TO BE AN"  
40 PRINT "EXAMPLE."  
50 END
```

{END tells the computer that the sequence of executable instructions has finished and tells it to terminate program mode}.

Have we finished? If so then type RUN. This is the command which tells the computer we're ready for it to execute our program. The screen should display:

```
THIS PROGRAM  
IS MEANT  
TO BE AN  
EXAMPLE.
```

If this has been successful then perhaps we can try adding something to the program. Suppose we'd like to add in a line which prints "*****" under THIS PROGRAM. What would you do? If you suggested typing a line with line number 15 which went:

```
15 PRINT "*****"
```

then I'm pleased to say you're absolutely right! Try it and type RUN.

See how the output is modified? To nullify or erase our last addition or any other line all we need to do is type the line number and then hit return without writing anything after it. For example:

Type: LIST (this tells the computer to show us the BASIC program we currently have in memory. LIST displays the program in numerical order).

```
Type: 15 [Press RETURN]
```

Type: LIST

See the absence of line 15. Try this with the other lines if you wish.

Summary

In this first part we've learned the following things:

- PRINT: Displays something to the screen according to the rules we've already learned.

- RUN: Executes a program already in memory.

- LIST: Lists to the screen the program we're currently working on.

- END: Signals the end of a program.

- NEW: Clears a program currently in memory.

- A colon ':' can be used to create "multi-statements".

That's all for this month. Try to use what you've learned as much as possible, and try to find good uses for it. Although you still have a limited knowledge, fear not, all shall be revealed to you in coming months.

Next month we'll try learning about variables, strings, INPUT, and a few other features which will make programming even more fun. See you next month! ■

Memory

by Graham Winterflood

THIS GAME IS based on the familiar card game called *Concentration* where the pack of cards is dealt face down, and you turn two cards over at a time in an attempt to get matching pairs. If the two cards do not match then both are turned face down and the next player has a turn.

In this computer version 24 cards are presented face down in a grid numbered from 1 to 6 across the top of the screen and labeled from A to D down the side. To select a card you enter the letter first then a number, for example C5 will select the fifth card along the third row. Do not hit return after typing the selection. The card selected will automatically turn over to present a pattern. Then type in your second card, for example A2, and

the second card will turn over.

If the patterns of the two cards match, then a bell chimes, and the two cards are blanked out. If the two cards do not match, then after about two seconds the cards automatically turn face down and the next player has a turn. If there is only one player, the computer will show how many attempts it took to get all the cards out at the end of the game, and if there are two or more players then the computer will display a score for each player at the end of the game.

If a mistake is made on typing in the card positions, do not worry, just type in the correct position again, as the computer checks for correct logic on each entry and will not accept an incorrect entry. Remember it is not necessary to hit the

return key at all when entering card positions.

When the program is first run, there is a short delay while data is read into memory, then you are given the option of viewing instructions. Type Y or N

(Yes/No) as you wish then enter the number of players from 1 to 6. If there is more than one then each player enters a name. This is necessary so the computer can keep a track of the score. At the completion of the game you will be

given the option of further play.

I hope you have fun with this game, my kids enjoy it and it is good exercise for the memory. ■

```

1 rem-----
2 rem
3 rem  memory - a game for the c64
4 rem
5 rem    by graham winterflood
6 rem
9 rem-----
10 print"[CLR]please wait..":dimpn(24,9)
,c(24),d$(12),e$(12)
20 forp=1to24:fork=1to9:readpn(p,k):next
:next
30 fori=852to920:reada:pokei,a:next
40 fori=679to722:reada:pokei,a:next
50 print"[CLR]":poke53281,0:r=54272:poke
r+24,i5
60 print"[DOWN][DOWN]"tab(10)"[RVON][YEL
]
70 printtab(10)"[GRN][RVON] ***  memory
***
80 printtab(10)"[RVON][YEL]
"
90 printtab(11)"[PUR][DOWN][DOWN]by g.wi
nterflood
100 print"[YEL][DOWN][DOWN][DOWN][DOWN][
RGHT][RGHT]would you like instructions (
y/n)?"
110 sys679
120 ifpeek(2)<>89then210
130 print"[CLR][DOWN] you will be dealt
24 cards face down
140 print"[DOWN] enter the position of
two cards"
150 print"[DOWN][RGHT][RGHT][RGHT][RGHT]
[RGHT][RGHT][RGHT][RVON][LGRN] letter fi
rst-then number "
160 print"[DOWN][YEL] and remember the
pattern you see."
170 print"[LBU][DOWN][DOWN]try to match
the patterns of two cards"
180 print"[DOWN]a test of memory for one
to six players"
190 printtab(13)"[ORNG][DOWN][DOWN][DOWN
][RVON] hit any key "
200 sys679
210 print"[CLR]":poke53280,5
220 t=0:s=0:l=int(rnd(0)*13)
230 sys876
240 fori=1to24:x=int(rnd(0)*24)
250 poke251,x:sys888
260 c(i)=peek(251)
270 next
280 printtab(11)"[LRED][DOWN][DOWN][DOWN
][DOWN][DOWN][DOWN][DOWN]how many player
s?"
290 fori=1to12:d$(i)="":e$(i)="":next
300 geth$:ifh$=""then300
310 ifasc(h$)>54then300
320 w=val(h$)
330 ifw>lthen350
340 p$(i)="selection":goto360
350 fori=1tow:input"[DOWN]players name":
p$(i):next
360 print"[CLR]";
370 print"[WHT]  1    2    3    4
5    6"
380 print"[HOME][DOWN][DOWN][DOWN]a":pri
nt"[DOWN][DOWN][DOWN]b":print"[DOW
N][DOWN][DOWN][DOWN]c":print"[DOWN][DOWN
][DOWN][DOWN]d":print"[HOME][YEL]"
390 fori=1to4
400 print"[RGHT][U][S*][S*][S*][S*][U][S*][
S*][S*][S*][U][S*][S*][S*][U][S*][S*][
S*][S*][U][S*][S*][S*][U][S*][S*][S*][
S*][S*][S*][S*][S*][S*][S*][S*][S*][S*]
-[S*][S*][S*][S*][S*][S*][S*][S*][S*]
[S*][S*][S*]"
420 print"[RGHT][S-] [S-][S-][S-] [S-]
-[S*][S*][S*][S*][S*][S*][S*][S*][S*]
[S*][S*][S*]"
430 print"[RGHT][S-] [S-][S-][S-] [S-]
-[S*][S*][S*][S*][S*][S*][S*][S*][S*]
[S*][S*][S*]"
440 print"[RGHT][U][S*][S*][S*][S*][K][S-]
[S*][S*][K][S-][S*][S*][S*][K][S-][S*][S*]
[S*][S*][K][S-][S*][S*][K][S-][S*][S*][K]"
450 next
460 print"[HOME][DOWN][GRN]"
470 fori=1to4
480 print"[RGHT][RGHT][C+][C+][C+][RGHT]
[RGHT][RGHT][C+][C+][C+][RGHT][RGHT][RGH
T][C+][C+][C+][RGHT][RGHT][RGHT][C+][C+][
C+][RGHT][RGHT][RGHT][C+][C+][C+][RGHT]
[RGHT][RGHT][C+][C+][C+][RGHT]"
490 print"[RGHT][RGHT][C+][C+][C+][RGHT]
[RGHT][RGHT][C+][C+][C+][RGHT][RGHT][RGH
T][C+][C+][C+][RGHT][RGHT][RGHT][C+][C+][
C+][RGHT][RGHT][C+][C+][C+][RGHT]"
500 print"[RGHT][RGHT][C+][C+][C+][RGHT]
[RGHT][RGHT][C+][C+][C+][RGHT][RGHT][RGH
T][C+][C+][C+][RGHT][RGHT][RGHT][C+][C+][
C+][RGHT][RGHT][RGHT][C+][C+][C+][RGHT]
[RGHT][RGHT][C+][C+][C+][RGHT][DOWN][DOW
N]"
510 next
520 fori=1to6:sc(i)=0:next
530 q=1:print
540 print"[LBU][UP]          ":print"
":print"[UP][UP]"p$(q)?"
550 gosub770
560 h=asc(h$):ifh<65orh>68then550
570 printh$:a$=h$
580 gosub770
590 h=asc(h$):ifh<49orh>54then580
600 printh$:b$=h$:g=val(b$)*6:u$a$+b$
610 fori=1to11:ifd$(i)=u$ore$(i)=v$then5
40
620 next
630 gosub800:a1=a:g1=g:m=p
640 print"[UP]          ":print"
":print"[UP][UP]"p$(q)?"
650 gosub770
660 h=asc(h$):ifh<65orh>68then650
670 printh$:a$=h$
680 gosub770
690 h=asc(h$):ifh<49orh>54then680
700 printh$:b$=h$:g=val(b$)*6:v$a$+b$
710 ifu$=v$then640
720 fori=1to11:ifd$(i)=v$ore$(i)=v$then6
40
730 next
740 gosub800:a2=a:g2=g:v=p
750 s=s+i:ifv=mthen920
760 goto1060
770 rem-----hold-----
780 geth$:ifh$=""then780
790 return
800 ifa$="a"thena=1100:x=1
810 ifa$="b"thena=1300:x=7
820 ifa$="c"thena=1500:x=13
830 ifa$="d"thena=1700:x=19
840 x=x/g/6-1:p=c(x)+1
850 rem-----show card-----
860 fori=0to2
870 pokea+g+i,32+pn(p,i+1)
880 pokea+40+g+i,32+pn(p,i+4)
890 pokea+80+g+i,32+pn(p,i+7)
900 next
910 return
920 rem-----match-----
930 poker+5,9:poker+12,9:poker+19,9:poke
r+1,40:poker+4,33
940 fori=0to100:next
950 poker+18,0:poker+15,60:poker+18,33
960 fori=1to400:next
970 poker+4,0
980 t=t+1:d$(t)=u$:e$(t)=v$:sc(q)=sc(q)+
1
990 fori=0to2
1000 pokea1+g1+i,32:pokea2+g2+i,32
1010 pokea1+40+g1+i,32:pokea2+40+g2+i,32
1020 pokea1+80+g1+i,32:pokea2+80+g2+i,32
1030 next
1040 ift=12then1500
1050 goto540
1060 rem-----restore cards-----
1070 q=q+1:ifq>wthenq=1
1080 fori=1to1700:next
1090 fori=0to2
1100 pokea1+g1+i,102:pokea2+g2+i,102
1110 pokea1+40+g1+i,102:pokea2+40+g2+i,1
02
1120 pokea1+80+g1+i,102:pokea2+80+g2+i,1
02
1130 next
1140 goto540
1150 rem-----data-----
1160 data58,0,58,0,0,0,58,0,58
1170 data0,10,0,10,10,10,0,10,0
1180 data0,33,0,0,33,0,0,33,0
1190 data49,49,49,0,0,49,49,49
1200 data0,0,51,0,51,0,51,0,0
1210 data0,55,0,55,0,55,0,55,0
1220 data59,0,59,0,59,0,59,0,59
1230 data0,0,0,54,54,54,0,0,0
1240 data0,0,0,0,49,0,0,0,0
1250 data128,128,128,0,0,128,128,128
1260 data95,0,223,0,95,0,223,0,95
1270 data0,58,0,0,0,58,0,58
1280 data11,0,11,11,0,11,11,0,11
1290 data0,59,0,59,59,59,0,59,0
1300 data55,0,55,0,1,0,42,35,43

```

```

1310 data46,45,46,46,45,46,46,45,46
1320 data53,35,41,34,54,34,42,35,43
1330 data0,54,0,54,0,54,0,54,0
1340 data0,0,0,49,35,49,0,0,0
1350 data88,89,88,88,89,88,88,89,88
1360 data201,0,191,0,54,0,63,0,73
1370 data75,55,83,75,55,83,75,55,83
1380 data28,0,30,55,55,55,28,0,30
1390 data26,34,26,35,54,35,26,34,26
1400 data5,9,11,2,3,12,4,1,10,7,8,6
1410 data6,2,11,4,1,8,3,12,10,5,7,9
1420 data162,0,138,157,60,3,232,224
1430 data24,208,248,96,166,251,189,60
1440 data3,201,1,208,13,232,224,24,176
1450 data3,76,122,3,162,0,76,122,3,169,1
    ,157,60,3,189,84,3,133,251,96
1460 data173,32,208,72,174,204,2,189,204
    ,2,141,32,208,160,62,200,208
1470 data253,32,228,255,201,0,208,5,202,
    240,232,208,233,133,2,104,141
1480 data32,208,96,6,1,2,6,7,5,4
1490 rem-----finish-----
1500 ifw>lthen1560
1510 print"[CLR][WHT][DOWN][DOWN][RGHT][
    RGHT]you got it in"s"attempts"
1520 print"[DOWN][DOWN][RGHT][RGHT]anoth
    er game(y/n)?"
1530 sys679
1540 ifpeek(2)=89thenprint"[CLR]":goto22
    0
1550 poker+24,0:end
1560 print"[CLR][WHT][DOWN][DOWN][DOWN][
    DOWN][DOWN][DOWN][DOWN]"
1570 fori=1tow
1580 printp$(i) " scored"sc(i)"pair"
1590 print
1600 next
1610 print"another game(y/n)?"
1620 sys679
1630 ifpeek(2)=89thenprint"[CLR]":goto22
    0
1640 poker+24,0:end

```

Typing Practice

Improve your typing speed and accuracy using this program. A representation of the keyboard appears on the screen, helping you learn the principles of touch typing. This program originally appeared on our disk magazine number 3. ■

```

5 rem*[DEL][DEL][DEL][DEL][DEL]adap
ted by steven darnold, p.o. box 201 ale
xandra, new zealand
i
8 poke53280,0:poke53281,0:print"[CLR]":d
s="t y p i n g p r a c t i c e
10 fori=1to13step3:poke646,i:print:print
i[DOWN]
12 forj=1to12(d$):printmid$(d$,j,1)::fo
rn=1tornd(1)*56:nextn,j,i
14 print"[GRY3][CLR][SWUC]":clr
16 dimex$(60)
18 ln=39:sc=55296-1024
20 oc$="[F1]"
22 tl=700
24 gosub 40
26 gosub 252
32 zl=64:ri=2
38 goto190
40 a=1064:dimcl(57)
42 data169,258,254,173,92,175,177,179
44 data102,181,183,185,262,260,104,106
46 data88,94,171,96,100,256,90,252,98,25
0
48 fori=1to26
50 readcl(i):next
52 data336,256,258,260,176,178,180,96,98
,100
54 fori=48to57
56 readcl(i):next
58 return
60 x=asc(c$)-z1
62 ifx=-32goto66
64 y=a+cl(x):goto68
66 y=a+339

```

```

68 d=peek(y+sc):pokey+sc,l:return
70 print " [C+]"
72 end
74 print"[CLR]"
76 print"[CLR]"
78 print"[GRY1][RGHT][RGHT][RGHT][RGHT][
    RGHT][RVON] [RGHT] [RGHT] [RGHT] [RGHT]
    [RGHT] [RGHT] [RGHT] [RGHT] [RGHT]
    [RGHT] [RGHT] [RGHT] [RGHT] "
80 print"[DOWN][RGHT][RGHT][RGHT][RGHT][
    RGHT][RVON] [RGHT] [RGHT] [RGHT] [RGHT]
    [RGHT] [RGHT] [RGHT] [RGHT] [RGHT] [R
    GHT] [RGHT] [RGHT] [RGHT] "
82 print"[DOWN][RGHT][RGHT][RGHT][RGHT][
    RGHT][RGHT][RGHT][RVON] [RGHT][PUR] [R
    VO F] [RVON] [RVOF] [RVON] [RVON] [R
    VON] [RVON] [RVON] [RVON] [RVON] [R
    GHT][GRY1] [RGHT] "
84 print"[DOWN][RGHT][RGHT][RGHT][RGHT][
    RGHT][RGHT][RGHT][RVON] [RGHT] [RGHT] [
    RGHT] [RGHT] [RGHT] [RGHT] [RGHT] [R
    GHT] [RGHT] [RGHT] "
86 print"[DOWN][RGHT][RGHT][RGHT][RGHT][
    RGHT][RGHT][RGHT][RGHT][RGHT][RGHT]
    [RVON][CO][CO][CO][CO][CO][CO][CO][
    CO][CO][CO][CO][CO][CO][CO][CO]
88 return
90 print"[CLR]"
92 print " [C+][S] [C+][S]
[C+][S] [C+]"
94 print " [C+][S] [C+][S]
[C+][S] [C+][S]
96 print " [C+][S] [C+][S]
[C+][S] [C+]"
98 print "
100 print"[RGHT][RGHT][RGHT][RGHT][RGHT]
    [RGHT][RGHT][RGHT][RGHT][RGHT][RGHT][R
    GHT][RGHT][RGHT][RGHT][RVON] [RVON]
    [RVON] [RVON] [RVON] [RVON] [C+]"
102 print " [C+][S] [C+][S]
[C+][S] [C+]"
104 print " [C+][S] [C+][S]
[C+][S] [C+]"
106 print " [C+][S] [C+]"
108 print " [C+][S] [C+][S]
[C+][S] [C+]"

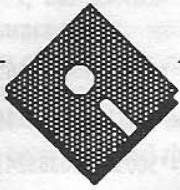
```

```











[C+][S] [C+]"
110 return
112 print"[LBU][HOME][DOWN][DOWN][DOWN]
    [DOWN][DOWN][DOWN][DOWN][DOWN][DOWN][D
    OWN][DOWN][DOWN][RGHT][RGHT][RGHT][R
    GHT]";
ex$(n)="[RGHT][RGHT][RGHT][RGHT]";
114 print"[LRED][RGHT][RGHT][RGHT][RGHT]
    "
116 e=0:c=0:l1=0
118 fori=1tolen(ex$(n))
120 c$=mid$(ex$(n),i,1):l=0
122 gosub60
124 t=ti: t2=t1
126 get d$: if ti-t > t2 goto 132
128 if d$="" goto 126
130 goto 142
132 t2=100000
134 print "[LBU][HOME][DOWN][DOWN][DOWN]
    [DOWN][DOWN][DOWN][DOWN][DOWN][DOWN][D
    OWN][DOWN][DOWN][DOWN][DOWN][DOWN][D
    OWN][DOWN][DOWN][DOWN][DOWN][DOWN][R
    GHT][RGHT][press [LRED]f1[LBU] to che
    ck progress"
136 get d$:if d$="" goto 136
138 print"[UP]"
140 print "[LRED][UP][UP][UP][UP][UP]
    [UP][UP][UP][RGHT][RGHT][RGHT]";: for k
    k=1 to i:print"[RGHT]";:next
142 if d$=oc$ goto 158
144 ifd$<c$thene=e+1:print"[WHT][LEFT]
    [LRED]";:goto126
146 l=ti-t:ifl>300thenl=300
148 ll=ll+1
150 pokey+sc,d
152 c=c+l:printc$;:next
154 tc=tc+c:te=te+e:t1=t1+ll
156 return
158 print"[CLR][DOWN]"
160 print"[CYN]present difficulty ="::i
    fint(n/4)<10thenprintint(n/4):goto164
162 print" numeric"
164 print:print"correct keystrokes ="::t
    c

```

Disk magazine No. 12



Features

-  **Appointment Manager 2.1** - now with print and search facilities
-  **Term** - communications program, dozens of features, fully menu driven, complete with phone directory and more
-  **Panes** - as appearing in the July and September issue of Commodore Review, windowing system
-  **Atlantis** - undersea fast action shoot-em-up
-  **Time Crystal** - Interactive graphic demo
-  **Circle Navigation** - calculate the distance between any two points on the earth
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```

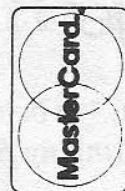
166 print:print"error keystrokes  =";t
e
168 if(tc+te)=0goto172
170 print:print"error/total      =";i
nt(te/(tc+te)*100);"%
172 x=int(tl/60):y=int(x/60):x=x-y*60
174 print:print"keyboard time used  =";y
;"min."x;"sec."
176 iftl=0goto180
178 print:print"words per minute  =";in
t(tc*720/tl)
180 print"[LBLU][DOWN][DOWN][DOWN][DOWN]
press [LRED]f1[LBLU] to return to exerci
ses.
182 getd$:ifd$=""goto182
184 if d$=oc$ then goto 14
186 goto182
188 end
190 ifr1=lgoto220
192 gosub400:print"[DOWN][DOWN][DOWN][CY
N]level of difficulty? (0 to 9)";
194 getd$:ifd$=""goto194
196 if d$ <> "0" then if val(d$)=0 goto
194
198 printval(d$)
200 n=4+val(d$)
202 tl=0:te=0:tc=0
204 gosub74
206 gosub112
208 ife>2goto204
210 ifll<1840thenn=n+1:goto216
212 n=n-4:ifn<0thenn=0
214 goto204
216 ifn>lthenn=ln-3
218 goto204
220 n=40
222 tl=0:te=0:tc=0
224 gosub90:gosub112
226 ife>2goto224
228 ifll<1840thenn=n+1:goto234
230 n=n-4:ifn<40thenn=40
232 goto224
234 ifn>47thenn=44
236 goto224
238 i=43:ln=11000
240 println+i;"ex$(i)=";
242 forj=1to33
244 getd$:ifd$=""goto244
246 printd$;;next
248 print:i=i+1:goto240
250 end
252 ex$( 0 )="fjfjffjffjffjffjffdkfdjkfdjk
fdjkfd
254 ex$( 1 )="dkdkdkdkdkdkdkdkdkdklksklk
dklks
256 ex$( 2 )="slslsllslslslslssakllkaslk
asklsa
258 ex$( 3 )="fdsajklkjasdfsadjlkjsfljd
ajlfjf
260 ex$( 4 )="sad ask lad all dad fad ad
d lass
262 ex$( 5 )="fgjhfgjhfgjhfgjhfgjhfgjh
jghjf
264 ex$( 6 )="gas had lag sag hag jag ga
qs lad
266 ex$( 7 )="ha add fads hags shall fal
er moan
l lads
322 ex$( 40 )="4564564564564564564564
5664546
268 ex$( 8 )="frdeswaqftrfedwsqatrewqasd
5664546
frewqa
334 ex$( 41 )="4141525263631441255236634
5612345
270 ex$( 9 )="jukiloploikujhyujkilopol
5612345
kiujhy
336 ex$( 42 )="5005325203652415636520145
0025641
272 ex$( 10 )="sawfedredfatjukkiloppokh
338 ex$( 43 )="4747585869697447855896694
5678945
ugjugft
5678945
274 ex$( 11 )="trfdeswqagyjhukilolpokiu
340 ex$( 44 )="1020301450475869500564758
6950145
hgtyrui
342 ex$( 45 )="1234567890054612347586950
0145650
276 ex$( 12 )="for the its two his got d
344 ex$( 46 )="1415052586369632145656321
4569874
ug lots
346 ex$( 47 )="0202123369852147412023456
9874520
278 ex$( 13 )="she rod out you are lids
348 return
pot saw
400 print"[CLR][LBLU][DOWN]rest your fin
gers on the home keys:
280 ex$( 14 )="sir fur how try had rut r
410 print"[PUR][DOWN][RVON] [RGHT] [
id weds
] [RGHT] [RGHT] [RGHT] [RGHT] [RGHT] [RGHT]
282 ex$( 15 )="did rod use ply ways ale
] [RGHT] [RGHT] [RGHT] [RGHT] [RGHT] [RGHT]
ate dog
] [RGHT] [RGHT] [RGHT] ";
284 ex$( 16 )="azsxdcfvghnjmkljhbklklopa
412 print"[RVON] a [RGHT] s [RGHT] d [RG
wsedrft
HT] f [RGHT] [RGHT] [RGHT] [RGHT] [RGHT] [RGH
T] [RGHT] [RGHT] [RGHT] [RGHT] j [RGHT] k [R
286 ex$( 17 )="zasxdcfvghnjmklkjnhbgv
GHT] l [RGHT] ";
fdcszza
414 print"[RVON] [RGHT] [RGHT] [RG
288 ex$( 18 )="zxcvbnmnbvczxfcdxsazajkm
HT] [RGHT] [RGHT] [RGHT] [RGHT] [RGHT] [RGH
lhbvnmk
T] [RGHT] [RGHT] [RGHT] [RGHT] [RGHT] [R
290 ex$( 19 )="lkjnhbazsxdcfvghnjmkljhn
GHT] [RGHT] "
fgvjhbf
420 print"[LBLU][DOWN][DOWN][DOWN]do not
nor end
292 ex$( 20 )="and fix hill buy man bed
look at the keyboard. keep your [DOWN]
294 ex$( 21 )="can cut now sons own big
eyes on the screen.
new car
430 print"[DOWN][DOWN][DOWN]press [LRED]
296 ex$( 22 )="mew him one any van but b
f1[LBLU] to check your progress.
ad ices
440 return
298 ex$( 23 )="off odd ann all see zoo c
an back
300 ex$( 24 )="qazswxedcfrvtgbyhnujmikol
ready.
pploqaw
302 ex$( 25 )="deswqaiopjkllyhtgvbnjukil
304 ex$( 26 )="bgvfrdswazaqplmjuoilplkmj
nutgvaq
306 ex$( 27 )="zserfdvczraqjhkalpolkijuh
yntgbaq
308 ex$( 28 )="the than able very gave h
id copy
310 ex$( 29 )="move then cam when have s
ent pot
312 ex$( 30 )="give them time try both n
ot much
314 ex$( 31 )="want best make to go more
cry as
316 ex$( 32 )="teupoyqshgrjwidakqtreougj
hsdfnj
318 ex$( 33 )="idpfwaklpoutweydsahjklkig
oroplqa
320 ex$( 34 )="atrqjewlduyigkfshipojsuew
tluonml
322 ex$( 35 )="frygadoqhskaruilqtpdoywhg
kfjecxn
324 ex$( 36 )="other their rye field nor
m rifle
326 ex$( 37 )="think usual waste for mov
e would
328 ex$( 38 )="month date year minute da
y times
330 ex$( 39 )="early delay about axe que

```



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An Introduction to the C Programming Language

By Adrian Sheedy

In many circles "C" is becoming the most important and popular programming language for applications ranging from operating systems to games.

MANY SOFTWARE houses are opting for C as their main production language. As a personal computer programmer, you can find that what's good for the big wigs is good for you too.

As our humble endeavour to prove this to you we will do as the title says and give you an introduction to the wide world of C. Future columns will take the aspiring C programmer through the concepts, commands and structures of C so you can decide for yourself if it is worthy of the praise that so many give it.

C is a compiled language, like Pascal or FORTRAN, as opposed to an interpreted language like BASIC or Logo. It is a powerful development language in which much of the Amiga software is written. Adding to this power is its portability. The developers of C wanted something that could be easily ported to other computer systems.

It is a structured language that requires predefined variables and has constructs such as 'do', 'while', 'for', and 'if'. But as you will find, it promotes economy of expression, and hence good programming styles. Its great ability to get down to the address level of the computer classes it as a 'low' level language. For some this may conjure up pictures of assembly code, but don't be frightened - you don't need to go to the bit crunching level to write successfully in C. In fact, in many cases people have stopped using assembly in favour of C.

A simple C program consists of one or more functions which tell the computer what operations need to be done. These

functions need to be compiled into a form which the computer can run (usually called an executable file), and often linked with additional files which may be needed for the program to run properly. Thus to write and run C programs means you need an editor, a C compiler, and a linker - and of course a computer!

As for compilers, there are two good choices available for the Amiga: *Aztec C* from Manx Software Systems, and *Lattice C Compiler* from Lattice Inc. There will be a full review of these products in a future issue. But for the moment the examples given will be tested using *Aztec C*.

I must take this opportunity to say that learning C on the Amiga is no party. It is indeed a challenge to learn C well. But the rewards of power, portability and flexibility will be welcomed.

Printing to the screen

Let's look at a program that prints a message on the screen.

Example 1:

```
/* This program will print a special
message on your screen. */
main()
{
printf("Wanna buy a Wombat?\n");
}
```

The output will be:
Wanna buy a Wombat?

This brilliant program needs some accompanying explanations:

— The slash and asterix '/' opens a comment. Its opposite look-alike '*'

closes the comment. You can have as many lines between the open and close comment as you wish. Everything in these is ignored by the computer.

— main() declares a function. The parentheses '()' identify 'main' as a function name. This particular name is a special one. Every C program begins execution at the function called 'main'. Subsequently, there must always be a function bearing this name in any C program.

— The open braces '{' denotes the start of the function's commands, and the close braces '}' ends it.

— printf is the command to print the string of characters, defined between the inverted commas, to the screen. More on this in the next example.

— The backslash n '\n' is the newline character.

— Each statement is ended with a semi-colon ';'. This is a necessary part of every statement. You will get rude messages from your compiler if you leave it out. Only function names and some other keywords (like 'while' and 'do') which usually start loops are free from the semi-colon.

The newline character is an interesting feature. The same output can be achieved with this example:

Example 2:

```
main()
{
printf("Wanna ");
printf("buy a ");
printf("Wombat?\n");
}
```


Each string of characters is tacked onto the end of the last. So you can see that the print command never assumes that a newline is intended - a feature which makes it easy to build up an output line in stages.

Variables

Variables in C must be declared at the beginning of the function or group of functions in which they will be used. There are two main types of variables, namely 'int' for integers, and 'char' for characters. Here's how it's done.

Example 3:

```
main()
{
int num; /* declares num as an integer
*/
num = 5; /* assigns value 5 to num
*/
print("Wanna buy a Wombat?\n");
print("Yes, I will take %d ",num);
print("Wombats thanks.\n");
}
```

In the second print line the percent d '%d' tells the computer to take the value after the comma and substitute it there. So since 5 is the value of 'num', the output will be:

```
Wanna buy a Wombat?
Yes, I will take 5 Wombats thanks.
```

Maths and more PRINTF

Now let's try some number crunching programs.

Example 4:

```
/* A program to tell you the squares
of numbers from 1 to 10 */
main()
{
int i, low, high, i_sqr; /*declares all
these variables as int's */
low = 1;
high = 10;
i = low;
```

```
print("i i squared\n\n"); /*two newlines
after heading*/
while ( i <= high )
{
i_sqr = i * i;
print("%-4d %-3d\n", i, i_sqr);
i++;
}
}
```

The output is:

```
i i squared
1 1
2 4
3 9
4 16
5 25
6 36
7 49
8 64
9 81
10 100
```

— Here we can observe the 'while' construct in action. The condition in the parentheses after the 'while' is tested. If it is true, then the statements in the braces are performed. Then the 'while' is retested, and if true, then the statements are performed again. When it is false the loop is terminated and execution continues with the commands after the loop, indicated by closed braces.

— The 'i_sqr = i * i;' is straight forward enough. 'i_sqr' was declared as an integer, and the appropriate value is assigned to it at this point.

— Note that the %d in 'print' statements can be used as many times as desired as long as there are a corresponding number of values specified after the inverted commas, and separated by commas. The '4' and '3' between the percent sign and the 'd' define the field width of the values to be printed. The minus sign means values are left justified. Without a minus, the values would be right justified. This is useful when you don't know the length of a number (or character

string) to be printed. You can easily set the length and forget about messing around to get a table of numbers to line up properly, for example.

— You are no doubt dying to know what 'a++' signifies. This is the shorthand C version of a = a + 1. We could have used '++a' and achieved the same results. There is a subtle difference between them which will be fully explored in a future installment.

Now we will introduce two more keywords of C.

Example 5:

```
/* echoes what you type in.
a 'q' quits the program. */
main()
{
int c;
c = getchar(); /*gets characters from
keyboard*/ while ( c != 'q' ) /*a q makes
this false*/ {
putchar(c); /*prints c to screen*/ c =
getchar();
}
}
```

The output is simply an echo of what you type in. Now for an explanation.

— 'c = getchar();' waits patiently for you to type characters and press return. It stores the characters in the variable 'c'. This command accepts input from the standard input device, which is the console by default.

— 'while (c != 'q')' checks what you typed in for a 'q'. The '!=' is the operand for 'not equal to'.

— 'putchar(c);' prints the character you typed in, as the comment says. It will print to the standard output device, which is the screen by default.

Our next installment will present some more useful programs and the rest of the most common C commands. ■

128 corner

Geocalc

by Harry Waterworth

This month, we take a look at one of the more serious products in the GEOS range, namely Geocalc 128. Although this program has a multitude of household uses, it is the small business person who will find Geocalc most invaluable for the day to day running of his or her business.

THE OTHER POINT to mention concerns the 1750 Ram Expander again, for it is this program above all others in the Geos family that best demonstrates the benefits that come with owning the expander.

With the 1750 Ram expander, the 128 has its power increased to 640K, and I guess the best way to illustrate the dramatic difference this makes is to give some direct time comparisons with and without the additional ram.

The following example is with a Geocalc file 19K in size, with a grid pattern 20 columns across (Rows A to T) and 55 lines deep. There is an entry on each line, with the totals in the last line extending across the full 20 columns (see diagram at bottom of page).

I think these figures speak for themselves, but to best illustrate the point, let's look at the following example of a small business owner completing his monthly cash book figures of, say, 70 entries, (deposits, bank fees, cheques to suppliers etc). Without the ram expander, it would take just over **one hour**. However, plug an expander into the 128 and the same job takes only two to three minutes. Pretty quick stuff to say the least, and where time is money, it wouldn't take too long for the expander to pay for itself.

Of the three spreadsheets I have tried

on the 128, *Geocalc* is by far and away the easiest to use. It also happens to have the most power and more active cells than either of the other two competitors. Indeed, there are in excess of 28,600 cells in which to place your data, more than enough for most people's requirements.

Having lots of cells is of little use if the program lacks the formulas to place in them. Fortunately, this is not the case with *Geocalc*. It has all the options you will need, and then some.

Most of us will stick with the statistical functions which allow you to select a row or range of cells and calculate the total value; the average value, or the minimum or maximum value of the cells involved. For all of the real number freaks out there, the following functions are also available:-

Math functions:

1. Absolute value.
2. Integer part of number.
3. Random number (between 0 & 1).
4. Square root of number.
5. Round number to nearest integer.

Financial functions:

1. Future value of series of equal payments, invested at a set interest rate over a set term.
2. Single loan payment, based on a particular principal, per term of the loan, and period interest rate.
3. Present value of a series of equal payments, invested at a certain interest rate made over a term of payment.
4. Interest rate of a loan based on a particular principal, final value (or sum of the payments), and over a specific term.
5. Term of a loan of equal payments, at a certain interest rate, with a certain final value.

Scientific functions:

1. The value e raised to the number power.
2. Log of number, e (natural log).

	WITHOUT RAM	WITH RAM	% TIME REDUCTION
Open 19K File	14 Secs	3 Secs	78%
Scroll From Top Line To Bottom Using Turbo Scroll Tool.	14 Secs	5 Secs	64%
Enter Value in Cell	52 Secs	2 Secs	96%
Delete Value in Cell	52 Secs	2 Secs	96%

3. Log of number, base 10.
4. The number pi.

Trigonometric functions:

1. 2-quadrant arc tangent of number.
2. Cosine of number.
3. Sine of number.
4. Tangent of number.

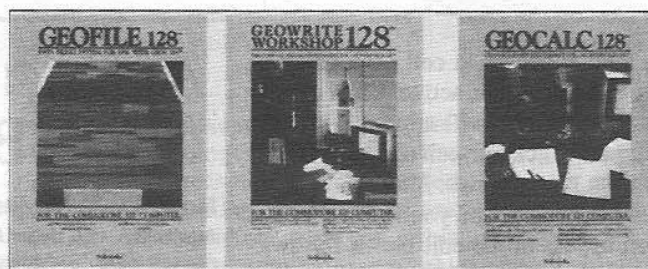
(The above descriptions are straight from the manual; I'm still trying to work out what a Sine is and my idea of a Pi is something you have whilst watching St George give Manly a hiding on Saturday afternoon).

When you first boot your *Geocalc* work disk, you are presented with a screen with column headings A to F, and downscreen rows numbered 1 to 13. As is obvious from the number of cells available, this opening screen is just the tip of the iceberg. The column headings start at A and continue through to DH (112 columns), whilst the rows are numbered from 1 to 256.

Column width can be adjusted by one of two methods. Firstly, you can use the mouse; just place the pointer in the column heading, press and hold down the button, and drag the column across to the required width, or secondly, select 'display' from the main menu; then 'width' from the drop-down sub-menu, and from there you enter the required width via the keyboard.

Locating a particular cell has also been made easy, as *Geocalc* provides three different ways of moving around the grid. Firstly, you can just move your mouse to that direction of the screen where the cell is located, and you will scroll one row or column at a time. The next method involves clicking on one of four "paging" arrows at the bottom of the picture and this will move you a full screen at a time, either left, right, up or down. The third method is used when you wish to move to a part of the worksheet which is a fair distance away. You click on the "Turboscroll" icon at the top of the screen, and move the small window around the spreadsheet rectangle to the area you wish to work in, then another click, and you're there.

Entering text or numbers into cells is simplicity itself; just click on the cell that you want the amount or text to be placed in, and start typing. What you type will appear in the edit bar at the top of the screen, and to drop it into the cell, you just click on the 'enter' icon (it looks like the tick your teacher placed on your maths exam on the rare occasion when you got a correct answer) and presto, the information is locked in.



How does it work?

To get an idea of how *Geocalc* works, let's look at the monthly budget projections for that well known couple around town, John and Mary Yuppie. Space is always at a premium, so to keep the editor happy, we'll restrict it to a six month period.

The first step is to enter the column and row headings, and from there, you start to enter the data. Place the net income amount in cell C4, and if it is a constant amount, you only have to do this once. To get the amount into the rest of the cells in row 4 is just another quick job for your friendly mouse. Click on cell C4 to make it active. Then, move the pointer up and click on the edit menu, then click on copy. Now, go back down to cell D4, click the mouse, hold the button down and drag it across to H4. Go back to the edit menu, click on paste, and that's it; the income is automatically entered into all the relevant cells.

This manoeuvre is repeated for all the rows with constant amounts. To get your totals is just as easy. We'll look at

1	A	B	C	D	E	F	G	H	I	J	K
2					NETT	INCOME					
3											
4	JOHN		JAN 1795.75	FEB 1795.75	MAR 1795.75	APR 1795.75	MAY 1795.75	JUNE 1795.75		TOTAL 10774.50	AVERAGE 1795.75
5	MARY (Part Time)		850.00	790.00	900.00	480.00	550.00	720.00		4290.00	715.00
6	FAMILY ALLOWANCE		55.00	55.00	55.00	55.00	55.00	55.00		330.00	55.00
7	BOARD-JIM		60.00	60.00	60.00	60.00	60.00	60.00		360.00	60.00
8											
9	TOTAL INCOME		2760.75	2700.75	2810.75	2390.75	2460.75	2630.75		15754.50	2625.75
10											
11											
12					TOTAL	EXPENSES					
13	FOOD		600.00	620.00	590.00	630.00	610.00	570.00		3620.00	603.33
14	PETROL		120.00	150.00	110.00	130.00	115.00	125.00		750.00	125.00
15	HOUSING LOAN		650.00	650.00	650.00	650.00	650.00	650.00		3900.00	650.00
16	CAR LOAN		300.00	300.00	300.00	300.00	300.00	300.00		1800.00	300.00
17	LIFE INSURANCE		50.00		50.00		50.00			150.00	25.00
18	CAR REGO			380.00						380.00	63.33
19	CAR INSURANCE					350.00		400.00		750.00	125.00
20	RATES		400.00			400.00				800.00	133.33
21	ELECTRICITY				180.00			180.00		360.00	60.00
22	SCHOOL FEES		460.00				460.00			920.00	153.33
23	CLOTHING			200.00		180.00		210.00		590.00	98.33
24	ENTERTAINMENT		120.00	120.00	120.00	120.00	120.00	120.00		720.00	120.00
25	MISC		40.00	40.00	40.00	40.00	40.00	40.00		240.00	40.00
26											
27	TOTAL EXPENSES		2740.00	2460.00	2040.00	2000.00	2345.00	2595.00		14980.00	2496.67
28											
29											
30	SURPLUS FUNDS		20.75	240.75	770.75	-409.25	115.75	35.75		774.50	129.08

the total expenses in cell C27. Click on that cell to make it active. Then type an = symbol which will appear in the top edit bar. Click on cell C13, but don't hold the button down. Keep clicking on each of the cells, and you will see each of them appear in the edit bar as follows: =C13+C14+C15+C16 etc. When you get to the last cell in the column; C25, just move the pointer to the enter icon and click on it and the total will automatically appear in cell C27. The same procedure as described in the previous paragraph is used to copy the "Total" formula in each of the other cells in row 27.

As well as using the mouse to enter formula and data into the cells, you can also enter information directly by keyboard into the edit bar. To example this, the averages in column K are entered by clicking on cell K4 to make it the active cell, and then typing the following formula: =AVG(C4:H4). A quick press on the return key and the job is finished.

Although this ease of operation makes *Geocalc* a good package, there are a host of other features as well, some of which are:-

- Option to print column or row headings;
- Capacity to print any specific section of the spreadsheet desired;
- Ability to print in plain, boldface or italic;
- Column alignment (left, right or centre);
- Accuracy up to 12 decimal points if desired;
- Split screen option;
- Use of the 128's numeric keypad (a great feature) and the ability to be used in conjunction with *Geowrite* or *Geofile*.

The only depressing thing about *Geocalc* is the speed at which it can tell you how broke you're going to be in twelve months' time.

In next month's edition, we will look at *Geofile 128*, Berkeley's database for the 128. Hope to see you then. ■

Amiga related user groups and BBS's

compiled by Tim Strachan

New South Wales

Australia Amiga Users Association
Associated BBS: AmigaMan BBS
P.O. Box 389, Penrith NSW 2750
Sysop: Ron Carruthers
Telephone: (047) 588006

Special Interest Group of AAUA
The meetings are held at: Connells Point
Public School Hall, Riverview Road,
Connells Point
Meets every 2nd Wednesday of the month at
7.30pm.

Burwood Amiga User Group
Meets 2nd Monday each month at the
Burwood R.S.L. 7.30pm
Peter Anderson Home: 6271596
Has about 60 members.

Ace User Group
Enquiries: P. O. Box 938,
Bankstown NSW 2200.

Goulburn Amiga Owners Group
Meet 1st Wednesday of the month at the
Southern Tablelands Education Centre.
General interests - all topics covered.
They have 22 regularly turning up of about 50
Amiga owners in Goulburn.
Contact: Rob Wilkins
(Publicity Officer) (048) 442251

Albury-Wodonga Commodore Users Group
Inc.
Meet last Monday every month at Albury High
School
President: David Willis
P O Box 1014
Albury NSW 2640

East Coast Amiga Users Group.
Meet 2nd Friday each month, 7 pm,
Cnr Alison and Rankin Sts, Wyong.
Also meet 4th Friday each month 7 pm,
Niagara Park Public School.
President: Jeff Campbell
Telephone: (043) 418140
Jeff reports good attendance, and formation
of a group in Roseville soon. They have a
newsletter called "Output".

Steel City BBS (Wollongong)
Sysop: Craig Sinclair
Computer: IBM, Hours: 3.30pm to 6.30am
Large Amiga section.
Telephone: (042) 837247

Club Amiga BBS
Sysop: Ross Kellaway and Ken White
Telephone: (02) 5216338

C Users BBS
Sysop: Rick Polito
Telephone: (02) 560 3607
C tutorial section; Amiga National Conference

Newcastle Amiga BBS
Sysop: Stan White
Telephone: (049) 587 350

Amiga Zone BBS
Sysop: Richard Duffy
Telephone: (02) 7716351
All usual baud rates; open 9pm to 7am;
membership with limited visitor access; runs
on an Amiga 1000.

Landover BBS
Sysop: Lance Lyon
Tel: (02) 319 1793
Open all hours; all the usual baud rates.

The Illawarra Computers Users Club
Meets every 3rd Saturday at 2 pm at: Aga
Club, Northcliffe Drive, Berkeley
(opp. Kembla Grange Race Course).
Secretary: Neville Dillon,
Telephone: (042) 562642
Plenty of support for Amiga (and incidentally
Amstrad 8bit computers).

UNIX Public Dial-In BBS (Wombat BBS)
Sysop: Andrew Khoo
Telephone: (02) 8684836

Blackboard BBS
Sysop: Will Black and Stephen Hudson
Telephone: (02) 5256970
Baud: V21, V22, V22bis, V23, B103, B212.
Access: Registration and Limited Visitor
access.
Computer: Amiga 500
BBS software: BBS-PC!

Cursor Contact BBS
Sysop: Greg Minahan
Telephone: (02) 6378131
Baud: V21
Software: BBS-PC!

Hornet Amiga BBS
Sysop: Rohan Snell and Craig Webster
Telephone: (049) 286383

Best of the latest Public Domain offerings

by Tim Strachan

PUBLIC DOMAIN (PD) and Shareware material continues to flow thick and fast in the Amiga community world-wide, and in Australia we're keeping up with it. An Amiga dealer reports that during a recent trip to Canada he was very surprised that none of the dealers or user groups over there seemed to have, or know much about public domain, and that we seem to be rather more up-to-date than they are.

In fact, Australia and Germany have taken the Amiga more to their bosom than any other country. And there's quite a lot of high quality PD material being written and distributed here in Australia.

Among the latest Australian offerings are:

- A suite of utility programs by Nic Wilson and Andy Clay and John Rowe of Toowoomba, including NOVIRUS (to kill viruses, constantly updated); GRAB and RESTORE (to save bootblocks as separate files for later restoration in the event of virus infection); DISKWIPE and DISKERR to wipe all information off disks and to find errors; various KICKSTART hacks and patches, and quite a bit more. These guys will write specific utilities (always in assembler) and also make hardware modifications. Contact them at (076) 358539, or via (02) 9593692.

- Mike Hansell has a shareware Directory Utility called DUTILS which apart from all the usual Dir Util functions, like read a file, show a pic, copy, delete, etc., allows you to edit sectors on your disk, and many other capabilities. Mike has released a PAL version (ie, fills your full screen) and he can be contacted at 56 Shanke Cres, Kings Langley, 2147.

- Ken White writes useful CLI utilities in Assembler of all kinds, such as COMPARE to compare any two files, ABORTCOMMAND to stop any particular CLI process at any time, etc. Contact him at PO Box 296, Caringbah, 2229.

- Steve Sweeting writes fine programs such as WICON, which allows you to turn any window on your workbench into a small "wiconised" strip which can be brought up to full size at any time. Most of the programs

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Issues 1-7 of MEGADISC for \$99:
The 4 free PD disks I want (2 in the case of a 3-issue sub) are:
OR please send your Catalogue-on-disk now and I will choose the remaining disks later.
GAMES-PACK for \$30:.....
Signature:.....
Name:.....
Address:.....
Postcode:..... Telephone:..... Date:.....

Send to: MEGADISC, P O Box 759, Crows Nest 2065.
Telephone: (02) 9593692 (all hours)

above can be found on Megadisc 7 and 8 (see ad this issue). If there are any programmers out there who would like to get national distribution for their programs, contact the author on (02) 959 3692.

Tampa Bay Amiga Group (TBAG) Disks

This is a collection of 23 disks of PD software with very little overlap with the Fish disks, Amicus disks or Amigan disks. The most recent arrivals were TBAG 20-23, and a short overview of the better offerings follows.

● TBAG 20

BRUSH2ICON - This lets you create "animated" icons using two IFF pictures and you can also select the type of icon created (tool, project, etc.).

CURSIVE - A program to change normal text on screen into a "cursive" script text, made up of all kinds of odd characters

FINANCA - Useful utility to allow you to calculate mortgages, annuities, compound interest, and other such functions automatically.

FREE - returns the available free bytes on any storage device that Amiga-Dos sees as a drive. A list of up to six drives is kept by the program.

SPLITICON - takes an icon that has been ALTICON'd (ie ICON-MERGED) and make two icons out of the single-dual (action) icon.

QUICKFLIX - an IFF slideshow and cel animation program. It takes full advantage of the Amiga's multi-tasking operating system QuickFlix supports the LO-RES, HI-RES, NON-INTERLACE, INTERLACE, and HAM modes of the Amiga. A stand-alone slideshow or animation sequence can be generated when QuickFlix is run independently.

MAZEMAN - A Pacman type game.

MAKEANIM - an ANIM standard compressor, which can take a series of IFF files and combine them into a single animation file that can be played back with ShowANIM, as well as the Director and Aegis VideoSeg. There's also a SLIDESHOW and a graphic hack called MONDRIAN (creates geometrical designs onscreen).

● TBAG 21

VSCREEN - allows you to have screens that are larger than the actual display area of your monitor. vScreen

comes with four utility programs to help you manipulate windows on virtual screens: wSize wMove wMax and wList. Very good discussion in the docs about Intuition programming.

BIGSCREEN - allows user to specify left and top offsets AND height and width of Workbench Screen.

FIND - This program will look inside the program to be patched and find the appropriate NewWindow Structure. It will then tell you what offset in the structure must be modified.

FIX - This program will modify the Max Window Size values to 1024x1024

TEXTED - A full-featured text editor with a lot of similarities to EMACS, but with a much more friendly interface. Has all sorts of advanced facilities (macros, keyboard equivalents, etc.) and a full manual.

SHOWFONT - This program allows you to quickly and painlessly view all 256 characters in a typical font.

CONTOURA - This is a graphics program that graphs the contours of 3D-functions of the type $Z = F(X, Y)$. It is of interest to scientists and engineers as well as painters and designers.

PEEL - is a program which takes a 320x200 IFF picture and peels the image off the screen, while showing the back side of image. Like tape being pulled off glass.

TILER - a little game that is almost identical to Activision's *Shanghai* except much simpler, and although graphically pretty and inventive, uses fewer colours than *Shanghai*.

● TBAG 22

GT - Excellent terminal program with full docs, said to be for the "power user".

NEWCD - NewCD is a program to replace the CD that comes with AmigaDOS. It operates exactly like CD, except it puts the current path in the title bar of the CLI window.

BFORMAT - Bformat allows for the formatting of otherwise un-useable 3.5" diskettes. Good for recovering dud disks with only a couple of bad tracks.

SHOWWIZ - ShoWiz combines the features of a display program with those of a slideshow program. This means you can show individual pictures or a whole disk full! ShoWiz has 23 different ways to display your pictures and it works with ALL resolutions, including Overscan.

QUICKLENS - Creates a lens on any

screen for zooming in at various magnifications.

KING'S KORNER SOLITAIRE is a simple little solitaire game that is quick to play and contains several levels of difficulty.

TABLECLOTH - load a picture into the Workbench screen, more stable than DropCloth and other similar programs.

● TBAG 23

ICONLAB - Program that will let you see your icons and their alternate images without having to go to the Workbench. The program will also allow you to change various icon parameters like ICON TYPE, HIGHLIGHTING, DEFAULT TOOL, TOOL TYPES and STACK.

CRUNCH2 - "Crunches" or compacts programs to about 60% or so, but the programs are still able to be run. Very useful for conserving space on your workbench.

WEATHERMAN - A program to forecast the weather. To use this program, you need a barometer and some means of finding the wind direction (weather vane, fancy electronic instrument, wet finger, etc.).

VIRUSX1.7 - Latest update, checks all known viruses.

HERMIT - This will SAVE and CYCLE your FRONT SCREEN by using HOT KEYS. Very useful when you need a copy of a screen of a word processor, a game, a utility, etc.

SCREENX - Utility which lets you automatically cycle through all screens available, save them as IFF files. Has a clock.

POINTER-ANIMATOR - animates the Workbench pointer. Lots of choices, and customisable.

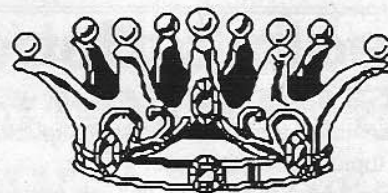
CYCLER - A program to cycle pictures at 3 speeds with forwards and backwards cycling. Lots of capabilities.

EW - Gives you "exploding" windows. This means that when windows (and also requesters) are opened, they open in a more exciting manner - a rectangle grows from a very small size to the size that the final window or requester will be.

The listing above will give you some idea of what's on the TBAG disks - much of it you won't find anywhere else. If you're interested in getting any of these or previous ones, check your user group or local BBS, or contact Megadisc on (02) 9593692. ■

Adventurer's Realm

by Michael Spiteri



WELCOME ONCE AGAIN to the dark depths of Australia's only help column dedicated to Commodore computer users.

Welcome Kamikaze Andy to the help team! From this issue, he will be the Realm's role-playing expert, bringing you news and views and reviews as well as hints and tips from his role-playing world - The Dungeon.

Realm's official hint sheets

The response to the new hint sheets have been amazing. I was away for a few weeks, and when I returned discovered over eighty letters from adventurers for these free hint sheets. Unfortunately, the supply ran out - which left many adventurers waiting a while for the free hint sheets to be sent to them. I apologise for the delay - everyone should have received their requested hint sheets by now, and I'm making sure I'll have more than enough in supply.

Stuck in a game? Write to the Realm

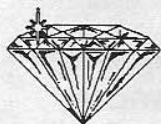
If you are having problems in any adventure game, I might be able to help. If I can't then someone else probably will! If you are that 'somebody else', don't hesitate by sending in your tips.

In fact anything to do with adventure games and this column should be sent to me. The famous address to write to is:
Adventurer's Realm
1/10 Rhoden Court
North Dandenong
Victoria 3175

New hint sheet!!

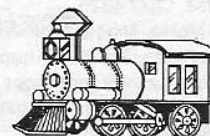
Yes, folks, thanks to Suzanne Parkes, we now have a hint sheet for *The Pawn!* Others available include . . . *Bards Tale I* (5 pages - only ask for if desperately needed!!) *The Hobbit*, *Kabyashi Naru*, *NeverEnding Story*, *Lord of the Rings*, *Adventureland*, *Zork 1,2,3*, *Castle of Terror*, *Pirate Adventure*, *ZZZZZZzzzzzz*, *Faery Tale*, *Borrowed Time*, *Hitchhiker's Guide To the Galaxy*.

You must enclose a stamped addressed envelope - large enough to hold the hint sheets. Also, please make sure when you post your letter to me, that the stamp is the right amount for the size of the envelope, otherwise Aussie Post will send me horrible little yellow bills asking for money!!



Wargame freaks - we cater for you too!

Barry Bolitho, our resident wargame expert, is on hand to supply strategic tips to battle in any world war. Just mark your envelope "Wargame Section" and mail it to the normal Realm address, and I'll pass it to Barry.



Finally, for role play freaks, welcome to . . .

The Dungeon

by Kamikaze Andy

Hello, and welcome to The Dungeon, the section of the Realm for all role-playing adventure gamers. The Dungeon is open to all views, comments, and questions from the role-playing public, and will hopefully provide clues for those stuck in any role-playing games (rpg). News and reviews will also appear frequently on this page, to keep you up to date.

The address for role-playing help/tips/ views etc is . . .

Realm's Role Playing Dept
44 Hawkesbury Drive
Willeton
WA 6155

Dungeon news

After *Land of Legends*, software developers Micro Illusions are planning the release of a construction set soon. Rumors of a *Faery Tale* sequel are getting louder all the time . . .

Origin Systems, creators of the classic *Ultima* series, have planned several new rpg's, including *2400 AD*, as well

as sequels to *Moebius* and *Autoduel*.

2400 AD is set in a futuristic world where robots are masters and humans are slaves, and it's your destiny to free the oppressed citizens by destroying the robot empire. The C64 version should be out soon.

Strategic Simulations will soon release more in its *Advanced Dungeon and Dragons* line, including an interactive game which allows you to train your characters for future scenarios. Training include logic puzzles, mysteries, arcade and strategy sub games. All will be out of for the C64 in early 1989.



Realm's debate centre

Two months ago I put forward this controversial topic for all to contemplate. The topic is adult software.

Following the release of such games as *Leather Goddesses* and *Leisure Suit Larry*, I think we should take a serious look at the impact of these products on children and adults alike. I want to find out how people feel about adult orientated software, whether we should welcome it with open arms, despite how explicit it may become. If there are any minors out there (no, not Zorkers - I mean people under 18), I'd like to know how easy it is to obtain and access these programs, and with computers becoming increasingly popular, are these products really a threat to society?

So far, I've had one interesting response. Alex Harvey writes . . .

"I'm 14, and as far as I'm concerned, obtaining adult-orientated software isn't

much of a problem. Even if you couldn't purchase these from a shop if you're under 18 (which I'm sure you can), you could always obtain a back-up copy from a friend. A threat to society? I think not! I mean there are certain adults-orientated scenes in every M rated movie, and they're all available to persons under 18."

MS: And supporting Alex's claim, I recently witnessed a boy, most certainly under age, purchasing Leisure Suit Larry at Myer's in Melbourne. However, Alex is quite right in pointing out that some M rated movies are more sexually explicit than the computer software available. Still - the debate must go on!

Is it possible to justify explicit themes in adventure games simply because other areas of the entertainment industry find them acceptable? - Ed. game Pilgrims out

Official realm bulletin boards

There are currently two bulletin boards that offer heaps of hints and tips among other things. These are . . .

Terminal BBS in Western Australia (09) 389 8048 and

Down Under BBS in New South Wales (02) 674 6647

We are currently looking for bulletin boards from all the other states to become part of this new network in adventuring !!

Zorker of the month

Gerry Dwyer is your good-ol-fashioned Zorker, who has a few problems in *Zork I*. Realm goes back to basics in awarding Gerry Dwyer the prestigious title of Zorker of the Month - November 1988.

Adventurer of the month

This month's great achiever is Mike Blinman, a sooper-doooper Infocom expert. Mike sent me solutions to both *Plundered Hearts* and *Stationfall!!* Well done, Mike!

Problems - and more problems (demented adventurers dept.)

First of the troubled minds is Scott Bullock, of Alexandra Hills. *Robots of Dawn* is a great strain on the brain for Scott . . .

1) If you talk to anyone they reply with a garbled mess of words and symbols. What's wrong?

2) How do you open the safe?

Then Scott paid a visit to *Emerald Isle* where he's spending minutes upon minutes trying to find a use for the hand axe.

A friend of adventurer Mark Sutton is stuck in a game called *Pilgrim*. His friend is having great parrucles at four cold areas . . . a blind ravine, a frozen river, a crevasse, and an ice glacier. Any

Realm's adventure chit chat

A character called ISEPIC has written to the Realm looking for pen-pals. He/she is 14 years of age, and the address is 29 Opal St, Mt Isa, QLD 4825.

Mario Moeller of 38 Greenvale Drive, Greenvale, Vic 3059 happens to be a clever contact (as the term goes), and he is willing to offer assistance in most adventure games. Meanwhile, he writes . . .

"Do you give reviews on home-grown adventures? As I and a friend have written one. If not, what would the address for the *ACR* Disk Magazine be, as we would then maybe try submitting it to them."

MS: I will review any game sent to me, especially home-grown ones (re: Paradox Effect 1 and 2). If you want to submit a game to the Disk-Mag, then just send the program to at 23 Bonnefin Rd, Hunters Hill 2110.

On the continuing saga of the *Bard's Tale* conflict, Ivan Maclaine of Howrah in Tassie writes . . .

"I would like to say that any adventurer who doesn't like the *Bard's Tale* series doesn't deserve anything!"

MS:- Beware all you Bard's Tale haters. Going by the number of requests for the Bard's Tale hint sheets, they look likely to outnumber Zorkers!!

"False advertising!" writes The Adventure Ace from Rivett in ACT. "I went to check out

your bulletin board on my dad's modem and after eight minutes of searching (which is quite expensive from Canberra - even on a Sunday) I found a dinky little message saying that the Realm was coming soon after a message in the Realm (August) said that it was there already!"

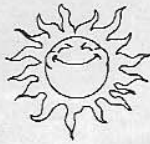
MS: My! Many apologies! It seems that ACR came out earlier in August than I expected. The hints service is now up and running on the Down Under BBS, so you shouldn't have anymore problems.

Famed UK Adventure Columnist Keith Campbell (*Computer & Video Games*) had a few things to say about John Harwood's comments in the recent interview I did with Beam Software . . .

"I hope John was deliberately exaggerating when he said you get 18 new titles a week in the UK! About four or five a month is more like it, and that includes stuff from the States! The scene over here is not really 14-year-olds with Spectrums as far as adventures are concerned. It is becoming dominated by Atari ST, and the age group is higher!"

Finally, David Dixon of Malvern, Victoria writes . . . "Should your title Adventurer's Realm really be titled Adventurers' Realm?"

MS: Yes, you are quite right (though I tend to feel that the former looks better).



game Pilgrims to offer assistance?

Ex-Zorker of the Month Tony Newman has written to bother me with three more adventure games. Firstly, in *Oo-Topos*, how can he get the shield unit away from the Collector Robot and what does she do with the moon-jewel? Will the shield get him through the force fields? Then into the *Uninvited*. Dogs guarding the chapel seem to be bothering Tony, as well as a Red Demon reluctant to give a key. Finally, in *Golden Path*, how do you get into the temple? Also, what does Tony give the monkey to allow him to get to his island. (And yes Tony, there is such a game called *Fish* by Magnetic Scrolls).

Another Realm regular, Maree Reynolds, is stuck in *Aztec Tomb* . . . "I am in the boat with the map, have gone to the island, lit the map, gone down the hole then back to the boat." And that is where Maree is stuck. Then she is having problems with obtaining a stupid frog in *Witch's Cauldron*, and also a snake with a paddle (actually, see the help section for this answer) in *African Safari*. A lever in a cave in a tree trunk is a game called *Smuggler's Cove* is also causing problems. Help wanted - urgently!

Can anybody help John Swanston get the game *Labyrinth* started? Apparently he's not doing a good job (at pirating maybe?).

Jill Howcroft is stuck in two Magnetic Scroll classics. In *Guild of Thieves*, she has the fly in the jam jar but she doesn't know how to get rid of the spider. Then in *Jinxter* she cannot open a safe.

Finally, Andrew Broekhuiz (of Colyton, NSW) is stuck in *Shadows of Mordor*. All he can do is go down the hole left by the tree and is left helpless with a few matches which get him nowhere fast. Could the crystal phial be of some use?

Help for troubled adventurers

Yes, folks, if you were stuck a few months back then you could be pulled out of a puddle here, thanks to many smart and clever adventurers.

Game: *Labyrinth*

For: Ricky Pezzimenti

From: L. Butcher

Help: To get out of the hedge maze, get the shears out of the stone corridor. Go to the overgrown section and "use shears" (MS: *Well! There's one way of getting out of a maze that acted like a maze but turned out not to be a maze that we associate with the mazes found in adventure games. Quite amazing!*)

Game: *Labyrinth*

For: David Newmann and Roy and Anne Barnes

From: L. Butcher and Ian Ross and Geoff Fisher (Thanks men!!)

Help: To enter the castle, first get the arm of firey (?) (In hedge maze with ludo, call ludo, call rocks, use camcorder, then at firey (?) give video and get arm, leg, head) Then go up to the gate and use arm. (MS: *Well again! First we have a maze that isn't the maze it seems to appear as. Then this maze contains a game of ludo and a strange character, and then we start dealing with an army of arms and legs and heads!! Heavy stuff!*)

Game: *Bard's Tale*

For: Shane Whalen

From: L. Butcher

Help: There is no fourth level. To progress, go to On 20e where there is a Mad God. Approach and defeat it. You are then reported to a new section of the town. Go into the middle building. Go up the stairs and you'll find yourself in Kylearn's tower.

Game: *African Safari*

For: Glenn Williams and Maree Reynolds

From: Glen Williams, Keilor, Vic.

Help: To get the paddle from the snake you must first scare the monkey playing the flute with fire. He will drop the flute and run away. Get the flute and go to the snake. Play the flute and the snake will also run away.

Game: *Bard's Tale*

For: Andrew Hansen

From: Jill Howcroft (Kaleen, ACT)

Help: Answer to the Past warcrapes . . . riddle is shields.

Game: *Labyrinth*

For: B. Ross **From:** Ian Ross

Help: To get out of the Wise Man's

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Garden, ASK WISE MAN - he will give you a riddle. Give dollar, take rulebook. Now solve the riddle to find the exit.

Game: *Labyrinth*

For: Roy **From:** Ian Ross

Help: To get out of the secret corridor, find the missing black key in the piano wall. Insert plank and open door.

Game: *Deja Vu*

For: G.A.Hocking

From: Dave Gainsford, Graham Johnson and Eddie Ryan (Ace Harding Certificate Holders) - all from the PTC Training Centre in Papua New Guinea!!

Help: Marcia's diary, ransom note and operated pad in bedroom are required to complete this game, as well as destroying the gun.

Guide to contributors

EVERY MONTH WE receive dozens of submissions from would be writers. For these we are most grateful. If you have considered writing for the *Australian Amiga and Commodore Review*, here's a few guidelines. The majority of contributions are accepted, however as we have a larger number to choose from these days, a few more stringent guidelines need to be met.

Style: Easy to read, entertaining and informative. We aim to be an enjoyable easy to read publication - with a smattering of technical articles for those so inclined. We are most interested in tutorials, "how to" type articles, and general hints and tips. Programs are also sought after for our disk magazines, Suite 64 and Amiga Live!

Format: Don't include any formatting such as printer controls, centred headings, print styles etc. Put a space af-

ter commas or full stops. Do not indent paragraphs. Numbers under 10 should be typed. We prefer contributions on disk - Commodore 64/128, Amiga, MS-DOS and even Macintosh. Don't double space. Just a straight ASCII text file is all we require. We also accept contributions via modem once you become a regular contributor. Baud rates of 300, 1200, 1200/75 and 2400 are supported.

What to include: A brief letter, if it's your first effort. Don't forget your phone number - this is the most important thing! And put your name at the top of the actual article, not just on the letter.

What you get: Fame and a little fortune. Writing is a lot of fun. You'll get payment of \$50 per 1000 words - paid about one or two months after publication and a free subscription to the magazine after your third article. We take

receipt of the article as permission to publish - you may not always be contacted before we use your article.

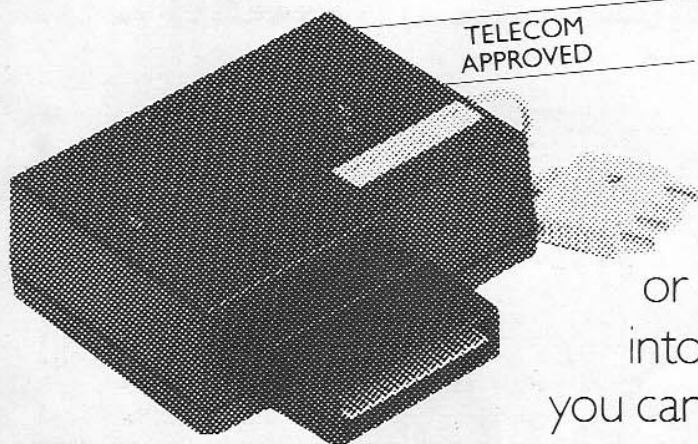
Where to send contributions: Post articles directly to *The Australian Commodore and Amiga Review*, 23 Bonnefin Rd, Hunters Hill. Or call (02) 817-0011 to arrange modem transfers. Don't send us your original - we cannot guarantee return, and it may become damaged in the post. Send 5 1/4 inch disks in an Australia Post cardboard Post Pak especially designed for carrying disks. Do *not* use padded post bags - these have a tendency to make the postman want to bend them in half. Amiga disks can just be sent normal mail.

That's it! For a more detailed version of the above, call our office and ask for the complete writers guide. ■

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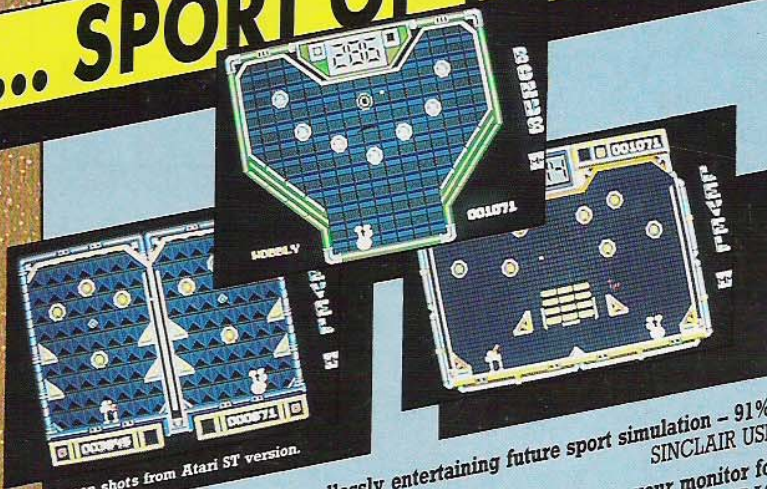


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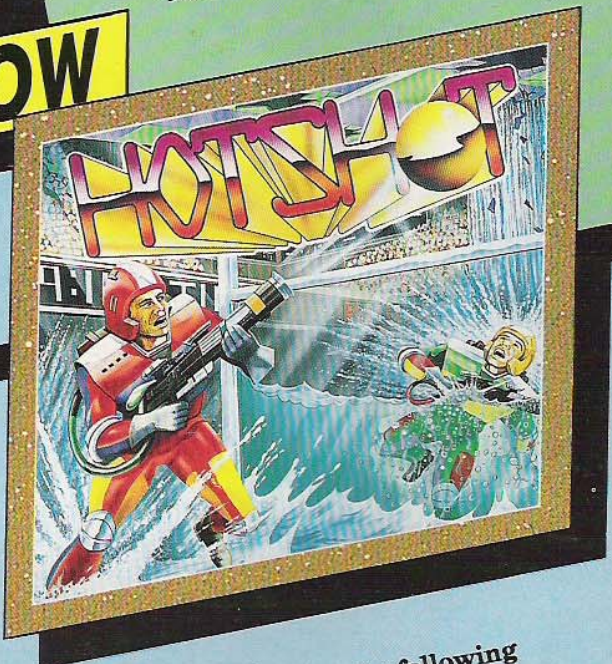
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