Megacomp

AUSTRALIA'S   **HOME COMPUTER MAGAZINE**

WIN AN AMIGA!
New competition PLUS Megawords for Atari buffs!

Publishing ST style
Become a desktop print mogul with your Atari

Roll over Rembrandt
Blockbuster comparison: 2 Amiga paint programs
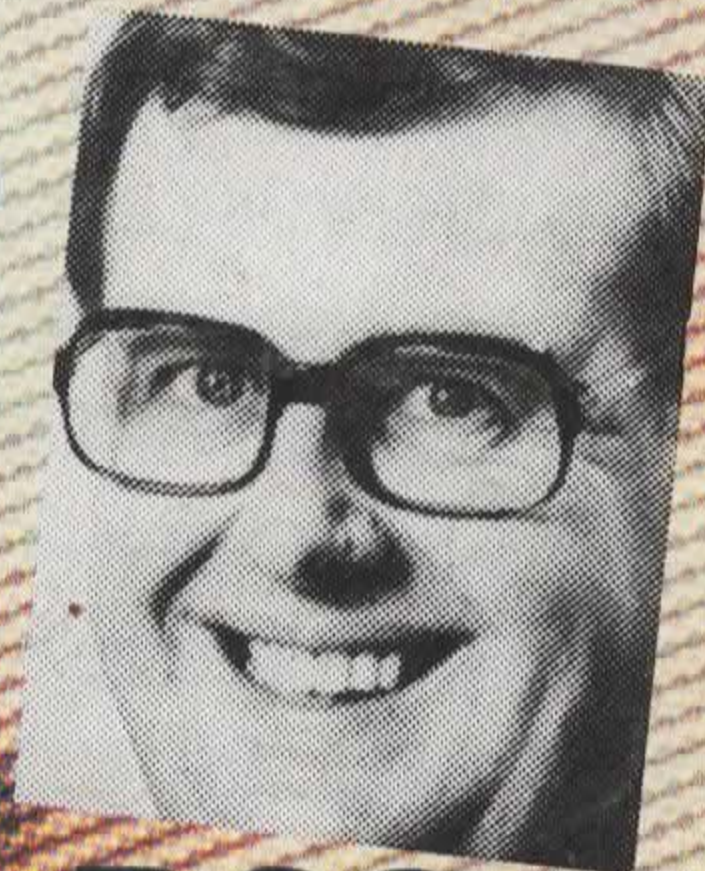
"We wouldn't even spew on it!"
Amazing reactions to our first issue; read what they said!

C64 fast loaders
Demon vs Dolphin test

Malcolm T on Apple
Our new columnist gets to the core

Why buy a PC?
Excuses, excuses

Amiga's shame?
Guide to those hidden messages

The 2-button Amstrad trick
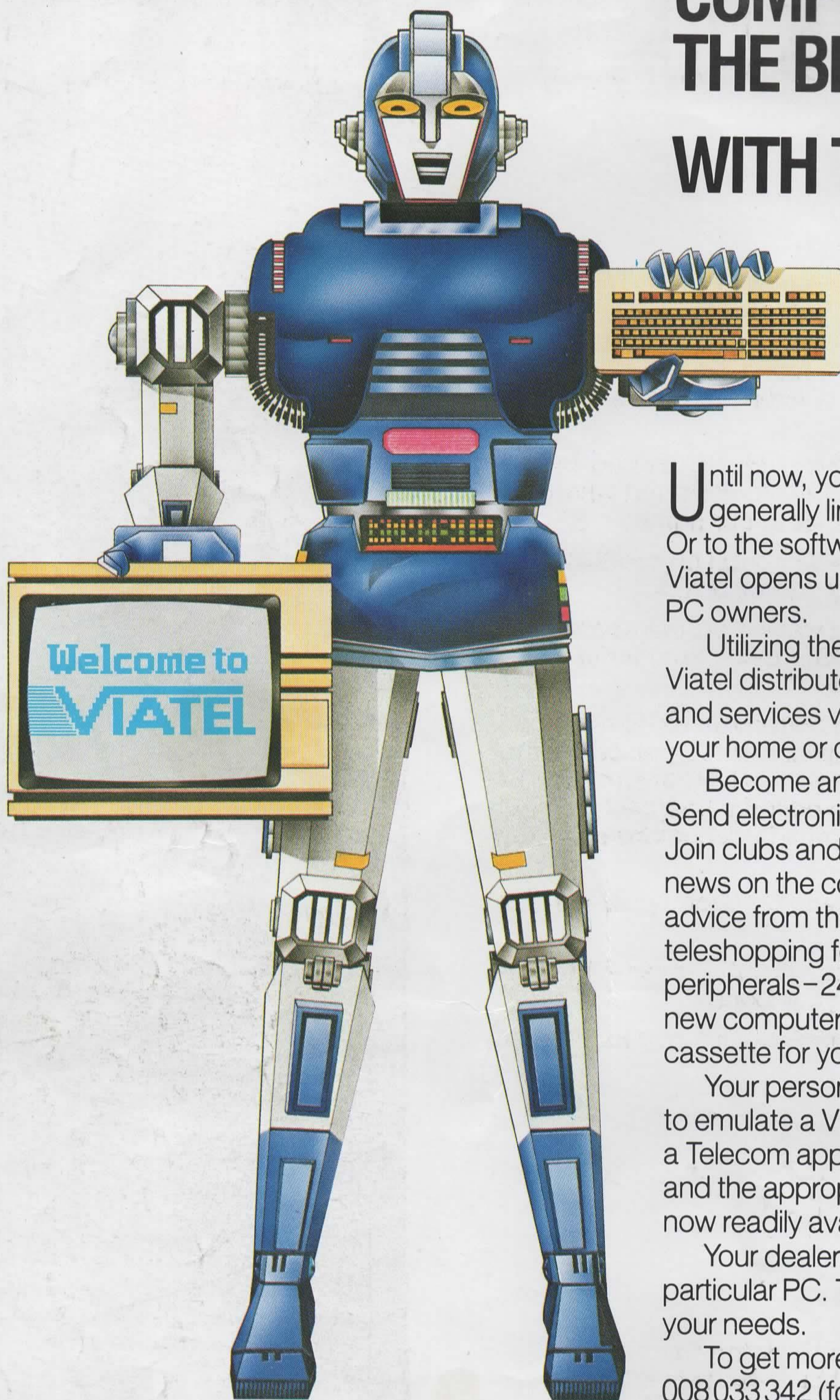Solve your data transfer problems this easy way

Virus expose!
Complete survival kit: a Megacomp exclusive!

NEWS ★ GAMES REVIEWS ★ USER GROUPS ★ NOW MORE PAGES!

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THE PERILS OF PUBLISHING

I know, I know. Not only haven't we shown for four months, but now we've turned up with a different name. Quit bellyaching - what else do you expect from a mob of indecisive bogons like us, hey?

You can blame our absence on the muck-up caused by the name change. And thereby hangs a tale. It all started when our oriental numerologist counted the letters in our name.

"Seven retters bad luck," he muttered through his noodles, "better you have eight retters. Eight bring you rotta ruck."
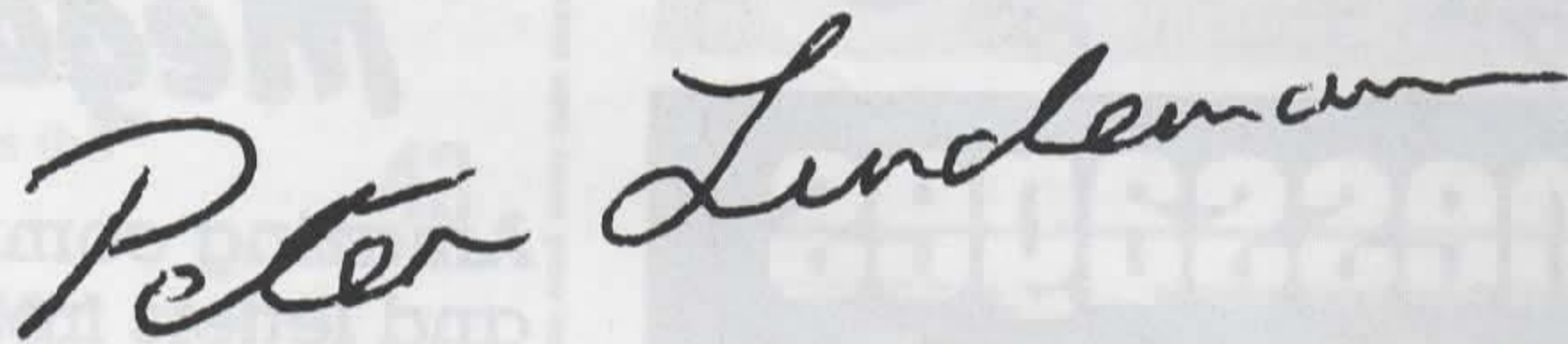
We I-Chinged and Yu-Chinged for a week or so, then decided to add the extra letter and become MEGACOMP. Wonderful things began to happen almost immediately.

My stereo magically came good on both channels, so now I can hear Pink as well as Floyd. Doris Snitch, our tea-person, won a two-week holiday on Tristan da Cuna with Sir Les Patterson. Blick's dreadlocks stopped going green. The editorial ballpoint decided to work again, And Abhorable Jack got his Docs back from railway lost property.

Anyhow, if Reggie Dwight can become Elton John, we can change to MEGACOMP.

So here we go again, bigger and brighter than ever — but now our name is MEGACOMP. Get it into your bonce.

A very merry Christmas, a happy New Year and rotsa ruck to you, too!

Peter Lindemann

Peter Lindemann
Publisher & Executive Editor
MEGACOMP MAGAZINE

Inside

Megacomp

Megablasts

ANYONE HOME?

"Hey, Megacomp: is Megaman still working there?!?!"

Rocky Kid
Viatel 067000530

If you call sitting in a chair singing Tigers songs and picking your nose "working", the answer's yes - Ed.

SOME CRAZY'S SURE TO WRITE

"...what a great magazine you're printing...the bloke who created the Amiga Virus (Something wonderful has happened) was a Norweigen (sic) and was then employed by a company to write a virus protection system for their games...maybe you could run a letters page...there's usually some crazy who'll write in so everyone can ridicule him."

Chris Parkes
Bombaderry, NSW

Um, yes - Ed.

MID-YEAR HONOUR

"Hey, Megacomp : I think your magazine is great. And what an honour to be placed on the Viatel user roll."

Caz,
Viatel 527513120

Aw, shucks, we're blushing - Ed.

COMPUTER PLUTOCRAT IMPRESSED

" ... I must confess to being impressed...I have an Apple IIGS, an Atari 520ST and a Sega 3000H...extremely broad range of computers covered...I certainly felt well catered for...please start my subscription from issue number two."

John Thornley,
Wentworthville, NSW

RETAIL CHUNDER

"That Magazine? Yair, I've seen it, and it's so bad we wouldn't even spew on it."

Nameless computer shop employee
City of Melbourne

It figures. Gutless wimps like you couldn't spew on anything - Ed.

CARAVAN CRITIC

"...too glossy, too thin & too much sheckles (sic)...news out of date...get female contributors...bless your mercenary hearts."

Chris Hutchings,
Littlehampton, Sth. Aust.

Chris (who describes himself as a scruffy bearded bikie travelling round Oz) wrote to us from his caravan in Cairns. It was the longest letter ever sent to any magazine in the world and it was a bewdy! Well, Chris, Megacomp's gonna get glossier and fatter for $3.50. (Only $2.60 on subscription). As for the rest - sniff around this issue. But please - NEVER ring us reverse charges - Ed.

THREE computers already! The industry loves you, we love you (thanks for the suggestions) you're OUR kind of reader! - Ed.

HIS KINDA TERRITORY

"Hey, Megacomp : Gidday Megaman, Blick and all else. Looks like things have come along well. Looks like I will have to buy one of these subscription things off you to check out this mega-mag. Keep up the work guys!!"

SID,
Viatel 892713810

Thanks old buddy. How's things in Darwin? - Ed.

GENTEEL CHIDING?

TO MEGACOM MAGAZINE,
89B FOSTER STREET, DANDENONG 3175, VIC.

I want to subscribe for a whole year (6 copies). Start my subscription with issue number __. I have enclosed $15.60 which saves me over $5 off the regular price.

Name: __
Address: __
__ Postcode: __

☐ Include me on your mailing list for special MEGACOM offers.

CRAP
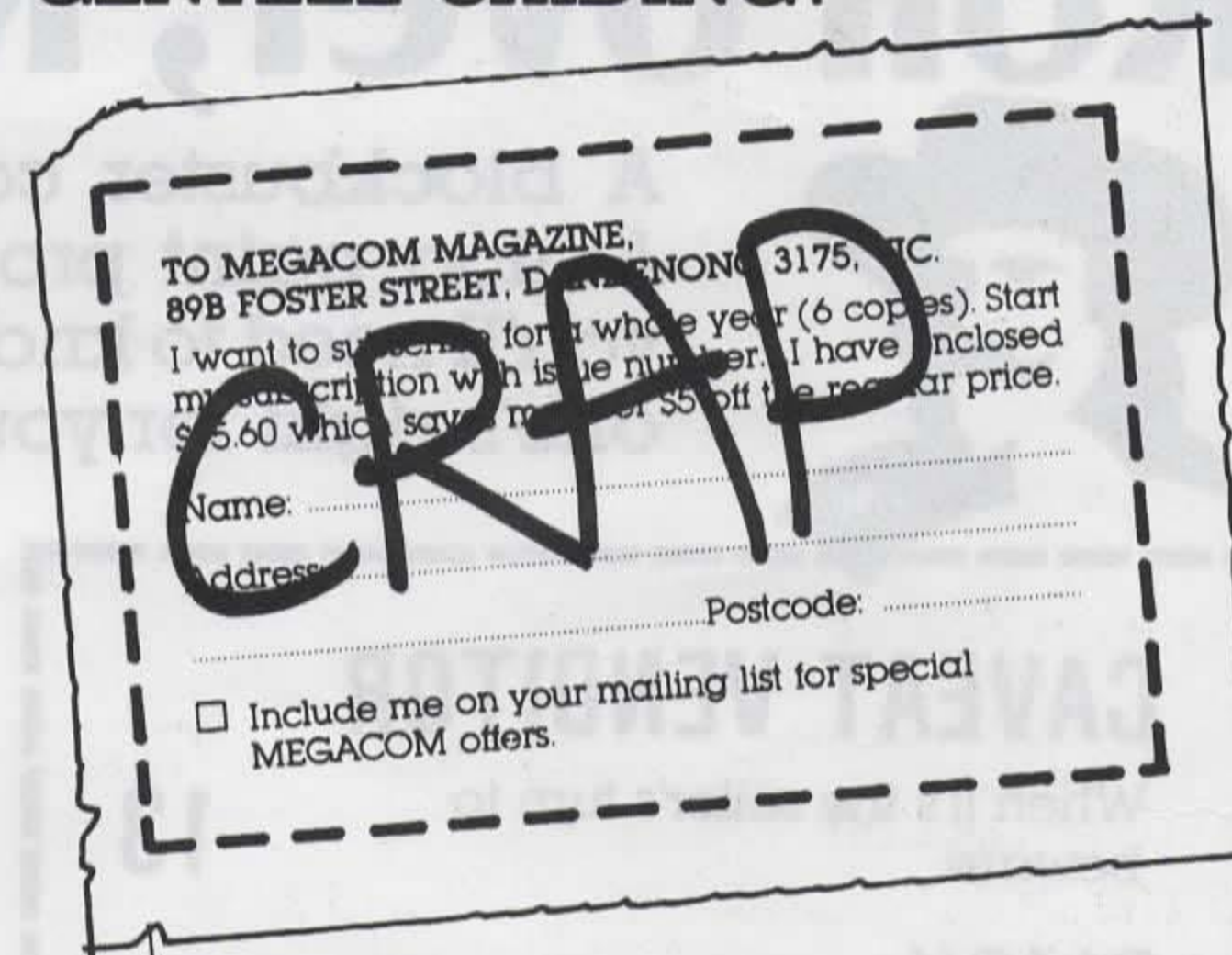
Unsigned subscription coupon,
Hunter's Hill, NSW

Dear Sir /Madam /Miss /Mrs /MS/Thing, if you are expressing an opinion, thank you for your interest and your $3.50. On the other hand, if you are exulting in the triumph our last issue has helped you achieve over flaccid peristalsis, we're glad to have helped - Ed.

WE LOVE SEGA, TOO

"Hey Megacomp. Any Sega stuff in your mag, thanks."

DB
Viatel 376351110

Got a grouch about something? Want somewhere to unleash your aggro? Maybe you're even feeling like saying something nice for a change. MEGABLASTS is where you do it. We can decipher almost anything as long as you write it in English. Long, turgid letters will be axed ruthlessly. Excessively sycophantic offerings ditto. Anything even remotely libellous gets the shove, OK? Write to: **MEGABLASTS, Megacomp Magazine, 163 Mackie Road, East Bentleigh 3165, Victoria** - or if you feel too paranoid about Australia Post, do it on our Viatel page 666115. Wassamatta? Cat got yore tongue?

"Hey Megacomp ... quite a few people at today's Sega meeting had the mag and they all loved it."

John Carter, Technical Ed.
Viatel 280940820

We run Sega items regularly. The Sega is probably one of the most under-rated home computers ever brought into Australia. It's a pity John Sands succumbed to the blandishments of mammon and walked out on it - and on the people who believed them - Ed.
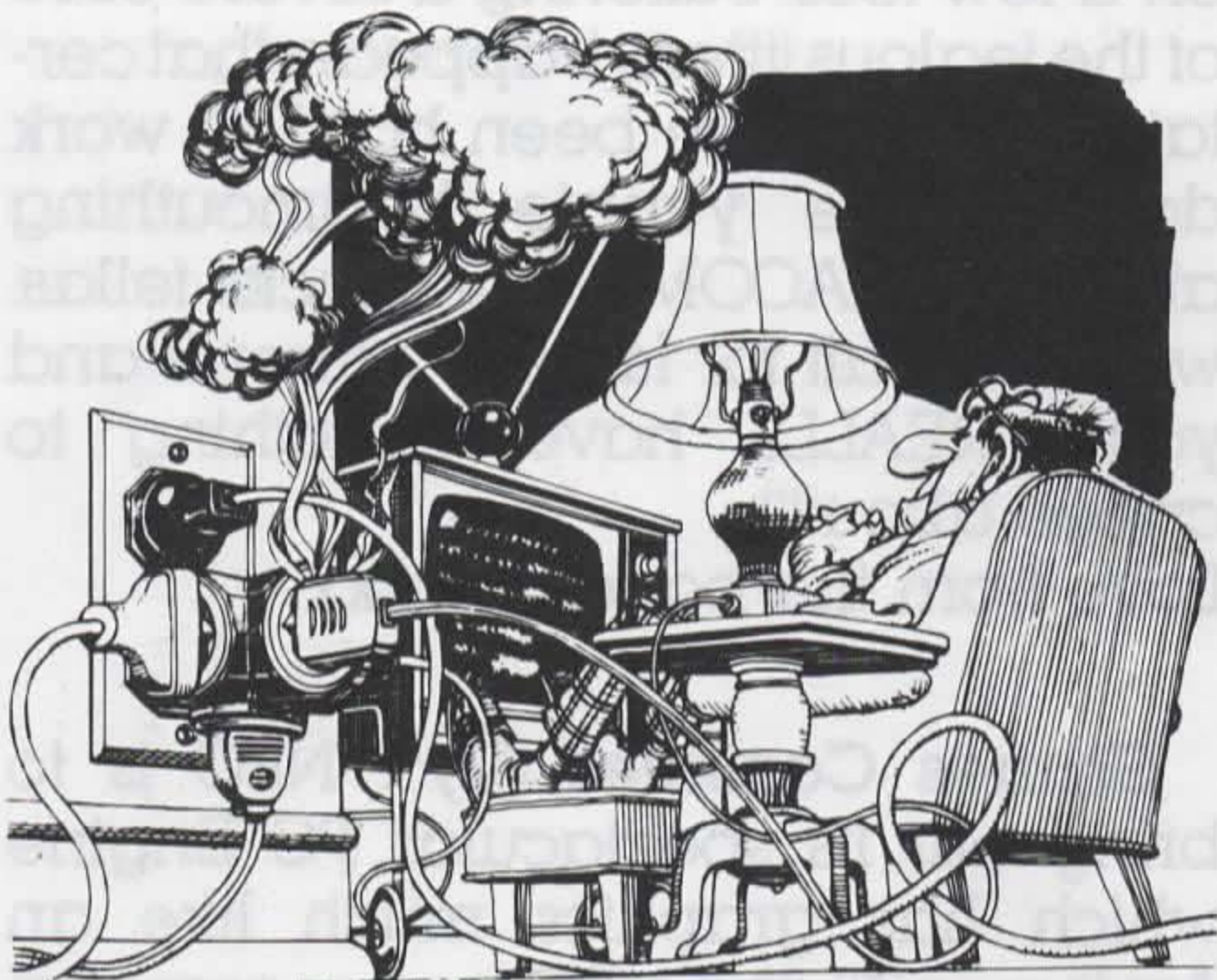
CoCo NOT FUNNY

"Living dangerously with CoCo. I mean really! Well, it is humorous in parts but it doesn't sing - it just seems to sit there, chest inflated, mouth open, about to cut loose & what happens - nothing - is it trying to be funny, educational or just pass the time of day? Besides, it's too bloody short."

Chris Hutchings
Littlehampton. S.A.

It's YOU again - hmph! Well, WE thought the CoCo story was bloody terrific. Whadderyer want fer $3.50? The Comedy Company in person? Any more mealy-mouthed comments like that and we'll send Big Arnie (see games pages) round to rip all your spokes out and stomp on your Weet Bix - Ed.

MSX ORPHAN

"As the owner of a Yahama CX5MSX and a Sanyo PHCZ7, I would appreciate any further articles on MSX. Since the demise of "(the magazine)" MSX COMPUTING, Australian MSX owners must be feeling as I did - more than slightly neglected, especially in the light of the European success of the MSX standard. Come on folks - talk to us!"

Bruce Devenish
Fremantle, W.A.

We know the feeling, Bruce, and we're right with you. If we could lay our mitts on any MSX stuff, we'd publish it. Trouble is, MSX stories are a bit thin on the ground. Anyone out there got any meaty MSX pieces or program listings? - Ed.

SOME CRAZY WROTE

"Congratulations on the superb magazine. It is far and away the liveliest and most entertaining computer mag in Australia. Anyone who thinks otherwise is a whacko stuffed shirt. I kiss your feet. Please send me 20 subscriptions immediately. Do you have a low alcohol version?"

Jeremy Blick
Upper Mangrove, NSW

This has to stop. We told you clearly that employees are NOT permitted to write letters to us. Get back under the stairs where you belong. And stop dribbling! - Ed.

POLITICAL SILENCE

Brimming with naive enthusiasm and more than just a touch of national pride, we sent copies of our leg-wetting first issue (with covering letters) to various Oz politicians. As MEGACOMP is an all-Australian publication, and this is Australia's bicentenial year, we thought they might be interested in commenting. That was over a mongh ago. Reaction to our letter has been disappointing (except for a most complementary letter from Barry Jones, Minister for Science and Technology and some very encouraging comments from Senator Janet Powell - Australian Democrats). Oh well, almost anything homegrown seems to get a low priority these days...including the voters - Ed.

Is Viatel goanna be privatised? : This rumour has gone well beyond the whispering stage. You could even say it has been consolidated. And if it turns out as we expect it will, it should be the best thing that's happened since Mr. Bell got his wires uncrossed.

Big Plus for Atari : You can expect to see additions to the successful Atari ST range sometime in 1989. MEGACOMP has been told that the new models will be called ST+. They will have new improved sound and graphic chips which are 100% compatible with the current range of ST software. They'll also have a larger cartridge port to take the new Atari Super Games cartridges. These have around 700K in them compared to the (approx.) 300K in existing ST games. Does that mean they'll be twice as mindblowing? If you have one of the current ST units, you'll be able to buy an adaptor to take the new cartridges.

Atari Games Machine : An ST games machine is on the way which will be dedicated purely to the ST+ games. These new Machines and Cartridges are due at your local Atari dealer around April 1989. More on games below.

Sinclair by Amstrad? : Rumours still persist about a new Amstrad compu-

ter aimed at the home market. The new job will probably be either ST or Amiga compatible and if some curly legal problems are solved, it will carry a Sinclair badge. (Hopefully not QL!) Our Amstrad mole is still sniffing out more info.

Commodore goes Apple picking : Commodore has an interesting upgrade to the Amiga 2000. It's called the Amiga 2500 and uses the 68020 CPU which makes it run faster. Whoopee! It's the same CPU used in the omnipotent Macintosh 2. The Amiga 2500 is supposed to be pitched at the small business market but the MEGACOMP crystal ball department tells us that the more affluent home users are likely to account for a fair percentage of sales.

Rescue for IIGS : The hot rumour is that Apple is planning an update to save its flagging IIGS. This might come out as a cut-down Macintosh or an upgraded IIGS which just might be dubbed the IIGS+.

Good news for SEGA users : Compulink has upgraded its ingenious word-processor-in-a-cartridge, Linkword 2. This is the battery backed-up version which lets you turn your Sega off without losing any work on file. Compulink has replaced the original

lithium battery with a nicad which recharges from your Sega. Sega users are a dedicated lot (you rarely see a Sega in the classifieds) and this upgrade makes Linkword far and away the best WP for non-disk set-ups.

Second try for Games Consoles : Home game consoles look like coming up for a second (third, fourth?) breath. These machines have been very popular in the U.S. and U.K. for quite a while but haven't taken off in a big way here. Distributors Mattel (Nintendo), and Toltoys (Sega), are to launch huge Oz advertising campaigns for Christmas. They're both coming up with new ranges of games as well.

Dirty work at the crossroads : We figured our first magazine might step on a few toes. Suffering a severe case of the jealous jitters, it appears that certain parties have been hard at work doing some yuppie badmouthing about MEGACOMP. Aw shucks fellas, why not wait for Issue Number 3 and you'll REALLY have something to cringe about!!!
Love from the bogons ... xxx

Games Consoles (2) : NEC is to bring out its spectacular PC Engine which has graphics much like an Amiga or ST. The NEC games come on a card similar to the Sega Master system. Atari is bringing out the 7800 games console as well as the ST games machine. The 7800 has been in the U.S. for a while and will be released here at a very competitive price. Are games machines worth it? If you spend more than a few hours a week at your local arcade where games run from 40¢ to $1 a play, then investing in your own machine could be a smart move. Play around 1000 games at home (easy) and you're in front ... and you still own the machine. Better than giving your money to the rip-off merchants and rubbing shoulders with greasies, dips, gropers, heads, weirds and chicken hawks, hey?

Who's on top? : According to the industry's bible, Compass Research - Amiga 500 is the number one selling

computer in all markets. Of the home market machines, the Apple IIe was number eight, the Atari 520ST number 10 and the 1040ST number 18.

Goof-ups department : A number of errors crept into our last magazine for which the nerd responsible has been fed to the octopii at marineland. First, there was no page number given in our index for Marketplace. Also, the grey heading on the index pages was too light. But by far the worst boob was the closing date we gave you for our MEGAWORDS competition. It should have been last mail, October 28, 1988 and not August 5 as shown. Which probably explains why we got only one bag of entries. We've run MEG-AWORDS again in this issue, with the correct date, so you have a second chance. Finally, in the Atari ST story, we gave the wrong prices. They should have been : **520ST $1198** mono and **$1448** colour; **1040ST $1198** mono & **$1748** colour. (These prices include Monitor).

SEGA's phoenix : From the ashes of the (prototype) Sega 5000 comes the Sega AI. The 5000 was Sega's super computer, and destined for the Oz market until John Sands folded its electronic tent. The AI (artificial intelligence) is a 16-bit machine with i80188 CPU, 128K ROM, 128K RAM, 64K VRAM and graphics akin to the Sega Master System. It boasts a large graphic tablet, slide-in disk drive and plug-in ROM cards to change the capabilities of the computer. Dunno when or if it's coming here, but when and if it does it should put the cat amongst the pigeons.

Freebie from Viatel: Got an IBM PC or compact? Want to see Viatel on your screen? Check Viatel's ad in this issue (inside front cover), for their offer of a FREE demo disk that can save you multibucks. Mad if you don't. Tell 'em you saw it here.

MSX set for another go : Though MSX 2 has done well in Europe, it hasn't exactly swept the market here. Undeterred, rising sun boffins are now developing MSX 3. Third time lucky? Hard to predict, but the original Datsun Bluebird didn't do so well, either — and you wouldn't knock back a 300ZX today, would you? **C64 staggers on.** Let no-one kick sand in your C64's face. Now you can play big boy games. ECP's Paperclip Publisher will get you into desktop publishing. You can create picture-and-text documents up to 50 pages in length (Too short for MEGACOMP - pity), as well as using files from other word processors and painting programs. Sure beats cutting up newspapers to make your ransom notes. **Memo Michelangelo.** Come down from the ceiling at once. The much awaited Spectrum 512 and Quantum painting programs are here/are coming. These are the full-on professional job. You'll need an ST to run them. **Talk's cheap.** For the swelling band of Amigaites, Acme Software has a new Australian designed Micromodem 5 together with Amiga Talk software for it. Price is quoted as "very competitive". **Better than good.** Computer Oasis in Perth is importing the Best range (no plug, that's the name) of modems. There are four models. **Canberra goes Soft.** New Australian Software Co. is Canberra-based Panther Games. First product is a blockbusting war games simulator called Fire Brigade. It's for Macintosh; Amiga & ST prolly to follow. **Easy-Mac for ST.** Now, Magic Sac + Translator is how you can emulate Mac on your ST without having to buy a Mac disk drive.

Late news? : Some readers pointed out that a few news items we ran were actually no longer true "news". That's the problem with running a bi-monthly magazine. All our stuff IS news at the time of writing, but can be a tad out of date by the time it gets into your anxious mitts. On the other side, a lot of readers didn't know about those items, so what we printed was news to them. The solution for MEGACOMP is obvious, and it might happen sooner than you imagine, giving a nice little bonus to subscribers. In the meantime, thanks for your feedback, and keep those news items rollin' in!

Publishing ST style

Politicians might get up to nonsense on their desktops but S.T. Linter draws a more moral line with his Atari ST.

Have you ever wondered how a newspaper gets the pictures in the right spot and fits the words in as well? And wouldn't it be great if you could do that on your computer?

Well, you can do it. It's called Desktop Publishing (DTP) and it has literally revolutionised the publishing business.

DTP lets you scan pictures, documents and drawings so they can be modified to suit your needs then combined with work from drawing programs or text from word processors.

Alternatively, you can do the lot on your DTP program. Anything from small leaflets to newspapers can be produced.

WHO CAN USE IT

Although DTP has been aimed at business, its use is becoming widespread throughout the community.

User Groups, Sports Clubs, Schools, Churches, Social Organisations and a host of others are using it to produce newsletters, catalogues, reports, posters, notices, and dodgers quickly and easily. It's a long step up from the old rotary duplicator. (It would work wonders for some of those grotty underground and anarchist publications).

DTP PROGRAMS FOR ATARI

A decent DTP program naturally needs a pretty capable computer to run it successfully.

The Atari ST is a computer which has grown rapidly in market acceptance both here in Australia and overseas.

It now has some very classy add-ons and software for it, including word processors, utilities, a feast of good games and now ... DTP.

The two DTP programs you are most likely to find on your Atari dealer's shelf are Publishing Partner ($249) and Fleet St. Publisher (399).

PLENTY OF FEATURES

These are both full-featured DTP programs with all sorts of bells and whistles such as manual kerning.

Kerning lets you squeeze up the space between letters so you can fit more text in without making the letters smaller. Some newer programs offer automatic kerning, which is a good timesaver.

Page Magnification is another good feature of Publishing Partner and Fleet St. Publisher. With it, you can look at your document as a full page or blow it up (not ka-boom, but enlarged) to examine a specific area.

Both programs let you choose the type size and style you want and with Publishing Partner, you can buy extra typefaces, called Font Packages.

The programs work both as word processors and drawing boards as well as allowing you to incorporate pictures and words from other programs.

The latest DTP offerings for your Atari are Calligrapher (N/K), Timeworks Desktop Publisher ($229) and Publishing Partner Professional ($599).

If you haven't the money for the advanced programs and you don't need all the features, then you might find Printmaster + ($69.95) OK for you. It's a page layout program which lets you combine text and graphics in a no-frills, easy-to-use format.

It's helpful to have a good word processor and art program to use with your DTP package. For the Atari there are word processors such as First Word Plus ($199), Habba Writer (N/K),

Microsoft Write ($299) and Word Perfect ($599).

Some of the art programs for budding Picassos are Degas Elite ($79.99), Easy Draw Supercharge (N/K), Art Director ($149.99), Quantam Paint (N/K), Spectrum 512 ($149) and there are some brilliant CAD or Computer Aided Design programs. New titles are arriving almost every week.

LASER PRINTING

Atari has taken a giant step in the DTP field recently with the introduction of the Mega ST. (No relation to Megacomp).

There's the Mega 2 (2MB RAM) and Mega 4 (4MB RAM), either of which will let you look down your nose at

11.

Publishing ST style *continued*

formerly snooty friends who thought 512K memory was tops.

Both the Mega machines can be used with Atari's ingenious SLM-804 Laser Printer. Ingenious, because unlike other printers which have expensive on-board processors, the SLM-804 uses the Mega ST memory for its processing power. It works also with the 520ST and 1040ST but with some restrictions due to the smaller memory available.

Documents done on a laser printer are usually OK for most printing jobs. Depending on what sort of quality you want, you don't need to go to the expense of a laser printer because a good dot matrix printer can produce quite acceptable results. Just be sure your ribbon is in good condition.

SCANNERS, DIGITISERS AND TYPESETTING

Earlier, I mentioned combining elements such as designs, drawings and pictures with DTP. This can be done with a scanner or digitiser.

There are various brands on the market. Both Canon and Hawk put out good scanners, and there's a low-cost model coming soon from IMG. Just scan whatever you want to use and it's yours.

If you have a spare $100,000 or so hanging around, you could even invest in a Linotronic 100 or 300 laser typesetter, which will produce your text in proper crisp, clear type.

At present, most typesetters who accept DTP material have only Macintosh or IBM, so they can't use your Atari disk. However, some bureaus let you bring your ST to them, where you plug it into the typesetter. (Ouch!) Your programs have to be postscript compatible, otherwise the typesetting machine won't understand anything on the disk.

So, there you have it. If you want to get into desktop publishing with your ST, there are plenty of programs out there. The only thing that can limit you is your ability to design documents, but

with a little practice you'll soon get the hang of it. My first attempts were average (Editor's note: how about VERY average, Mr. Linter, Sir?)

Who knows, Today a simple notice, tomorrow a whole newspaper. With DTP, the sky's the limit!

Editors Note: a breathless runner, in from the west has just brought us info on a new piece of DTP software. Called Font Design Partner, it allows you to create your own lettering designs and runs with Publishing Partner. Apparently the results are spectacular, even with a 9 pin dot matrix printer. Designing fonts is usually a stinker of a job, but because of the special interface you get with FDP, most of the hard work is done for you. If you're into DTP, this sounds like a "must". It's distributed by Tech-Soft Computer Wholesale and available from Computer Oasis.

Caveat Venditor

Larry O'Keeffe turns the tables and gets a $50 bargain.

This story is true and can only be considered as unbelievable:

I went looking for the bargains in the department stores. Any old junk that could be of use for robotic experiments. One store offered an 800XL and 1010 data recorder for $50. It had been returned as "not working".

"Here is the card", and handed over the plastic money. An interesting little gamble, For another $20 the 1020 printer with all the manuals.

I specificially requested the following words be written on the receipt "NOT FOR RETURN OR CREDIT". The store manager consented.

At home, I plugged it in, turned it on, and up came the prompt (READY). The machine was working,. I tried the following command in free mode ? FRE (O).

It answered correctly by telling me the FREe memory 37902. The sounds, the colours, the graphics, string handling, the player-missile routines and the mathematics all worked, giving this machine a clean bill of health.

? Peek (43234) yielded a value of 96 stating revision "B" basic. This would not be serious enough to return the whole machine.

Plugged in the 1010; the red light came on, pushed the play key and nothing happened. This is AOK as the computer controls the recorder's motors on play and record. Obviously, the recorder should be on play before attempting any program loads.

To test the motor I entered the following:-

POKE 54018,54 : turns motor on
POKE 54018,60 : turns motor off

These are good locations as you can pre-hear a program to identify the record format (covered shortly), if you're unsure.

The drive mechanism worked. I was losing sleep trying to find what was wrong! Pressed the stop button, and inserted a new medium priced C90 tape.

The final thing to do was to check the printer. Each time I did 2LP.", the paper feed worked. The command:-

"LP."HELLO":LIST"P:", 10,100
prints the word "HELLO" and the program listing from line 10 to 100 inclusive.

Everything worked fine ... no problem. I went back to the shop and asked the shop assistant what was really wrong with the machine. He said that his customer pressed play on the tape machine, but the tape would not go round. No matter what they did, nothing worked. All they got was a prompt that said ready. They even pressed start but that did nothing.

It was obvious they had not read the manuals and expected the computer to stand on its head, wag its tail and roll over. I explained my findings. The assistant learnt a valuable lesson in two ways, an understanding of the product; and since the sale was final, the words to remember "not for return" ... I won, and for a $50 outlay, received an $800 plus system.

HuCAL
the magnificent

Tim Anderson does a little number on the versatile spreadsheet designed for Sega.

HUCAL, as you may know, is a disk-based spreadsheet for the Sega computer.

It has a wide variety of uses, and can be programmed to suit exactly what you want it for. Applications include chequebook balancing, tax returns, information store, telephone number index and so on.

If you don't work much with figures, a spreadsheet program such as HUCAL can be quite intimidating. In reality, it's a superb tool which can carry out the most complex calculations and sorting functions with astonishing speed and accuracy. Once you grasp the basic principle of it, you'll wonder how you ever got along without it.

Imagine a huge sheet of paper divided into a grid of 255 columns wide from A to IU, and up to 10,001 rows or lines deep, starting at 0. That's basically what you're working with in HUCAL.

With HUCAL, you can move around the spreadsheet by using your cursor keys. Alternatively, you can go straight to a location by holding down the control key and pressing "J". You then enter the column and line number you want, hit CR and HUCAL zips you there.

Each section within a column is called a "Field". A Field can hold a maximum of 32 characters and a minimum of 3. The entire HUCAL chart covers just over two and a half million sections, but because of memory limitations, the actual capacity is only about 19K - plenty for just about everyone except a federal treasurer!

You feed data into a field simply by typing it in. HUCAL gives you, in effect, an enormous database to fill and use as you wish. When you put your cursor at the top of the screen, HUCAL will display your current field information automatically. This includes auto cal on/off; bytes used; field protection on/off ... and so on.

At the bottom of the screen you have a menu which offers you 8 options. You select the one you want by moving the cursor with the space bar and pressing CR when you're on the one you want.

Let's try a simple example of direct programming with HUCAL. What appears between the brackers [ ] is what you type in. [CR] means press the CR key.

Say you want to work out how much you'll get paid after you have worked 16 hours overtime at time and a half. You use HUCAL this way:

First, you need to set up your decimal position. Go to fields B/O and select FORMAT on the menu using the space bar. [CR] and select DEC.POS. If it does not show 2, change it to 2. [CR].

Repeat with fields C/O and D/O. Now you're ready to enter information in the various fields.

Field A/O :
   overtime hours [16] [CR]
Field B/O :
   pay per hour [9.50] [CR]
Field C/O :
   overtime rate [1.5] [CR]
Field D/O :
   holds formula [/] [CR]

This last entry moves your cursor to top left screen, where you type in your calculation formula: [!(A,O)*!(B,O)*!(C,O)] [CR]. Now, in field D/O where you typed a backslash, you will see the amount 228.00.

What does the formula mean? The "!" specifies the field, and the "*" tells HUCAL to multiply the amounts. Field D/O holds the formula, does the calculation and displays the result.

Of course, this is only a simple example. With little work on your part, HUCAL is capable of performing very complex calculations.

HUCAL also has a window function, and you can have up to 4 windows on the screen at one time, moving between them as you wish.

I'll be taking you through these steps in future articles, as well as covering things such as automatic field protection, the use of Macros and HUCAL's built-in commands.

PRODUCT: HUCAL Spreadsheet (Disk)
FOR   : Sega SC3000 & SC7000
DESIGNER   : Hudson Soft Co. Japan
MADE BY   : Sega Enterprises, Japan
DOCUMENTATION:
          176 page step-by-step manual.
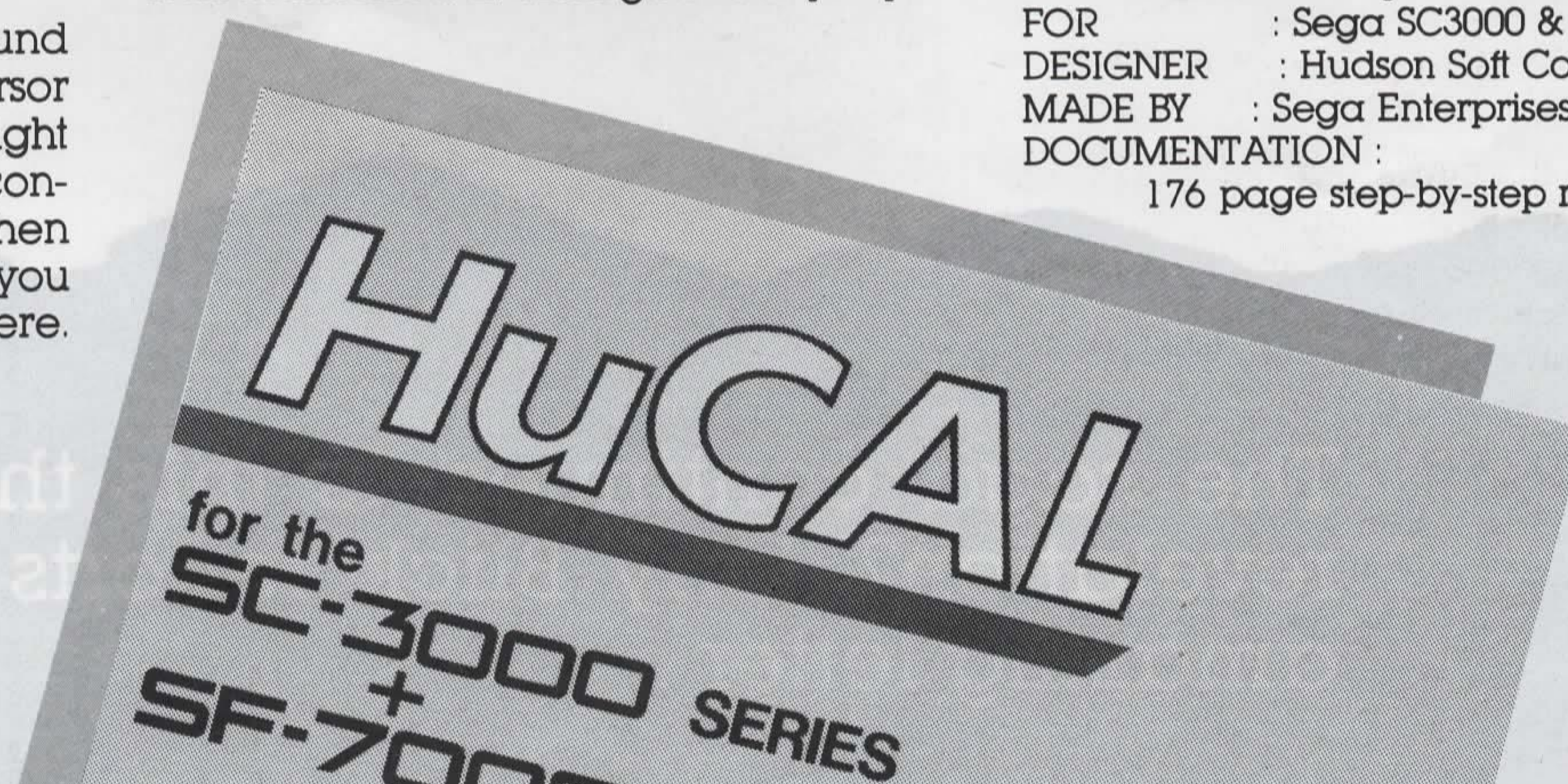
It seems that our expose in our last magazine had Amiga 1000 owners all over Australia and New Zealand bashing furiously away at their function keys trying to offend their good taste with THAT message.

In some of the more heavily Amiga-populated areas, we're told you could hear whoops of joy almost every Saturday night. Mind you, it could well have been the result of something more mundane and sweaty, but that's what we were told.

Tennyrate, just as we were using the last of the stickytape to get this issue together, along came a letter postmarked "Mail Centre, Blackburn 3130 Victoria".

As it didn't have a windowface envelope and we don't owe money to anyone in Blackburn, Vic. we opened it.

Out popped the most amazing piece of information from one Gordon Withers, who must be the ultimate Agmia freak.

Good Gordon had trusted to the tender mercies of Australia Post the ENTIRE collection of Amiga hidden messages, PLUS detailed instructions on how you can get 'em.

Here, only slightly edited, is the text of Gordon Withers' astonishing letter ...

"After reading the article in the first edition of Megacomp about the Amiga's hidden messages, I decided I wanted to set a few things straight.

"So here is a list of commands to get ALL the messages up onto the workbench title bar.

"These messages are in the Kickstart, so on the A1000 they're in software and on the 500/2000 machines they're in hardware.

"To the best of my knowledge, the Amiga designers did this when they were sacked, which was just after the completion of the 1.2 Kickstart.

"To start with, there's one message not many people know about. This is in the Preferences program. It's not as spectacular as the Workbench ones. PS: must be Preferences 1.2!"

* These must be attempted with the Workbench Icon window open and the pointer over the close window gadget at top left of window. When the right Amiga key is pressed the gadget will highlight when you insert the disk.

These messages appear in the workbench title bar. The last two messages appear at random when you insert the disk, so keep trying until you get the right message. You might have to reboot sometimes to get the funny one. (Editor's note: Gordon means the word we put the asterisks into. We're no dummies when it comes to censorship and circulation).

Megacomps thanks and admiration go to that most nimble fingered Amiga buff, Gordon Withers, whose perspicacity and dogged endurance have astounded us. Thanks buddy.

Footnote: We tried doing similar things on our editorial VZ200 hoping to get some sort of Dicky greeting, but nothing happened. If anyone out there has made any discoveries on ANY machine, how about letting us know?

The saga continues! Is this the final revelation? Jerry Blick reports on an amazing letter ...

THE RARE ONE

1: Run Preferences 1.2! program from Workbench or CLI
2: At right you have ML (mouse left) and MR (mouse right)
3: Click 1st then 2nd button of ML. Do the same with MR.
4: Repeat until you've clicked each button of each mouse 4 times. (Total of 16 clicks)
5: Move and click into the printer change box
6: Select serial printer gadget at upper left
7: Go to this gadget and click up the arrow until the hidden message comes up in the top left corner of the preferences program window.

ALL THE OTHERS

L-A = Left Alt.   L-S = Left Shift
R-A = Right Alt.   R-S = Right Shift
F? = Any Function Key

   Start each sequence with L-A, L-S, R-A, R-S then F key indicated. You must hold ALL keys down to get the message. All sequences must be done in lower case, OK?

F1 - "System Software: Carl, Neil & Kodiak"
F2 - "Graphics Software: Dale, Bart, Jimm & =RJ="
F3 - "QA: Jon, Bruce, Stan, Kim & Jerry"
F4 - "LG Support: Caryn, Dave, Victor, Terry, Cheryl & Nancy"
F5 - "CBM Software: Andy, Barry, Dave & Eric"
F6 - "Pics: Sheryl & Jack"
F7 - "Docs: Rick, Mitch, Peggy & Rob"
F8 - "Chips: Jay, Akio, Glenn, Edwin, Mark & Dave"
F9 - "HW: Dave, Bill, ChrisR & Josh"
F0 - "Moral support: Joe Pillow & The Dancing Fools"
F?+Eject Disk - "The Amiga, born a Champion"
F?+Insert Disk - "We Made The Amiga, They F****d it up" *
F?+Insert Disk - "Still a Champion"*

EXCLUSIVE TO MEGACOMP!

18.

Disk Demon
v
Dolphin DOS

Your Commodore 64 won't know itself! David Morrow waxes enthusiastic over these blurringly fast program loaders, and shows forgiveable bias.

In the world of paralallel fast loaders, two stand out from the crowd. They are Dolphin DOS (made by Evesham Micros, distributed here by Micro Accessories of S.A.) and Disk Demon (made by Datel Electronics, distributed here by West End Computers).

Dolphin DOS advertises a 25 times faster loader that will load a 202 block program in 6 seconds.

Disk Demon advertises a loading increase of 6000% (a staggering 60 times faster) which will load a 202 block program in 3 seconds!

For the average user all that techno-talk may be meaningless. Well, what it does mean is that with either of these fast loaders, you'll rarely have to wait more than 10 seconds for a program to load.

Your only decision, really, is which one to buy. Maybe what follows will help you nut that one out.

Unfortunately, there's one drawback with both of these fastloaders and that is that they are rather expensive. So if you've got a light wallet or a weak heart, just skip the next bit.

The Dolphin DOS retails for around $170 and the Disk Demon for around $190. Ouch!

While this is a high price to pay, I think it's reasonable when you consider what you are paying for. But if

you actually enjoy making 34 cups of coffee while waiting for your favourite game to load, the cost might seem a bit steep.

The main problem with the Dolphin DOS is that it can't load a file over 202 blocks without it first being broken down into two parts.

You can do this with the Freeze Machine which is also made by Evesham and distributed by Micro Accessories. So, for example, a file of 215 blocks couldn't be loaded at the 25 times faster speed.

Disk Demon, however, can load any file up to a length of 250 blocks, which is the largest file you're ever likely to load.

Both loaders have extremely fast and reliable copiers which have a copying time of around 18 seconds. The Dolphin DOS copier will cost you about $30 extra; the Demon's copier comes with the loader.

They both have built-in commands to slow down the speed of the loading so that you can use these with the rare programs (usually multi-loads) which do not work at increased speed.

Both of them can also be switched out completely and they both use the function keys to do things such as load. For example, the f7 key will give you a directory, f5 will load using the fast loader, and so on.

For dedicated programmers, the Dolphin DOS has a fairly good machine code monitor as well as 6 different resets that perform various little functions.

Another feature of both devices is that they can format a disk with 40

tracks, thus giving you 749 blocks free instead of 664.

Now for the all-important question : will they work with your disk drive? Well, the Disk Demon will work on 1541, 1541C, 1571, 1581 and SX64, and of course, it works on the 128D, both old and new.

The Dolphin DOS will work on the same drives and for an extra $10 it will work on the Excellerator disk drive as well.

Both of these utilities are great performers. But I am slightly biased because I own a Disk Demon. There is only a $20 price difference and the Disk Demon is superior in speed and is about 99% compatible with all the software I've ever loaded — and that's heaps.

So, While I think the Disk Demon is a better buy, I am by no means bagging the Dolphin DOS, as all the Disk Demon has over it is sheer speed. Best to make your decision on the basis of your needs.

The 2-button Amstrad trick
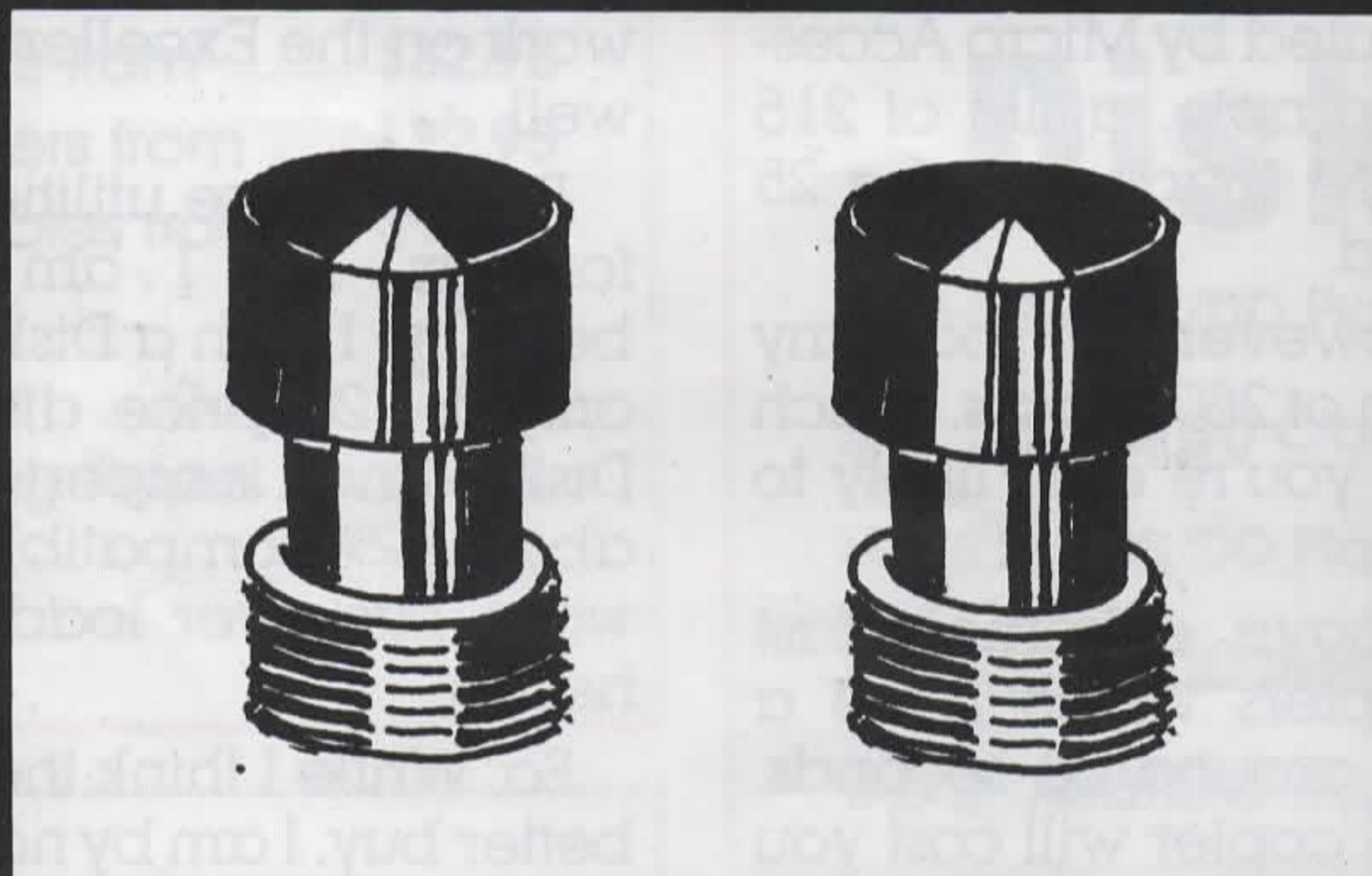
Hermit solves his Amstrad transfer problems with an ingenious little 7-day wonder from the old Dart.

As anyone who owns or has used an Amstrad CPC computer will tell you, they are one of the best value home computers on the market.

Having owned my 6128 for over two years now, I have never regretted the purchase. I have found it a great games machine as well as being more than capable at the business end of things.

I do have one slight gripe, however. The cost of disk software often exceeds that of tape software by more than the cost of a disk (or even two).

Buying software on tape is the obvious answer, but who wants to wait all that time for the damn thing to load when one has the much faster and more efficient medium of the floppy disk at hand?

"Buy a Tape-Disk Transfer utility!", I hear you cry. Well, I've tried about six of those. Some were quite good, but most would successfully transfer only about 60% of the programs I tried them on. I have yet to see a software-based Tape-Disk Transfer program which works simply (none of this start/stop button bashing) and efficiently every time.

SEND MONEY, CHOOM

Being an avid reader of anything relating to the Amstrad, I came across an advert in one of the English CPC magazines for a device called the MULTIFACE II.

The ad claimed that this little "black box" could transfer from Tape-Disk, Disk-Tape, Disk-Disk and Tape-Tape at any time, quickly and easily - as well as giving you a few handy extras. This I just had to see!

So, off to the bank I went, cash in hand. To send money to the U.K. you first have to get your Aussie dollar converted into £ Sterling. This isn't as daunting as it sounds.

The nice teller at the bank converted the £42.88 I needed (£39.88 plus £3.00 p&p) into A$102.10 (which included A$4.00 for the conversion and the cost of the bank note) in a matter of minutes.

Next it was down to the post office to send off the cheque and the coupon.

Then it was time to go home, mope around and wait for it to arrive.

To my surprise and amazement, the package arrived within 7 days! Hastily, I ripped open the brown jiffy bag and extracted a small blue carton which contained my new toy.

Once freed from its confinement, the MULTIFACE II is about the size of a cigarette packet - can I say that here? (Editor's note: OK - MULTIFACE smoking reduces your fitness). On the top of the unit are two buttons, a green one marked RESET and a red one marked STOP. A ribbon and edge connector protrude from the front of the box and you plug this into your expansion port. A thru connector is at the back of the unit, so you can tack other peripherals onto it.

UP & RUNNING, SORT OF

There is a switch on the front of the unit which you use to switch the MULTIFACE II in and out of play. According to the instructions, which are short and to the point, when this switch is up, the unit is invisible to the computer.

I found this not to be the case when using certain programs. For instance, while using Mini Office II, I tried to save a copy of this story to disc. On choosing the Save Mini Office file option, the screen went berserk, the disk drive decided to play Round-and-Round-the-Mulberry Bush and the old AY-3-8912 (sound chip) played its rendition of My Darlin' Clementine in reverse! Worse, the disk I was saving it to contained about 3 months and 60K worth of database files, none of which were there anymore. My fault for not having back-ups!

By the way - all you piratical plunderers out there will be disheartened to know that you can't reload a game saved with MULTIFACE II unless the device is present and switched on. So it's back to the software-based backeruppers for you lot.

Once you're plugged in and powered up, you can do one of two things. You can press the RESET button and get a kick out of watching a true reset (as much fun as watching rocks growing); or you can press the STOP button.

OK! OK! Enough with the RESET button already! Sheesh! You'd think some people would get the hint!

AND HERE'S YOUR MENU

Once the STOP button is pressed, the screen goes all haywire and a two line menu appears at the bottom of the screen.

On the first line of this menu, you are presented with five options. They are RETURN, SAVE, TOOL, JUMP and CLEAR. Apparently, when using the MULTIFACE II with a 464 or 664, the CLEAR option does not appear. This is because the CLEAR option is used to clear the second bank of RAM on the 6128 which is full of junk when you first power up or reboot.

CLEAR is a very useful option as it will save you up to 70K of disk space. The reason for this is that on power up the second bank of RAM on the 6128 is full of garbage. If the MULTIFACE II detects anything there, it assumes you want it saved.

If you are using CPM 3.0 (Plus) or any form of bank switching, it's not a good idea to use the CLEAR option. CPM+ uses banks 4 to 7 during its operation. I won't insult your intelligence by telling you why you shouldn't use it with Bankman. (To the two of you who are wondering why - go ahead and try it!)

SIMPLE SAVING

You can save either a whole program or just the screen you are looking at. The MULTIFACE II doesn't actually save the program. What it does is take a 'photograph' of the computer's memory at the time you pressed the red STOP button. It then compresses this and saves it as a number of blocks of data. When you reload the program, it is put back together again by a short (1K) '.BIN' file which it creates when saving.

The program you save can be either saved to disk or to tape. If you are saving to tape, you can choose normal speed of 1000 BAUD or high speed of 2000 BAUD.

An obvious omission is that nowhere in the instructions or on-screen does it specify whether you can save to a second drive. I assume it's not possible, but if you know otherwise, please let me know.

This certainly must be one of the easiest to use back-up devices around. So simple to use, yet so effective. It must be - even I can get it right!

When you choose S)ave, a prompt will ask you to enter a file name which can be up to 7 characters long with no extension. It's only 7 because the MULTIFACE II uses the eighth character as a suffix for the blocks of data, numbering them filenam1, filenam2, and so on, adding the extension '.BIN'. On receiving the file name the units asks for confirmation. Answering YES takes you to the next menu.

NO ERROR WORRIES

The new menu gives you the choice of saving to tape (either of 2 speeds) or to disk. One minor annoyance is the fact that the unit defaults to saving a whole program so that if you forget to set the p)rogram / s)creen toggle before saving .... ! As I said, only a minor annoyance and an easy mistake to rectify - most of the time.

On the plus side, the whole operation is error-trapped so if your disk can't accommodate data due to not-thereness or corruptivitis or just plain data-obesity, never fear! MULTIFACE II will let you know and you can then abort the operation or use another disk and start again from the main menu.

To reload your programs, you simply type RUN "filenam". Reloading screens is a little more involved, but not much so. A small routine to reload screens is given in the instructions.

Most of the games you'll save will be from a point somewhere after the loading screen. So, first you save the loading screen from tape to disk, then save the program itself. For effect, you can then write a small loader which

will call up the loading screen and after a key press, take you into the game.

Generally, I have found I can fit two screens and two games on a data-formatted disk. I have written a short menu program for you (see box) which you can use to load and run two programs you have previously saved using MULTIFACE II.

It's nothing fancy, mind you. After all, what do you expect for nothing? The two games used in the example will be called Donk The Zungoids and MegaNuke (the latest atomic blast simulator) and their respective files are DTZSCR.BIN & DTZGAME.BIN / NUKESCR.BIN & NUKEGME.BIN

MORE THAN JUST A BACK-UP

Not only do you get a fast, reliable and efficient back-up device for your money, the MULTIFACE II also includes a very comprehensive programmer's toolkit. The options within the toolkit include such features as the ability to POKE and PEEK at any memory location and/or RAM bank with ease; view and alter any of the Z80 registers, get information on the colour palette and generally raise hell with your computer's memory! Try playing around with the software controls for the screen pack and you'll see what I mean.

All this can be done at any stage during program execution. The ads say this gives you the ability to POKE

infinite lives and so on into your games. While this is certainly true, the fact remains that you'll still need a relatively good knowledge of machine code to get it done.

Next time, I'll give you a more in-depth look at the features. Sooooooo! Join us again next issue for another thrilling instalment in our climactic series on the MULTIFACE II !

Product : MULTIFACE II
Price : £42.88
Made by :
Romantic Robot,
54 Deanscroft Avenue,
London. NW9 8EN,
United Kingdom.

```
1 REM**** GAME LOADER For use with the MULTIFACE II ****
2 REM****          For The AMSTRAD 464/664/6128          ****
3 REM****                                                ****
4 REM****  (c) Craig Nicholls for Megacomp Magazine      ****
5 REM****                    2/8/88                       ****
6 REM*********************************************************
7 REM
10 INK 0,1:INK 1,6:INK 2,24
20 BORDER 1:CLS:MODE 1
30 PEN 2:LOCATE 1,23:PRINT "Ensure switch on MULTIFACE
unit is DOWN":LOCATE 12,24:PRINT "Now Press A Key!":CALL
&BB18:CLS
40 WINDOW#1,9,31,7,17:PAPER#1,0:CLS#1:REM <- Change
dimensions to suit filenames being used >
50 PRINT#1:PEN#1,2:PRINT#1," SELECT :"
60 PRINT#1:PEN#1,1:PRINT#1,"   1.Donk The Zungoids"
70 PRINT#1:PRINT#1,"   2.MegaNuke"
80 x$=INKEYS:IF x$="" THEN 80
90 x=VAL(x$):IF x<1 OR x>2 THEN 80
100 IF x=1 THEN game$="DTZGAME":scr$="DTZSCR":ELSE IF x=
2 THEN game$="NUKEGME":scr"="NUKESCR"
110 MEMORY &4000:LOAD scr$
120 CALL &8000:CALL &BB18
130 RUN game$
140 END
```

Why a P.C.?

Is Big Blue's classic or one of its clones right for you? Bill Liao strips away the mystique and tells you how to decide.

Many people in the computer industry talk at great length about the uses of the IBM PC and its lookalike clones. But what do these Machines mean to the home user?

With its launch of the PC, IBM virtually cornered the small computer market in America. IBM had more back orders for their PC than there were computers in existence in the early part of this decade. However the PC although popular in Australian business, never sold as well to the home user market.

The main impact of the PC here, was the way in which it created a standard in the small computer industry. Thus a mountain of small "Clone" or PC lookalike manufacturers sprung up and there are over 1000 different brands of PC all with very similar, if not identical, capabilities.

What this means to the home buyer is simply this: almost everybody sells a cheap PC, almost everybody can service a PC and there is software available to do just about any task if you look hard enough. This makes a PC clone a viable alternative for the home user.

So what do you need to know if you want to to buy a PC?

PCs now come in a very wide variety of shapes and sizes and prices. In fact there are so many types of compatible computers that I could not even begin to list them here, but I can tell you what to look for in a clone.

The PC/XT is the most basic of the available PCs. This code implies a copy of IBM's original effort to design a computer for the small user and is no longer manufactured by IBM themselves. This is the best alternative for the money for the small PC user who is just starting out.

To start with, a PC/XT supports several thousand different sorts of screens, disk drives, printers, speeds and a whole host of other devices, again too many to list here so I will describe what I believe to be a worthwhile system.

To be anywhere near as versatile as it should be, your PC/XT should have the following things:

- 640K of memory (PCs can support anywhere from 64 kilobytes of random access memory or RAM to 8 megabytes of RAM)
- Two 360K 5¼" floppy disk drives. (This is the most standard format of PC disk media)
- A colour graphics card and monitor (This will provide quite reasonable graphics and allow a large amount of games software to be run)
- A multifunction card consisting of two serial ports (for connecting to a modem and a mouse), a printer port (for connecting to a parallel printer), a real time clock (to keep the time even when the system is switched off).
- A mouse (for running drawing packages)
- A modem (for communicating to other systems). This is vital for a PC as there is far more pubic domain software available for this machine from bulletin board systems, than there is for any other machine.
- Finally, a printer is essential and a cheap Epson compatible printer such as an LX800 from Epson is ideal.

If you shop around for good deals you should be able to build the above system for about $2200 or less if you try hard and are a good haggler. At this price, it's unlikely there will be any components of it that are so called big name brands of equipment.

With PCs and clones there are two ways in which to purchase them. You can either buy the whole system from a big name like IBM or CANON, (and you will pay more), or you can buy a kit-form computer and put it together from the parts (this is easy to do if you have a screwdriver as all PCs are modular in design and require little assembly). This is the cheapest way to get your PC up and running. The difference is that with a big name you are also paying for continued and reliable service. Assembling it yourself you have to replace any bits that fail or try to get one of the small companies to fix it for you. It is all a matter of luck, taste, and bank balance.

Also, if you do decide to get a PC and you outgrow its capabilities, PCs are easily upgradable from XT to AT and even 386 machines but more of that, maybe next issue.

For now I would just like to say that PCs and lookalikes are a viable alternative to other small computers and are as powerful as the amount of money you spend on them.

the virus
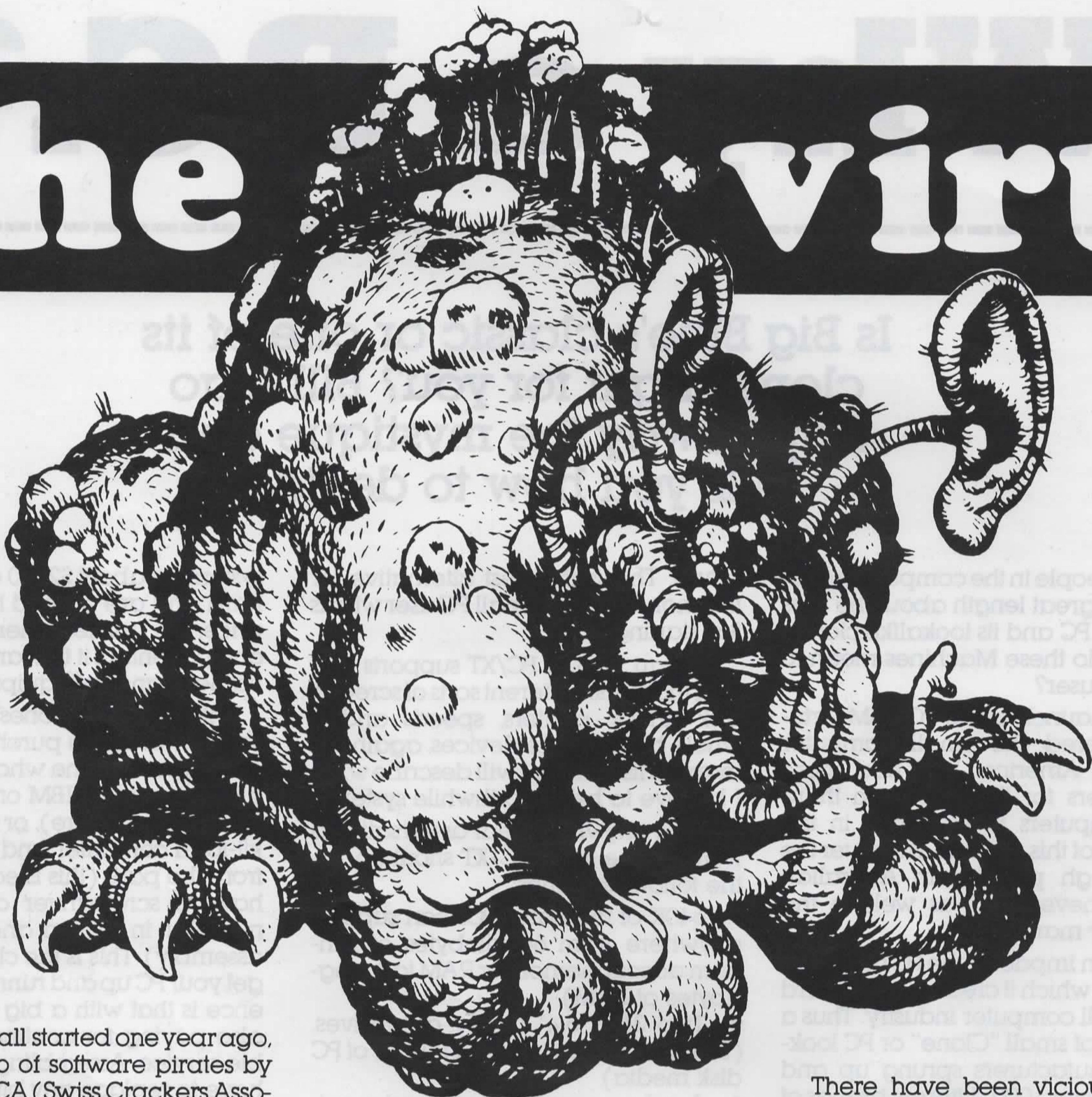
It probably all started one year ago, when a group of software pirates by the name of SCA (Swiss Crackers Association) were told that a virus was not possible on the Amiga computer.

They hastily proved everyone wrong, and the virus was born. It came as an unexpected shock to everyone, and as a result thousands of Amiga users around the world were left in panic. But that was just the beginning.

Now there are supposedly around six different viruses floating around which are much worse than the first one. Not only pirates have managed to acquire this virus, but there have been several cases of original software being sold with a resident virus.

Loricels of France claims that someone sent them a disk which contained a new and deadly virus. Other rumours have been that the review copies of 'Enlightenment — Druid II' which were sent to various magazines contained the destructive 'Byte Bandit' virus.

WHAT IS A VIRUS?

A virus is a program which enters memory from a particular program, then proceeds to write to any unwrite-protected disks.

The virus not only writes to all disks, but also it can crash your machine in the middle of anything you are doing. It can display messages on the screen and it can cause your computer to go into wild reset loops, thus obliging you to switch your machine off.

Not all viruses write back to your disk. They can be a form of copy protection, or can be used as part of a program. Eg., IBM Transformer resets the computer as it goes into IBM mode. These types of virus are not harmful, but some of them will force you to re-boot your machine.

There have been vicious rumours about viruses writing themselves into a permanent position in your computer's ROM. I have heard also of viruses blowing up chips and disks, writing over write-protected disks, and other equally ridiculous things.

IDENTIFYING THE VIRUS

At the moment, there are four versions of the virus. There's the SCA 'Byte Bandit', the 'Byte Warrior', the 'Revenge' and the 'Northstar'.

There are some others but they are just variants of the SCA virus with different messages on them. These viruses all reside on the bootblock (blocks 0 & 1 of your disk).

SCA virus : This is the first and most harmless of the viruses. It will display messages to alert you of its presence, but it writes to unwrite-protected boot disks. When the SCA hits your bootb-

survival kit

lock it has obvious messages on it such as '!SCA!' and 'Something Wonderful has happened'.

Block 0 begins with 'DOS.71;.CHW!'. Notice that CHW are the initials of the author's name — Christian H. Weber.

Byte Bandit virus : The worst of all of them. It writes to unwrite-protected disks regardless of whether you are booting off them or not.

It alters the trackdisk device so that if you try to install the disk or just validate it, the virus will write to your bootblock.

Another nasty feature is that it causes your computer to crash and display a blank blue screen. Rumour has it that 'Byte Bandit' was written by the hacking group 'Movers' in West Germany, but so far they have not claimed responsibility.

You can identify this virus by the message 'Virus by Byte Bandit in 9.87' on your bootblock.

Byte Warrior virus : This is a new virus which has just made its way to Australia. It does everything the 'Byte Bandit' virus does except crash your machine.

It is very hard to detect and kill once it has entered memory. Sometimes it gives itself away by playing a little tune as it dives into your computer. At the moment there is no clue as to who wrote it, but it definitely came from overseas.

'Byte Warrior' begins on block 0 with 'DOS.d.ml' and has the letters 'DASA' halfway down the block.

Revenge virus : At the time of writing, this had not yet hit Australia. As with all other viruses, it writes to unwrite-protected disks.

The thing that makes this one different is that exactly one minute after boot-up it changes your mouse pointer into a picture of part of the male body, leaving some people very offended!

It informs you of its presence by leaving 'Virus by Revenge' on your bootblock.

Northstar virus: This is a good virus. Once it is in memory it will eliminate both the SCA & Byte Bandit viruses.

It will write only to a disk which has been infected by them. As its name suggests, it was written by the Swedish group 'Northstar'.

There's no need to identify this, but if you feel you must, look for the big loud message on blocks 0 & 1 informing you of its presence. There are other anti-virus viruses such as 'Zebra' and 'Jungle Command', which do similar things to 'Northstar'.

NOW ... THE CURE!

Prevention is the best cure. Keep your disks write-protected unless you need to write to them. Check the bootblocks of all incoming disks no matter whether they are originals or public domain. If you see a bootblock which you are not sure about, don't boot off it.

If you have an Amiga 1000, you have much better chances of detecting and destroying a virus, as there are numerous versions of Kickstart available with built-in virus killers.

Two of them are HQC Penicillin V1.2, and Proton Kickstart. Both of these kill the 'SCA' and 'Byte Bandit' viruses.

Then there is Guardian V1.2. In my opinion, this is the best because it will tell you of any bootblocks which do not match the standard Amiga-DOS bootblock. From there you have options to use it, kill it from memory, or wipe it from disk. It is the only Kickstart which can detect the DASA ('Byte Warrior') virus.

You can get Guardian V1.2 by sending £3 (Stg.) plus postage and handling to : Transactor (UK) Ltd., Unit 2, Langdale Grove, Bingham, Nottinghamshire, England NH1385R.

If you have a 500 or a 2000 then you have problems. While there are numerous ways to kill a virus on these machines, first you have to detect it. Here is a list of programs you can use:

★ Guardian V1.2 : Works the same way as it does on a 1000, but every time you switch your machine on, you have to boot it up!

★ SCA Virus Protector : Detects and protects a disk infected with 'SCA' virus. Prevents disk from further infection.

★ Tristar Virus Killer : Detects and kills 'Byte Bandit' and 'SCA' viruses from disk and memory.

★ Virus XV1.5 : Kills all 6 viruses from disk and memory??

★ THRUST Virus Killer : Detects and kills DASA ('Byte Warrior') virus from disk.

Most of the programs listed have built-in killers, but if you don't have any of these programs, the best thing to do is to switch off your computer and boot-up with a clean workbench disk. Then destroy the infected bootblock with the install command.

VIRUSES - THE FUTURE

Why people write viruses is a mystery to me. It seems that the authors enjoy others suffering.

The people who wrote the SCA virus are supposed to have received death threats, which probably explains why the authors of other viruses use pseudonyms. The only exceptions are the writers with such massive egos that they get a kick out of knowing their names are popping up on computers all over the world.

In the future, we can expect to see many more viruses which will be much worse. The only way to save your disks is to be prepared. Viruses come on public domain disks and even on some commercial programs. If you are a pirate, then that's just another risk you take.

If you have a virus problem and you need some help, you can write to me, C/- Megacomp Magazine. In later issues I'll keep you up to date on any virus news.

Malcolm T on Apple

Here's the other side to one of Australia's best known multi-media stars. Beneath that zany, ebullient exterior is a dedicated Apple computer enthusiast. We're delighted to have him on board!

Hi!! I have been asked by MEGACOMP's editor to make the "odd" contribution regarding one of the worlds best selling computers the Apple II range. To this end I will be keeping you up to date on what is coming up in Apple software and hardware.

As a long-time user of an electric typewriter, I was afraid of the big step up to a computer, and must admit that FEAR was my biggest FEAR. As they say in the classics "there is nothing to fear except fear itself"!

When the Apple man arrived at the door talking, "Slots, Roms, Rams, Formats, Modems, Printers, Uni-disks and hard drives," I was ready to call it quits!

Thank God I persevered. The passion has grown over the past two years, the peripherals have increased, and where I once said "who needs 1 Meg on the desktop, or a 5 Meg hard disk?", I am now looking at getting a 40 Meg hard drive.

One of the biggest hurdles to overcome if you are undecided about a computer is to get past the sales "flaptrap" that some of the stores can put you through.

In fact it was the retailer "bulldust" that sent me off to the University of New South Wales and their Basic Programming course over 10 weeks, that sorted me out and started me on the way to be coming an Apple IIe enthusiast.

Some people want a computer just for the sake of having a PC, others have a genuine NEED. But before you buy, IDENTIFY that need. Is it only for games, or can you genuinely use the machine for WORD PROCESSING, DATA BASE, or SPREADSHEET calculations.

Some of the extra uses I have found have included Christmas card lists, phone number/mailing directories, personal insurance details, list of all tracks on LP records, car fuel consumption performance, personal banking, home entertainment-/games, and access to people of similar interests via bulletin boards.

One of the best moves you can make is to find a friend who has a computer and ask them, and their friends, what they use it for, how often, and do they enjoy other activities with the machine such as analysing and solving simple problems, programming, and configuring programs.

I used to drive an LTD until a friend made me aware that I was driving MORE CAR than I actually needed! The same goes for computers. The biggest, and so called best may not be necessary in YOUR CASE, for YOUR NEEDS.

The Apple II series from the IIc, IIe, and IIgs, will all blow you out of the water for different reasons. While the IIc is semi-portable, not all programs written for the II series will run on the machine. But these are few, and I recommend the IIc as an ideal introduction Personal Computer for child or student. Many adults love this machine also, but I prefer the full keyboard, and the ability to add various cards and peripherals. In this area the IIc is limited, and as a discontinued line in Australia can only be picked up second hand.

Although Mr. Hewlett and Mr. Packard were Silicon Valley Pioneers over 40 years ago, Apple IIe is one of the world's longest established Personal Computers, formed 12 years ago in March 1976. Steve Wozniak then 26 and Steve Jobs 21, used their small store known as the BYTE SHOP to manufacture and market 50 of the original Apple 1 boards, at Palo Alto in California.

Apple's first production model of the II+ was unveiled in April 1977, and since then has seen many modifications, enhancements and language changes. EG: Machine Code, Integer Basic, and Applesoft.

Today's machine is produced in a platinum grey, comes with 128K, exandable to 3 Meg, has a numeric key pad, and can be boosted up with accelerator chips, no slot clocks, Unidisk and hard drives, to make it perform in many cases as good as, if not better than a more expensive Apple Macintosh or IBM.

Sometimes I even wonder whether Apple don't wish that the IIe would just go away and die, so they can concentrate on marketing its big brother, the more expensive IIgs, released in 1986. With the right add-ons, (peripherals) the IIe can be the best value-for-money computer in the Apple range. The Trading Post can be the right place to look for one, as long as you have someone with you who can speak "computer talk" when making the purchase.

The IIgs has filled a much needed void in the marketplace, especially with those who were already happy IIc or IIe users. What the IIgs set out to do was to create better graphics and sound - thus "GS". Naturally a colour monitor is required, and depending on your needs, the current GS could see you paying for more computer than you actually need. Music composers, and enthusiasts just love it as do those who love to draw and make their own graphics.

News from the states is that a new GS is about to be released. It will run a little faster, have even sharper graphics, (if that can be possible) and expanded RAM to 512K. But most programs written for the GS require well over 512K and thus added expense for chips and cards which now are selling at all time high prices since the Cartel over chip pricing was entered into between Japan and the USA.

MANUALS

I have yet to see a computer manual written (for novices such as you and me) that tells you in SIMPLE language exactly how to put your computer together. Apple's advertising agency people have argued with me that the

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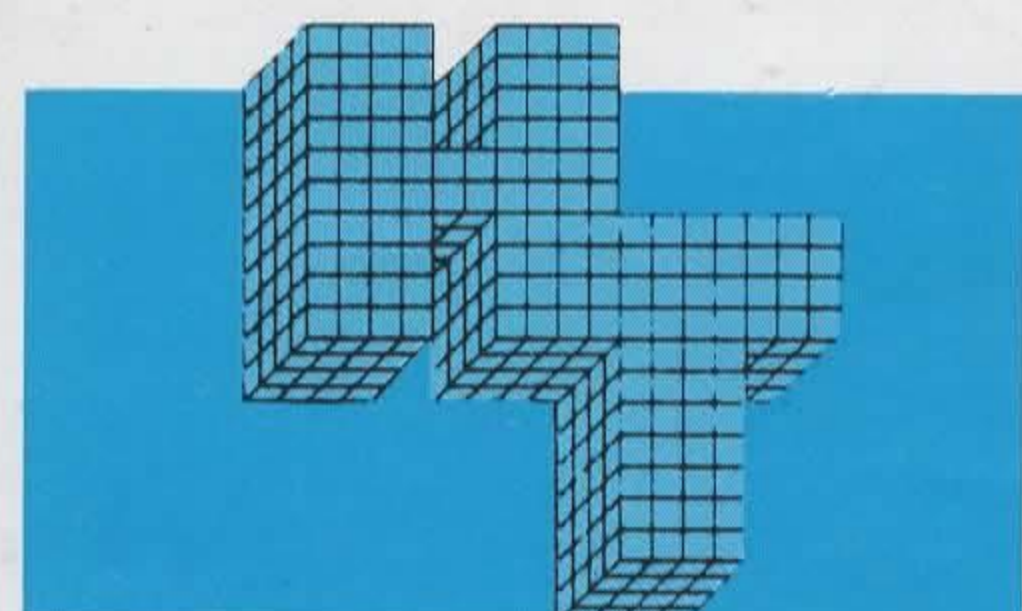
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1: Funnyline No. 1 is conducted by Megacomp Magazine. 2: Entry is free, but an official entry form as published in Megacomp Magazine must accompany each entry. 3: South Australian entrants may submit a photocopy or hand drawn facsimile - limit one entry per person. 4: Prizes will be awarded to the most witty and/or humourous entries. 5: Entries which bring about incontinence in the judges will have the best chance. 6: The decision of the judges will be final. None of the judges come from Queens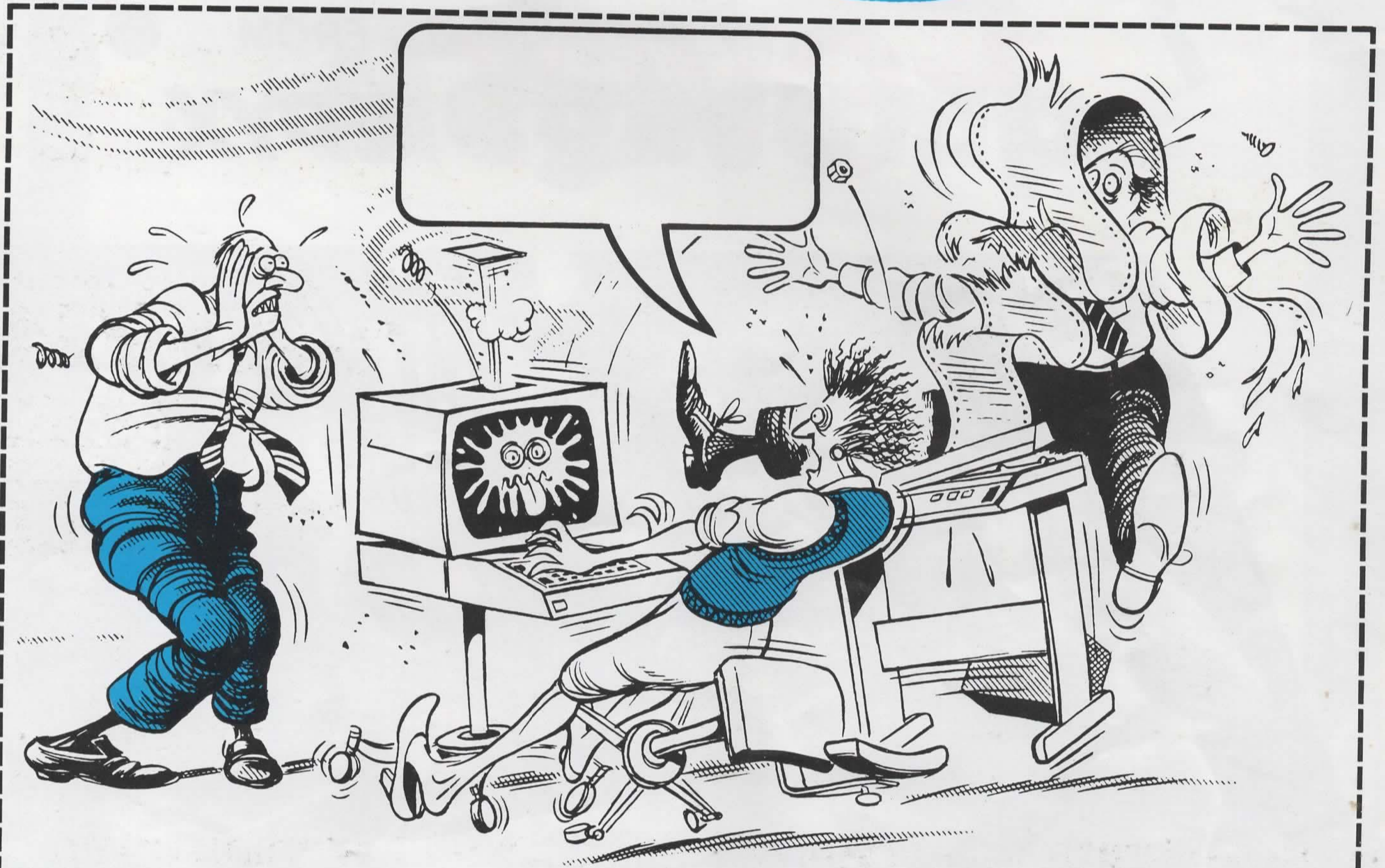land, so don't even try. 7: Prizes are not exchangeable for cash. 8: Entries are not returnable and only those received by the closing date will be judged. 9: Prizewinners will be notified by mail and listed in MEGACOMP Magazine. 10: Illegible, defamatory, obscene or grotty entries will be invalid. 11: Prize winners agree to the use of their name and address and/or photograph for publicity purposes. 12: Submission of an entry constitutes acceptance of these rules and conditions.

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The Games Fever

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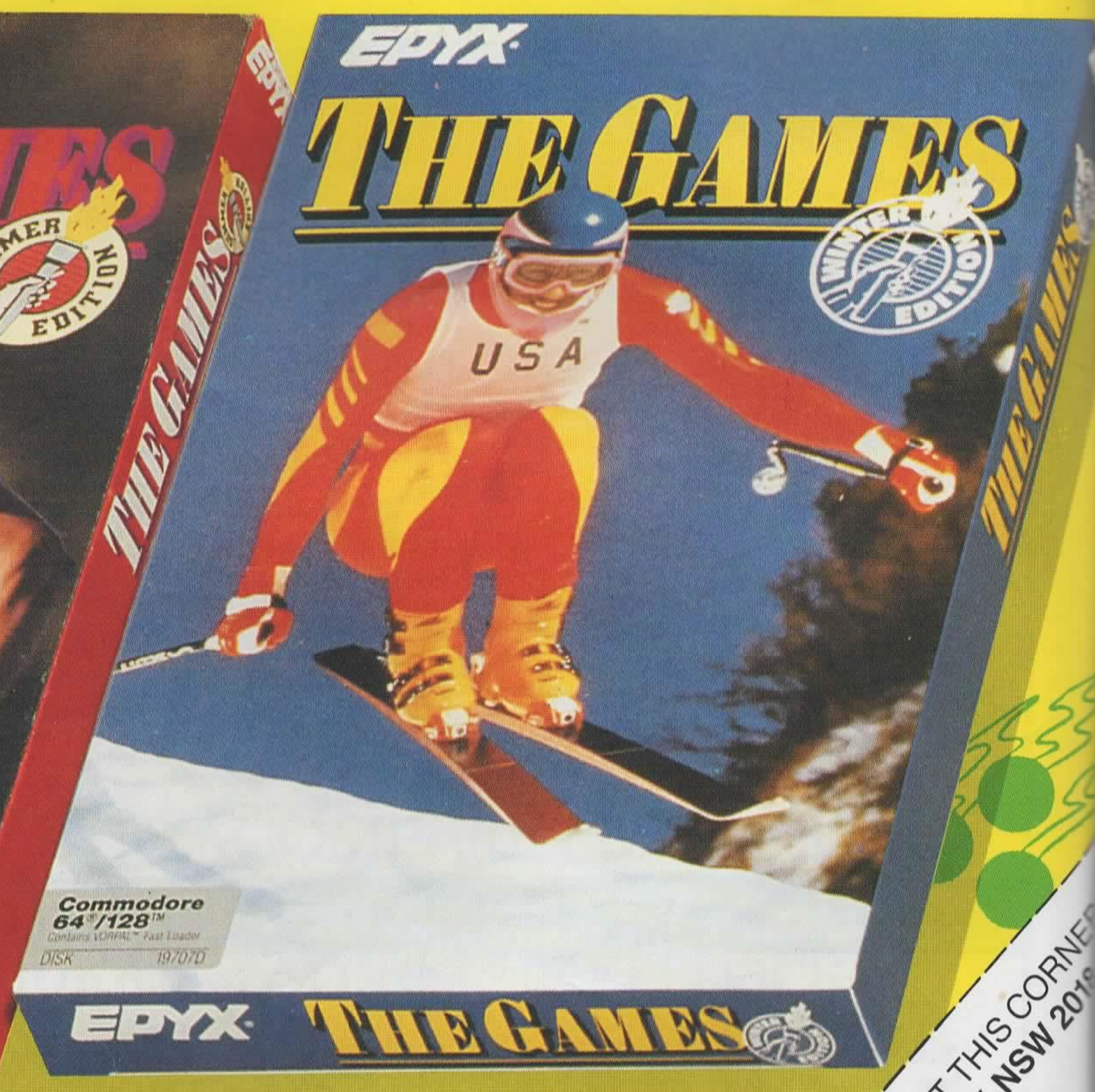
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Megacomp
ARCADE

GAMES REVIEWED

- Startrek
- Better Dead than Alien
- Balance of Power
- The Living Daylights
- Fire-Brigade
- Summer Olympiad
- Black Lamp
- Wonder Boy
- Final Assault
- Thundercats
- Fire and Forget

Gamer Newsline
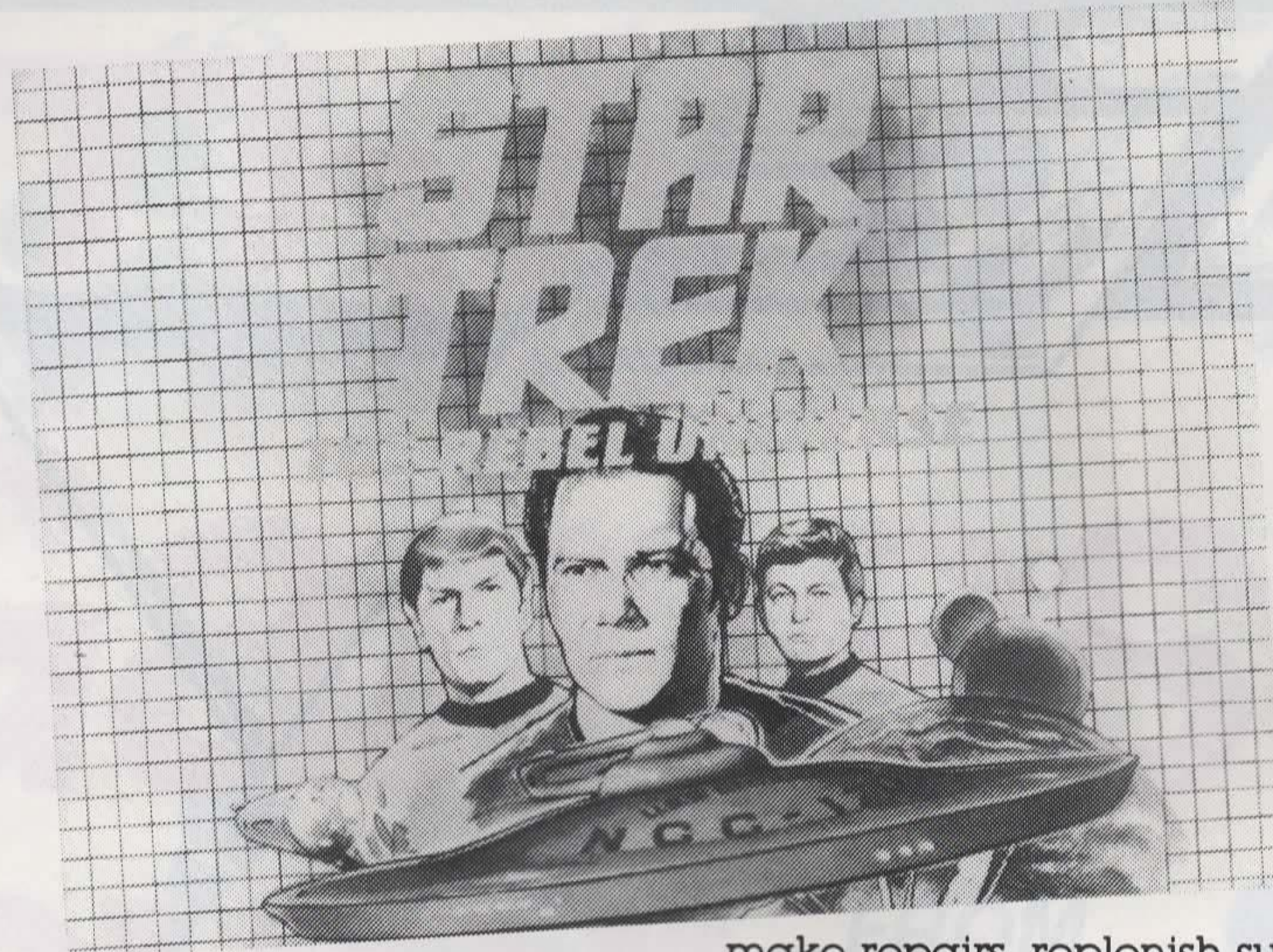
Into the wide blue yonder: Looks like ECP's F18 Interceptor is a big hit. It's a flight simulator that puts you in the cockpit of a carrier-based F18. Plenty of action and great screen display. Amiga only at present.

Epyx Epic: Impossible Mission 2 is sucking 'em in by the thousands, and no wonder. You have to prevent Elvin Atombender (computing genius gone loony) from triggering a nuclear holocaust. He's as cunning as a sewer rat. A bottler. Out for C64, Amiga, ST.

Ho! Wise guy, hey?: The Three Stooges live again in this wild one from Cinemaware. (They did Defender of the Crown). It's a riotous romp with Larry, Moe and Curly, bopping their way to save an orphanage from closure. Stunning graphics, digitised voices. Amiga, C64, PC, Apple IIGS, ST. Nyuk, nyuk, nyuk - bewdy!

**MSX Relief:** Computatronics (Sydney) is now distributing the Japanese MSX Konami games. Titles include Salamander, Penguin Adventure, Nemesis 1 & 2, Super Cobra, Time Pilot, F-1 Sprint, Goonies, Metal Gear. See? You haven't been forgotten.

Grab-Bag: Rocket Ranger (Cinemaware) is coming for Amiga, C64, PC, IIGS and ST. Live'n'Let Die, One on One (sequel to the basketball grabber), Skyfox 2, Hotshot, Football Manager II, Zoom, Wasteland (from the same people who made Bards Tale), Ultima V, Helter Skelter, and Shinobi soon for Amiga, C64, ST. Capone and P.O.W. due for Amiga. GI Hero coming for Amstrad CPC. Elite (C64 fave), Starglider 2, and Eliminator being released for Amiga and ST. Bard's Tale 3 will be on C64 and Atari dealers will get Bard's 2 and Super Hang-on for the ST.

Does Spock have anything between those ears? Are Klingons a threat to Blu-Tack? And who beams Scottie up? Come with Peter Chin Quan as he bravely goes where no man...

The first time I came across a computer games called STAR TREK was almost a decade ago while studying Electronic Engineering. In those medieval days when 8Kbytes of RAM was impressive, the game lived in a wardrobe sized NOVA minicomputer. Even with the 'enormous' computer power available the game seemed drab and unexciting. One plotted a course on the screen searching for KLINGONS. Having found a target one would key in its coordinates and launch a PHOTON TORPEDO. (Yawn!)

Even though the television series STAR TREK rates as one of my all time favourites I wasn't too enthusiastic when 'STAR TREK - the rebel universe' was put in front of me. I thought to myself "not another rehash of the old search and destroy game". I should have known better!

This new game by FIREBIRD SOFTWARE is amazing! One is thrown into the 'quarantine zone' where a strange physic effect has caused 20 Federation starship crews to mutiny and turn renegade. As commander of the USS ENTERPRISE you have five years to determine the cause of this mutiny and reverse its effect.

Navigating through the Quarantine zone is straightforward and involves using the mouse to select a destination on one of three 3-dimensional star charts provided by Sulu the ships' Helmsman. Warp speed is chosen and one soon arrives at the chosen star system. Impulse drive will take you to the chosen planet where one may refuel,

make repairs, replenish supplies or a number of other tasks depending on what facilities are available. Spock the Science Officer gives this information when asked. More information is provided by McCoy the ship's Medical Officer who reports on the crew's health status. This is important when Captain Kirk beams members down onto a planet's surface for various missions. Communications Officer Uhura reports incoming messages and ship's engineer Scotty reports on Impulse and Warp drive status.

While playing the game you also encounter enemy forces in the form of KLINGON battle craft bent on reducing your ship to space debris.

'STAR TREK - the rebel universe' is a very well written game that is fascinating to play. Graphics and game layout are excellent. Realistic digitized sound effects and especially voices, will give any 'TREKKY' a warm feeling of familiarity, the game provides enough realism to keep Science Fiction fans happy. There is enough strategy and thought involved in game play to keep the 'grey matter' exercised and interested. The game is definitely not dull and boring and will be enjoyed by a wide range of players with the possible exception of the idealistic 'shoot em down' purist. Definitely a must for any 'TREKKYS' or 'SF' enthusiasts out there.

Megacomp Scorecard

Star Trek - the rebel universe

SOUND 9	COLOUR 8	ACTION 7
GRAPHICS 8		BRAINSTRAIN 8
PLAY IT AGAIN SAM? 9		
OVERALL OUT OF 100 82		

Reviewed on	: Atari ST
Also for	: —
Software by	: Firebird
Distributor	: QUESTOR
Price	: **$59.95**
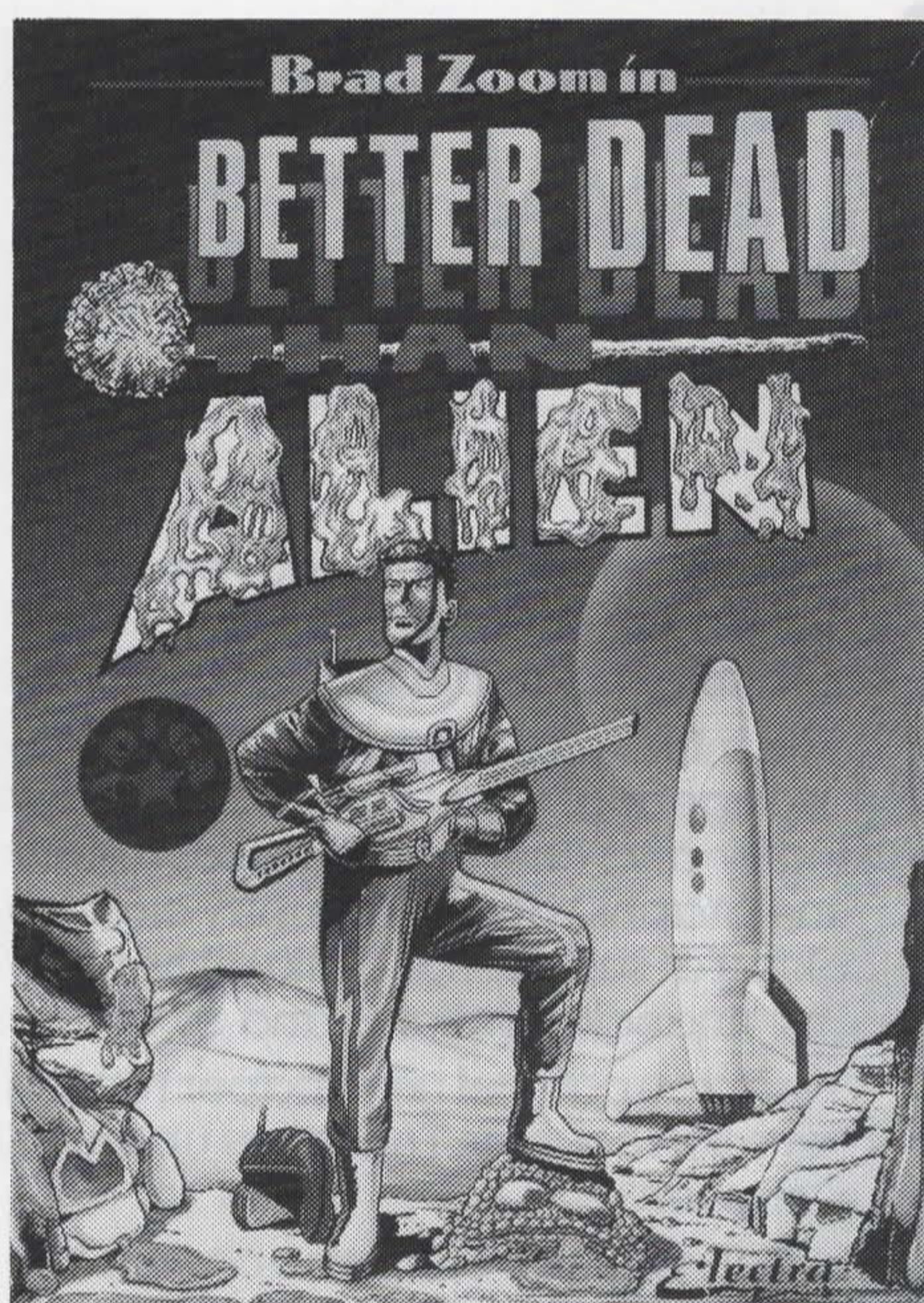
Shucks Cap'n - whut's that green slime all over the cockpit window? Could it really be Valentino (boom, boom) Rossi after his latest shoot-up with the space nasties?

Just when you thought it was safe to go back to your computer software supplier, a company from Britain called Electra have decided that what the world really needs is another 'Space Invaders' - type arcade game. It seems that old ideas die hard. At least the names have become a bit more inventive - 'Better Dead Than Alien' must be one of the more imaginative I have come across. Don't shrug this one off too quickly; true, it may not be the most original idea for 1988 but it has enough variation to make it worth a second look.

In case you've been off-planet for the past decade, a 'Space Invaders' style of game is one in which the player controls a small gun, or ship, which is located at the bottom of the screen and can be moved from one side of the screen to the other. Wave upon wave of various creatures, usually assembled in some pseudo-orderly manner, attempt to destroy your ship by dropping bombs on it. It is the player's goal to shoot as many of the aliens as he/she possibly can while attempting to avoid destruction. I might mention that the aliens slowly work their way down the screen, lessening the distance between your ship and a sudden demise. (And if there really is someone reading this who did

not already know the last paragraph word for word, let's hear from you; I think you deserve some kind of medal!)

Well then, that is the type of game that Better Dead Than Alien is. What's different about this one? First of all, I would have to say that the quality of the graphics is at least as good as most of the coin-operated games of this type. (By the way, the review package was the Amiga version. I imagine the Atari ST version is very similar). Each 'wave' of aliens is different and very imaginative, not to mention the background pattern which also changes frequently, and in the harder stages can get the eyeballs spinning in their sockets! Most of the screen is taken up by the main action.

In a sense, 'Better Dead' is more like the 'Galaxian' style of game where the aliens decide to fly down towards you from time to time, making life that much more difficult. Not too difficult thought, because your ship is allowed to move up and down the screen a certain distance as well as left and right. The game starts off fairly easily, as the aliens only require a single shot each to kill them. As you progress through to the more difficult stages, they require more and more hits before they explode, and when they fly down towards you they will need even more to kill them.

After you've successfully wiped out a couple of waves, you'll have to contend with a 'master alien' of some description. Instead of a whole group of small nasties, a single alien, much larger than the others must be destroyed, which usually takes at least thirty or forty hits — at least you can move around the entire screen during this phase. These master aliens, as is everything else in the game, are well-drawn and animated. Very mean-looking.

From time to time the game is transformed into an 'Asteroids' situation where you must shoot huge space rocks which break up into smaller bits, which break up into still smaller chunks; etc, etc... This part of the game can be the most confusing, especially when you have two people playing at once. Sometimes you think you've just watched your friend's ship get blown to pieces when you suddenly realise you've been watching the wrong ship for the past five minutes, and it's really you!

Better Dead Than Alien has another interesting feature: every now and

then one of the aliens will let out a strange sound, just before it starts to glow a green colour. If the alien is hit while it is in this condition, it will drop a 'power capsule' which you can safely let hit you. This can have one of a range of effects, depending on which of eight icons at the side of the screen happens to be flashing at the time; you may suddenly have a 'rapid-fire' gun, a protective shield or even an extra 'life'. The trouble is, in the heat of battle you're just as likely to take a shot at these too, before you realise what you've done.

The game progresses in stages, each one having its own name. The reason for this is that when you start a new game, you can type in one of these names and begin at that level, rather than starting from scratch each time. The game has many other nice touches such as this. As I mentioned earlier, two players can play at the same time, thereby increasing your chances with double the firepower, and you can choose between mouse, keyboard or joystick control for each player. Each method is easy to use, and the keystrokes are definable to suit your taste.

Another good aspect of the game is its sound. There is just the right amount of it, and all the effects have a nice ring to them. I don't want to give away everything (as if I haven't already) but I can't recall having been applauded for getting a high score before (not by the game itself, anyway!). Chances are, Better Dead Than Alien will be largely glossed over by most people because of the flood of great games now available, but I think it has possibilities. It has state-of-the-art graphics and sound, good playability and lasting appeal — especially if you can find a friend to play with — and the programmers have injected a large dose of good humour into the game. One last thing that I've neglected to mention: It's addictive!

Megacomp Scorecard

Better Dead Than Alien

SOUND 7	COLOUR 8	ACTION 8
GRAPHICS 8		BRAINSTRAIN 3
PLAY IT AGAIN SAM? 9		
OVERALL OUT OF 100 72		

Reviewed on	:	Amiga
Also for	:	Atari ST
Software by	:	Electra
Distributor	:	QUESTOR
	Price :	**$59.95**

BALANCE OF POWER

Geopolitics in the nuclear age by Chris Crawford

Peter Lindemann dipped out being appointed Governor General. After this display of his international diplomatic talent, we just can't understand why. Oh well...

Balance of Power came out about a year ago and has just been re-released by YPA. So why are we reviewing such an old game?

Well, this is one of those beasts which we reckon will probably become one of the great classics — once game players tire of shoot-'em-ups and other dross. A game for graduates, if you like. Quit right here if your brain isn't up to devious thinking.
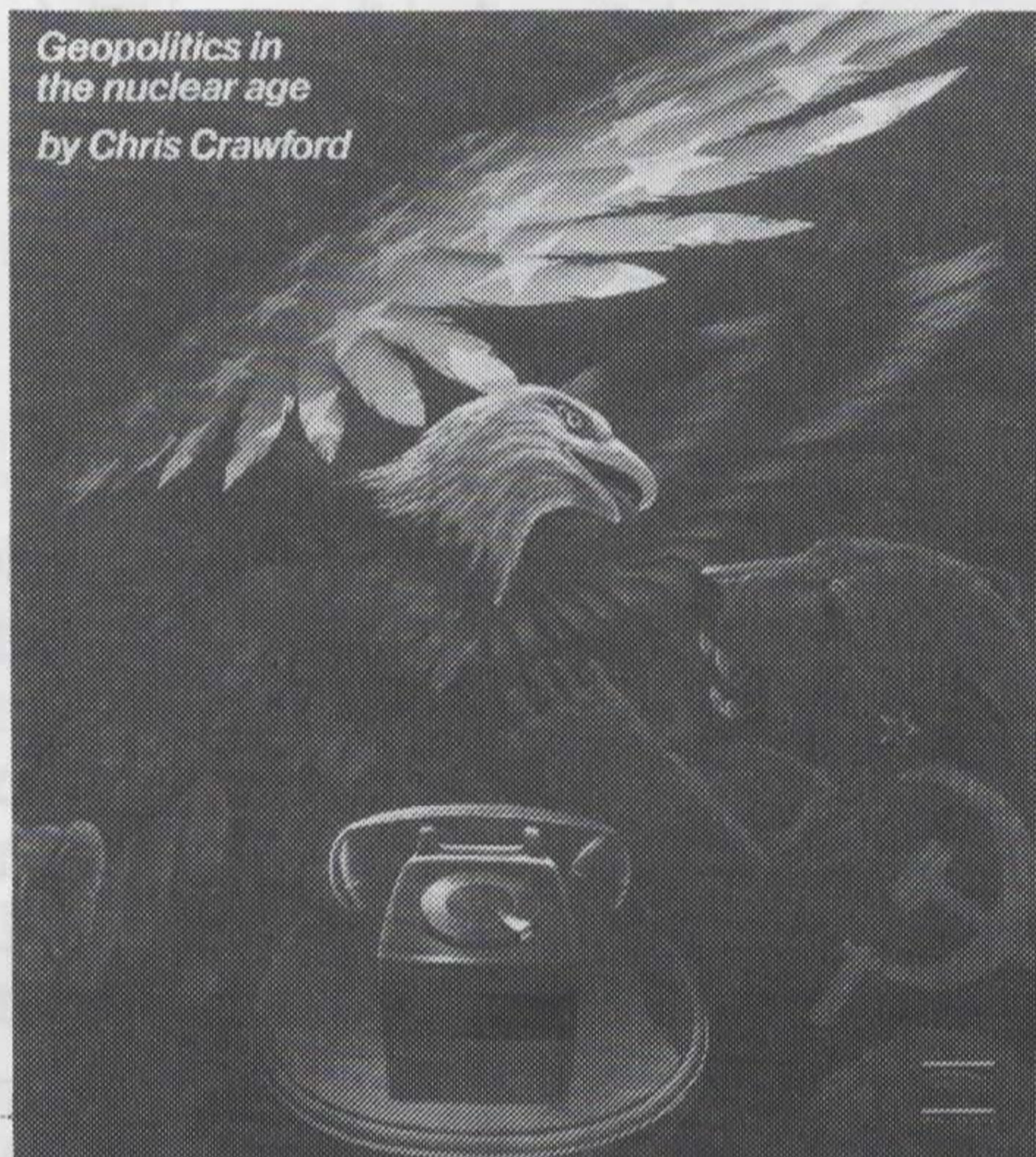
If you ever played Intellivision's "Utopia", that will give you an inkling of what Balance of Power is about — but on a far higher level, with infinitely more complex play and actual screen displays of newspaper reports from different countries. (How'd you like to read a copy of "The Australian" of the 1990's?)

Basically, it's a strategy game, but it doesn't really fit neatly into any of the usual classifications. We played it yonks ago and it sucked us in completely. When YPA waved this copy in front of us, we went all quivery and grabbed it.

It's an important game, not because of the highly detailed graphics, there's no sound — and no need for it, or the way it gets you in, but because Balance of Power makes you **think**. It can be quite scary (Read that any way you like!)

The game simulates relationships between the big two superpowers (not Richmond and the Swans, but Russia and the USA) and their influence on the world.

What you do is take the role of one of the super powers. You make decisions such as supporting rebel groups attempting to overthrow a foreign government. Diplomacy plays a big part of the game as does making sneaky deals with people you wouldn't want your daughter to marry. Familiar, huh?

You don't have it all your own way, though. The other superpower (the computer or your opponent) can challenge your moves and if neither of you backs down then someone may go to Defcon 3 (oooer!) then Defcon 2 (sticky fan time) then KABOOM!!! — the end of the world. It's also the end of the game.

Of course, blowing the world up is not the aim of Balance of Power, although the way things have been going in real time, you'd think it was.

The idea is to gather as many prestige points as you can by making the 'right' decisions. At the same time you can't sit back and let your opponent build influence with other countries. So the 'right' decisions are paramount to you maintaining your balance of power.

It's not a game you can master in five minutes. You gotta THINK, baby!

To help you get into this game with the least brainstrain, you can start on the lowest of the 5 levels. As you learn how to be more devious and more diplomatic (what's the difference?) you can progress to the higher and more complex levels.

At the top is the aptly named Nightmare level. Here, you're in the big league. You can use the CIA or KGB to destabilize countries, form treaties, apply diplomatic pressure, offer military and economic aid and send troops to intervene for governments against rebel opposition groups. Very nail-biting, edge-of-your-seat stuff.

The information you get in this game is staggering. You can look at any country and check its political history (nine graphs) or get a country closeup looking at such things as stability, weapons, financial policies and so on.

Also, you can get newspaper reports from each country. These are updated each year.

When you turn the game on, you are presented with a map of the world with shaded areas showing where revolutions, coups and so on are taking place.

You can change the display to show the influence of the superpowers on all countries. You can discover exactly the extent of superpower activities in any country.

In many ways, Balance of Power can be quite unsettling because it's so realistic. It makes you think pretty deeply of the awesome responsibilities our leaders have and how easily things could go off the rails.
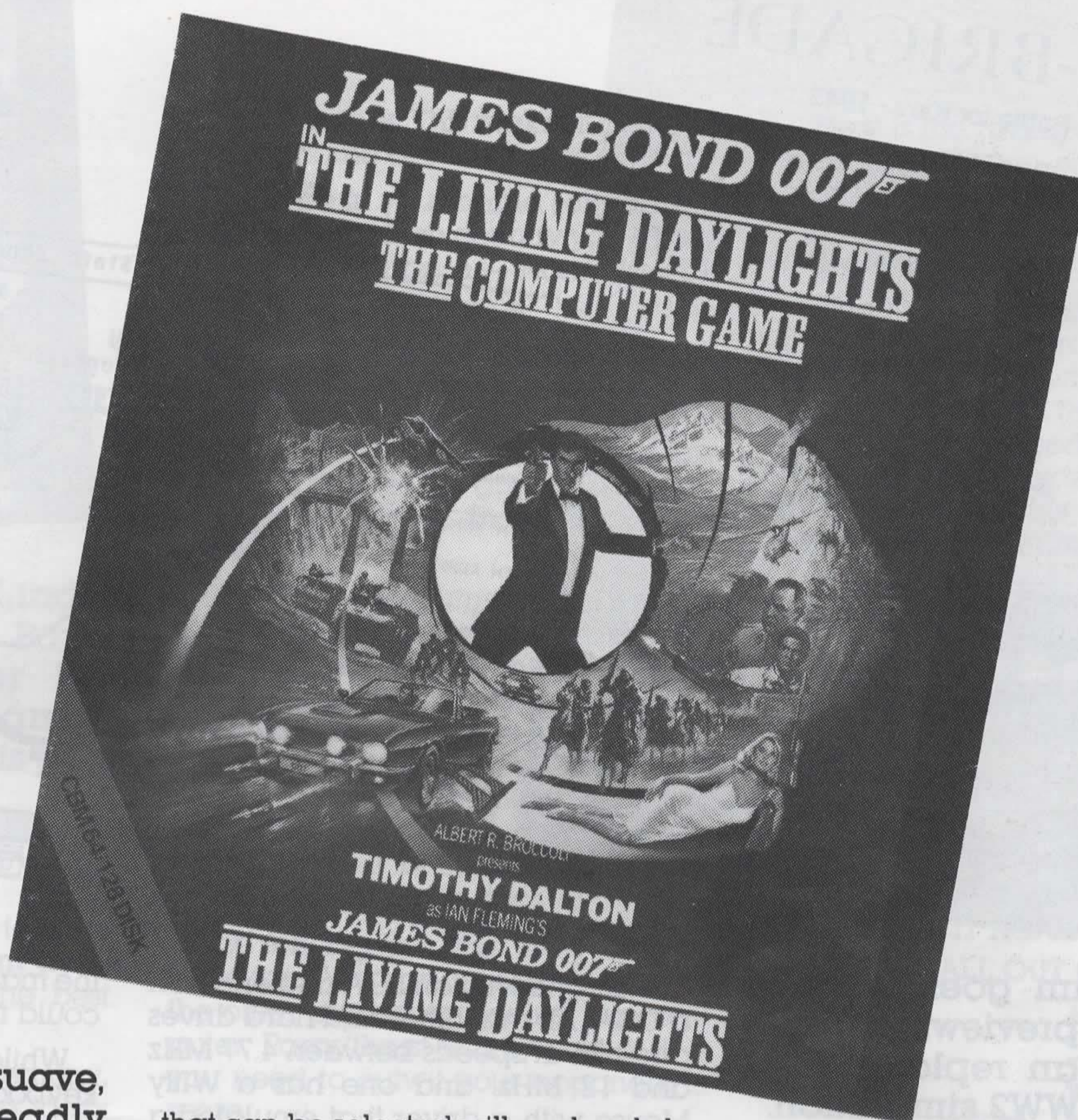
It's a program most dedicated shoot-'em-up fanatics might find hard to come at. But if you're yearning for something with more twists and turns than the pullover your grandma knitted, and something that doesn't insult your intelligence, you'll find Balance of Power utterly engrossing.

Megacomp Scorecard

Balance of Power

SOUND n/a   COLOUR 6.5   ACTION 3
GRAPHICS 7   BRAINSTRAIN 9.5
PLAY IT AGAIN SAM? 9.5
OVERALL OUT OF 100   71

Reviewed on	: Atari ST
Also for	: Amiga, Apple Mac & II
	: IBM, PC, XT & compats
Software by	: Mindscape (Alert)
Distributor	: YPA
Price	: **$79.95**

JAMES BOND 007 IN THE LIVING DAYLIGHTS — THE COMPUTER GAME

ALBERT R. BROCCOLI presents

TIMOTHY DALTON as IAN FLEMING'S JAMES BOND 007

THE LIVING DAYLIGHTS

Now you can be suave, debonair, urbane, deadly and devastating! David Morrow spills the beans on this James Bond 007 shoot-'em-up.

Bond is back and as usual our hero has got himself into some incredibly ridiculous situations which he must weasle his way out of against almost impossible odds.

007's mission is to find a defecting arms dealer (Brad Whittaker) protect a Russian defector (Koskov) and of course find some girl who he can make out with.

In search of his objectives Bond is placed in a variety of scenarios, ranging from a Music Conservatory to a Military Complex, each of these being represented with some good graphics and music, but unfortunately the sound effects are little more than beeps and buzzes.

As usual Bond has to cope with all the mundane hassles such as a few armies, snipers, exploding milk bottles and all the other paraphernalia involved in the realm of espionage.

The game is broken up into eight levels for you to conquer, and each time your Bond is killed he is given the chance to select another weapon besides his ever-reliable gun that never runs out of ammo. The weapon that can be selected will each only be helpful in one level and include things such as bazookas, grenades, missile-firing pens and ciragettes (who said smoking isn't dangerous), and even a ghetto blaster.

The levels are as follows:

1. Gibraltar —
The SAS has been brought in to test 007 armed with a paint gun but an enemy agent has crept in amongst the SAS and lays awaiting.

2. The Lenin People's Music Conservatory —
Bond has to guide a Russian defector (Koskov), past KGB agents and snipers out to kill him, all without injuring innocent people.

3. The Pipeline —
Bond is still smuggling Koskov only this time it's through the Trans-Siberian pipeline.

4. The Mansion House —
Koskov is now safe at last, or is he? Of course not - that'd be too easy, but our ever reliable agent James is there to guard him.

5. The Fairground —
Necros-one of Whittaker's cronies is out to get our James in the middle of a fun park.

6. Tangiers —
Koskov is missing again! The search for him takes 007 to the rooftops of Tangiers where he battles for his life.

7. The Military Complex —
How the hell did he end up there?!?! Anyway Mr. Bond has got himself trapped in a Russian Airbase in the middle of the Afghanistan desert.

8. Whittaker's House —
Our boy Bond really gets around huh? Finally the last level - now Bond must battle the arsenal of the criminal mastermind if he is ever to find his love.

The game in general is not a terrible one, especially for those who like shoot-'em-ups, but I'm afraid it does little for me.

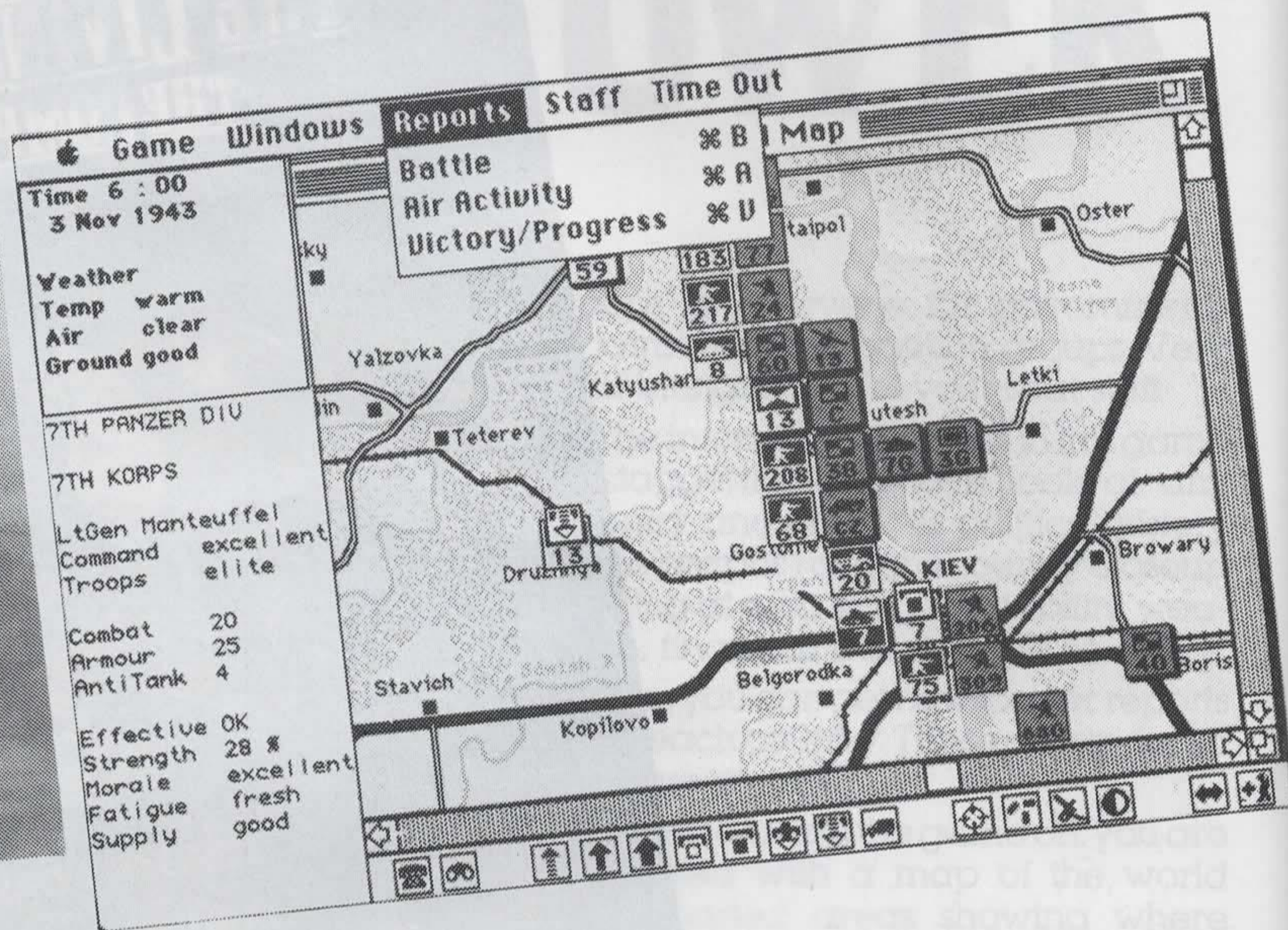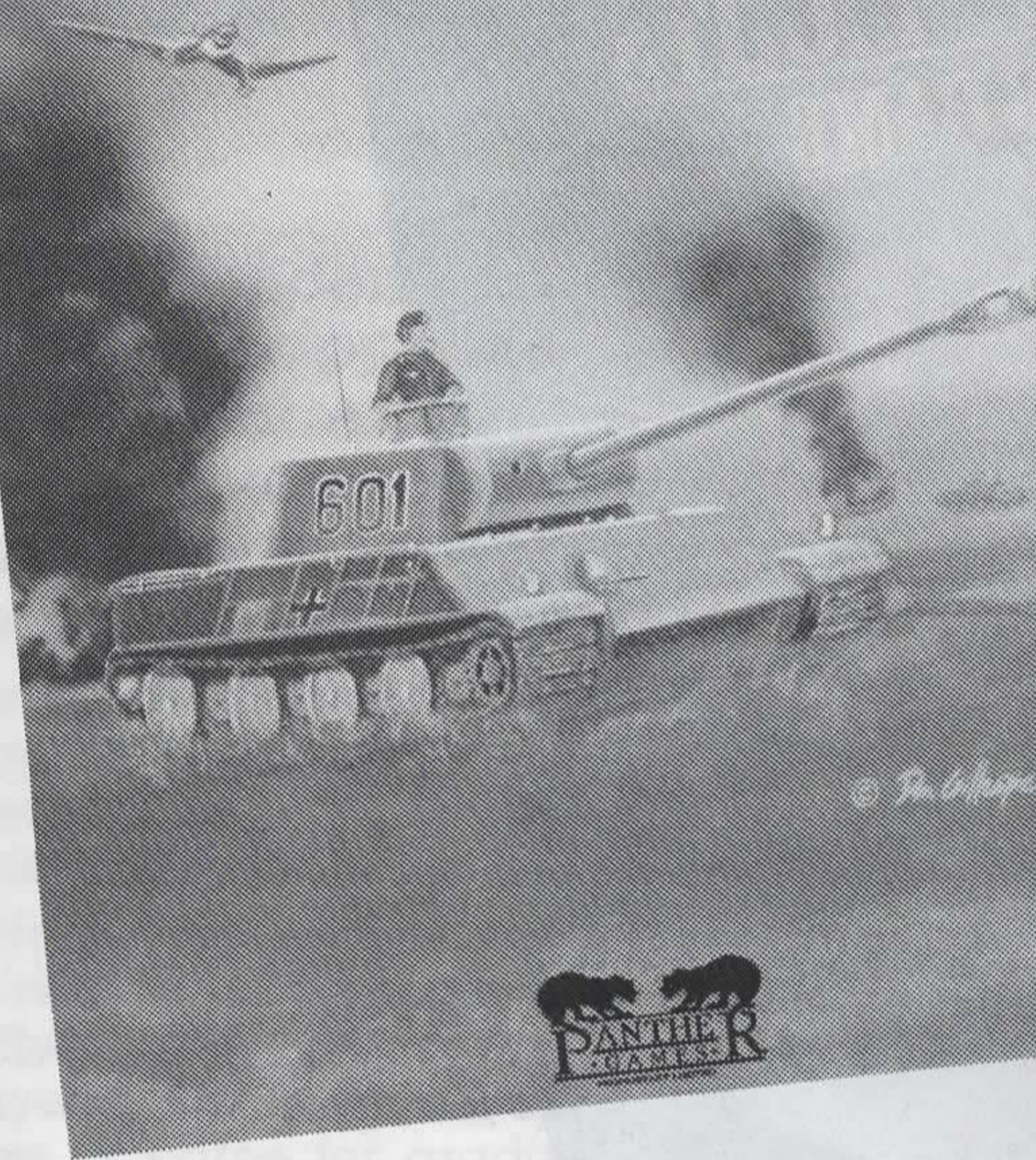## Megacomp Scorecard

The Living Daylights

SOUND 6	COLOUR 7	ACTION 7
GRAPHICS 7		BRAINSTRAIN 3

PLAY IT AGAIN SAM? 6

OVERALL OUT OF 100 60

Reviewed on	C64
Also for	Amstrad, CPC, Amiga, Atari XL/XE
Software by	Dolmark
Distributor	ECP
Price	$29.95 (C64)

FIRE-BRIGADE

The Battle for Kiev · 1943

Dave O'Connor
Tony Oliver
Ben Freasier

Andrew Pam goes all achtung as he previews Panthers all-Australian replay of this incredible WW2 simulation.

The sirens you hear wailing in this game are air-raid sirens, make no mistake about it ... and the men in red hats are Russian soldiers. Fire-brigade is a war-gamer's delight; the battle for Kiev, November 1943, rendered on computer by Dave O'Connor, Tony Oliver and Ben Freasier. And what a marvellous job they've done. This is a traditional war-game with all the clumsy counter-pushing and tricky bookkeeping looked after effortlessly by your computer!

I was able to install it in seconds, and have it running immediately. It looks great, especially in colour, and with the supplied tutorial I was able to learn how to play it very quickly. The program allows you to play either the Germans or the Soviets, and can also play itself or let two humans play; but best of all, two people can play each other on any two computers over a serial link. Unfortunately, I was unable to test this in time for the review, but I can see it being a lot of fun!

The program was apparently originally written for the Mac, and is now also available for the IBM PC, XT, AT, PS/2 and compatibles, the Amiga range, the Apple IIgs and the Atari ST. I received the IBM version, and tested it on an original 1982 model PC 1 with an EGA as well as a couple of AT

clones, one with an EGA and one with a CGA. All machines had hard drives and ran at speeds between 4.77 MHz and 12 MHz, and one has a Witty Mouse with a driver that emulated a Microsoft mouse. The program ran perfectly on all hardware tested.

The game is supplied on both two double density (360K) 5¼" disks and two double density (720K) 3½" disks, a move which I thoroughly commend. Also provided are the comprehensive and well-written 80 page manual, a four-page supplement for the IBM PC version, a small and amusing correction to the manual, three diskette lables for saved games, a registration card and three double-sided full-colour glossy reference cards; two showing the German and Soviet orders of battle for each of the three scenarios and the tutorial provided, and one showing an alphabetical index of towns and the game map.

All of this material is of the highest quality, especially the manual. This has to be one of the best game manuals I have ever seen! It's well written, clearly laid out and printed, uses plenty of crisp, clear diagrams and pictures of exactly what you see on the screen. It's even easy to understand and has an index to boot! This manual is definitely ten out of ten. The PC supplement did fail to explain the fact that the PC version requires you to type in the filename of the scenario when starting the game, rather than merely selecting it from a menu as shown in

the manual, but this was the only fault I could find.

While I'm niggling, when used in keyboard mode without a mouse, the cursor movement was very slow; this is overcome to some extent by using function keys and Alt keys to provide most of the commonly-used facilities, and the Tab key to select individual military units; however, in some circumstances the Tab key would move the cursor in a completely useless direction, sometimes even off the screen! Also occasionally the program appeared not to be quite sure whether the strategic or tactical map was displayed!

I suspect that these problems are specific to the IBM version, however, and none of them detract too much from the overall excellent impression that the game gives. Indeed, the very fact that I couldn't find anything more significant to criticise is an indication of just how highly polished the game is! Overall, I'd have to give it a nine out of ten; it's the best program of it's type I've ever seen, and Australian made, too ... if any product deserves to do well, this does.
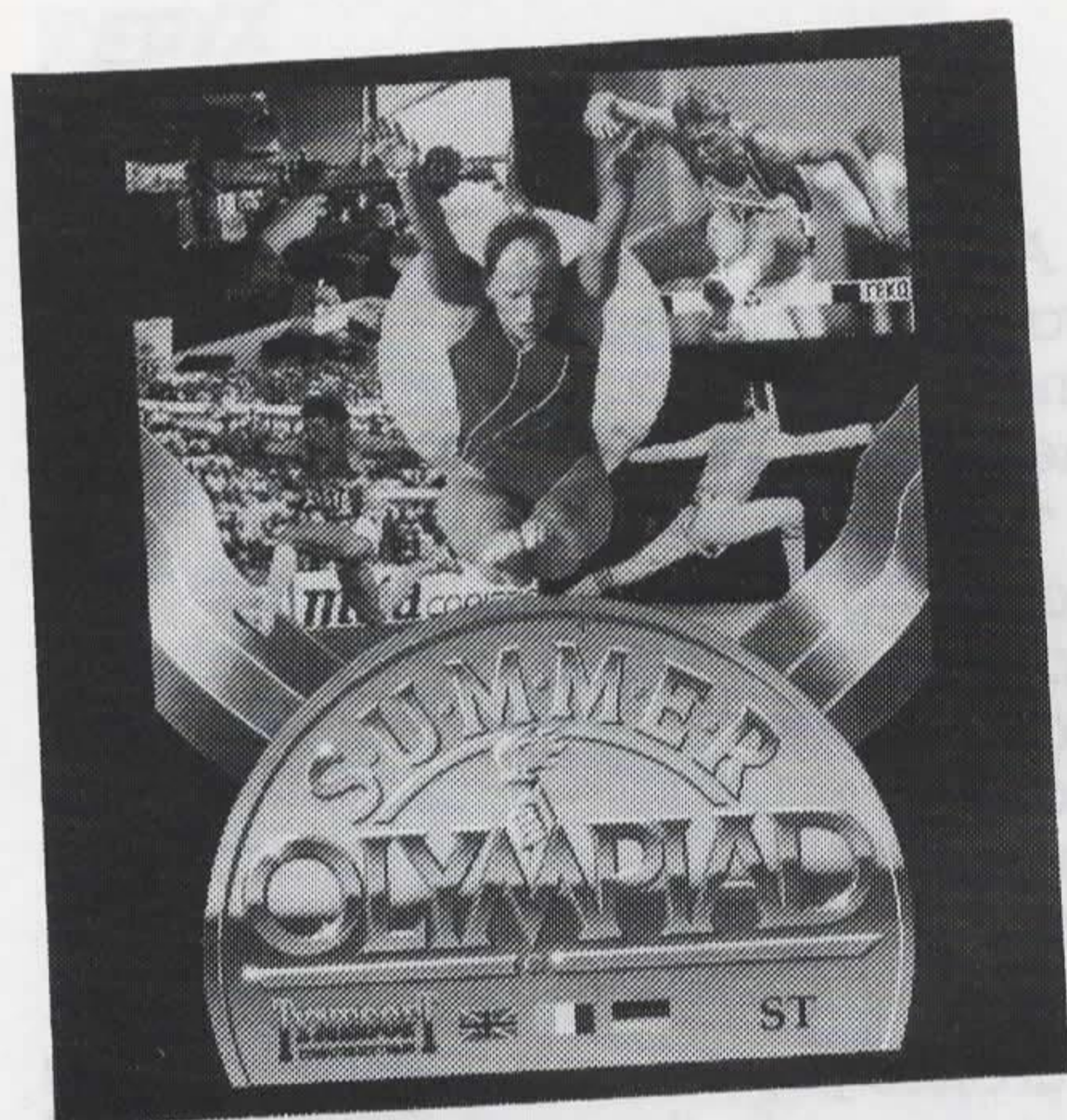
Sports freak, Peter Linde-mann, who gave up Para-bolic Mastiods after his gluteus maximus ran amok in K-Mart, checks out his pro-wess with this dazzler.

After sitting through hours of the Olympics and enjoying every moment, it was a nice surprise to have Summer Olympiad arrive on my desk. It turned out to be one of the best games I've ever played.

It starts with the opening ceremony, after which you can enter up to six players' names. This makes it an ideal game if some of your mates drop in.

You type in your name (or names), then choose which country you'll play for. Surprise, surprise — Australia is on the list. Yea, team!

First of the five events is Skeet Shoot-ing, where you blast away at clay pigeons with your trusty shotgun. You can use either your joystick or your mouse to control the gun. It's not easy, but it's lots of fun. Blam! Blam! Got anothery!

On to the Triple Jump, which is really tricky. To make a successful jump, you need to take off up the runway as fast as you can, then jump at just the right time. You build up speed by moving your joystick from side to side. If you don't have enough speed or if you jump at the wrong time, you're likely to end up on your fat bit in the sandpit. At least nobody laughs if you do.

The fencing is a real feast for Errol Flynn fans. You can fight against one of the other players or against the com-puter. Parry/thrust is only part of it — you need to outwit your opponent to score.

Next is the diving. After leaving the springboard, you can roll, pike and twist to build points before straighten-ing up at the end of the dive. It's terrifi-cally realistic.

Finally, if you have the energy, there's the 400m hurdles. The graphics here are superb, with the view pan-ning down behind the runners before the start. Your speed is controlled by the joystick, and you jump by hitting the fire button. This is a real joystick destroyer, and timing is critical.
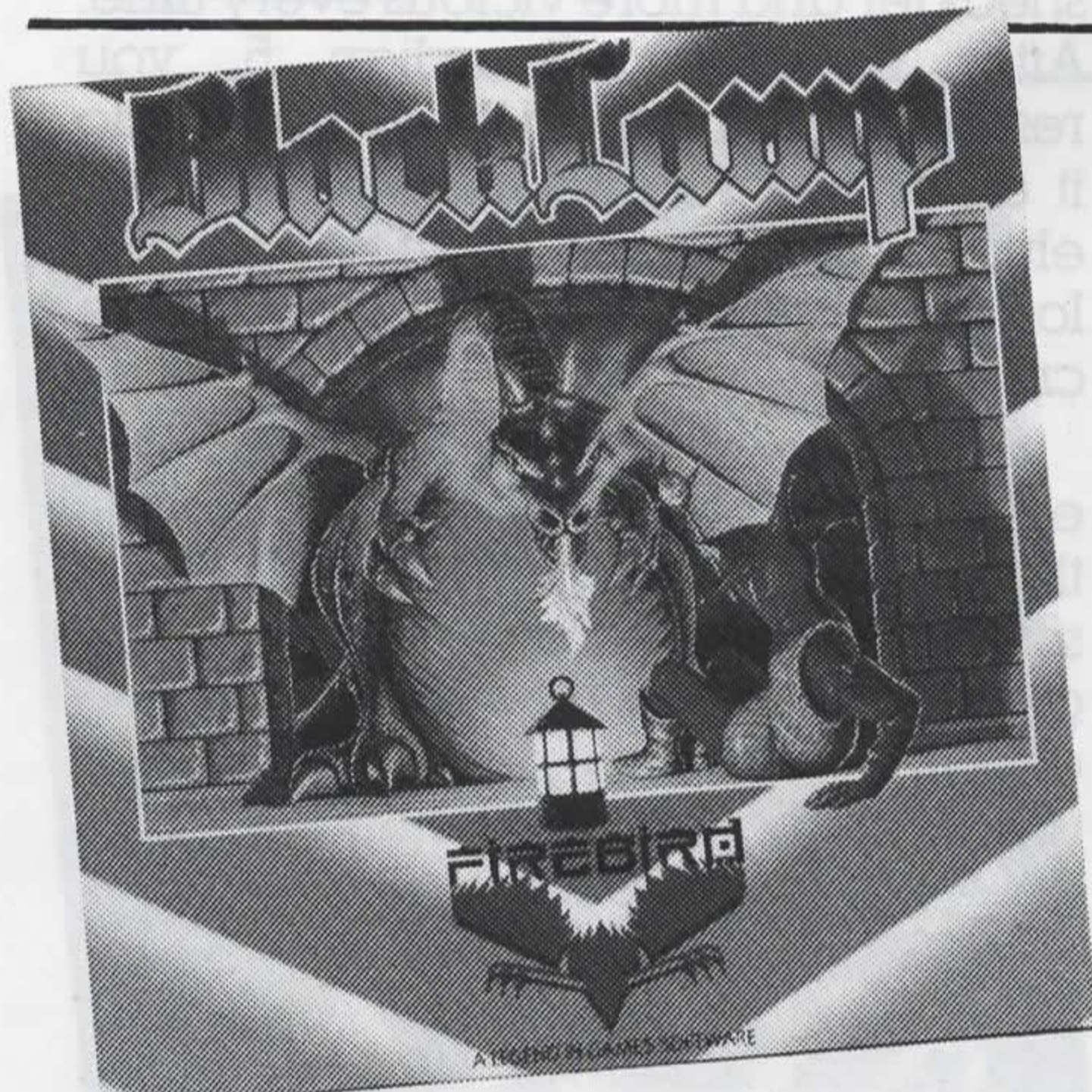
Of all the sports simulations availa-ble, I'd rate this as one of the best so far.

by Peter Chin Quan

Dashing Knight, Sir Peter Chin Quan braves buzzards, dragons, and a sort of medie-val Elcom in his courageous crusade to return the enchanted Black Lamp and win the hand of a princess. Now we know why his went rusty?

Thousands (millions?) thrive on 'Arcade' games around the world. I personally cannot say that I am among them. Though there is nothing wrong with the games themselves I generally find it difficult to relate to the player character.

The 'man' in this game is a rare exception. He is a plump little Jester with the most amazing expression on his face: sort of sleepy and contented. He walks around with a gait that could only be described as cute. Confronted by enemies he uses his magic belt-buckle which he shoots fireballs from by swinging back his arms and thrust-ing out his tummy!

The Jester's lot in life is to run around a castle in search of magic lamps which must be collected and stored in a special lamp cupboard. Jewels and other prizes are offered along the way. The castle is well laid out with an inter-esting variety of rooms and outdoor areas such as battlements and streets. Throughout are ladders and stairs to use as well as doors both forward and back giving an almost 3-dimensional world.

He must avoid the arrows, lightning bolts and other things hurled at him by the numerous prowling creatures which include witches, soldiers and even flies. Although they don't kill him outright they take their toll in terms of his 'health'. When eventually he runs out of 'lives' the expression on his face is one of surprise just before he turns into a pile of ashes! Ouch!
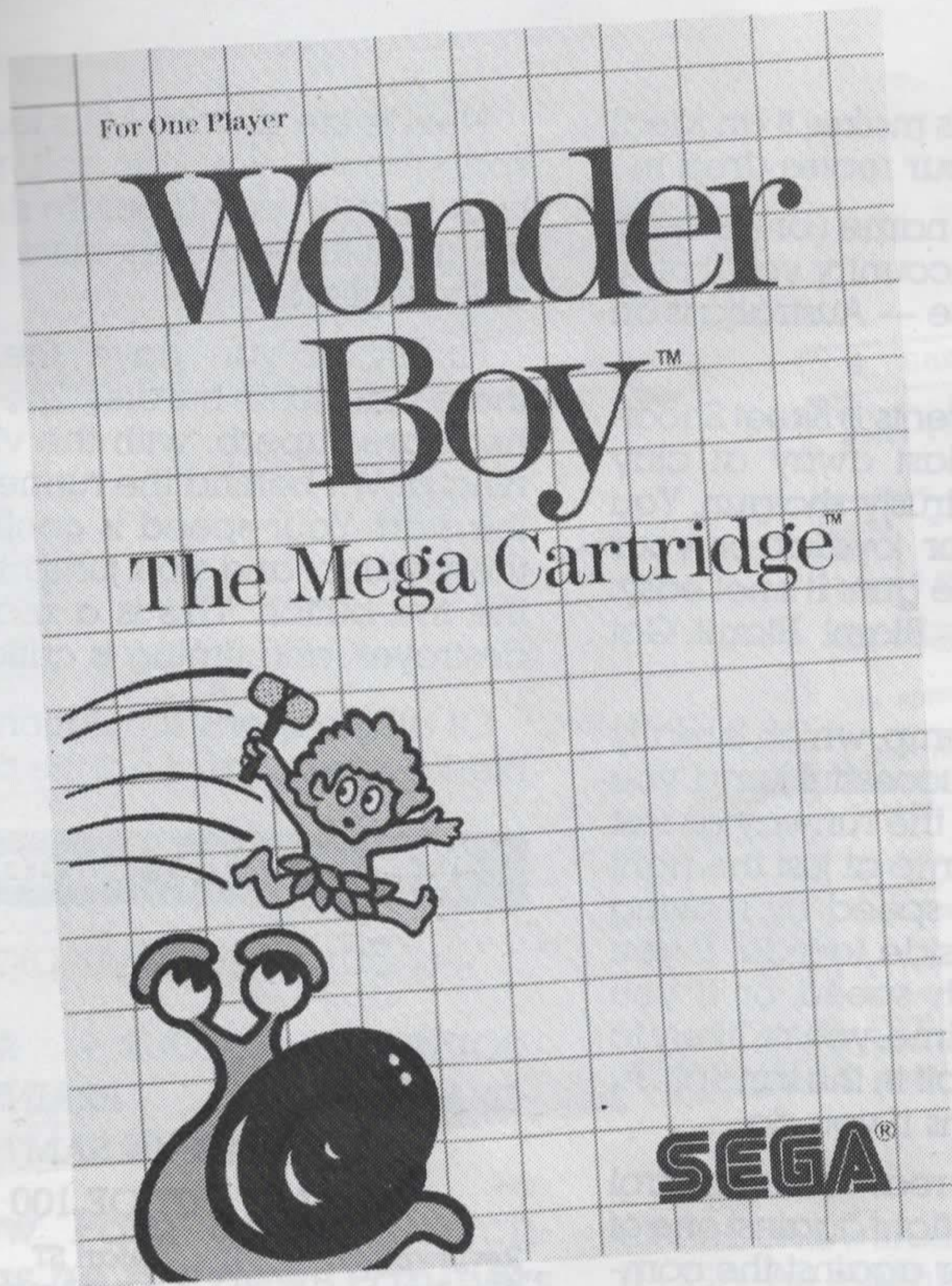
I like 'BLACK LAMP'. It is one of the few Arcade style games that keeps my interest. How could one allow the Jes-ter to be killed and not feel something for him.

Wonder Boy™

The Mega Cartridge™

For One Player

SEGA®

Charles Tanaka adopts the missionary position to reunite Sega's strutting little hairy hero with his chickie-san. Erp! - pardon.

Sega created Wonderboy for the big arcade machines and it looks like being the biggest hit yet for the Sega computer.

The game has been sold on other computer formats, but I feel that the Sega program is the best conversion of all.

Even if you have played the arcade Wonderboy you'll still enjoy this one because Sega have cunningly changed the game around and added some special objects which you can find only by doing a series of movements in the right order.

So, let's get into it. First, you have to guide a chunky little island boy (Wonderboy) through the five sections of the game, which are called areas. Each area is different.

After completing the final area, Wonderboy is reunited with his girlfriend as a soundtrack plays music in the background.

However, before you get to that stage, you have to survive some dastardly things in your travels — including a large and aggressive and most unfriendly "Guardian" at the end of each area.

Now you have a broad idea of what happens, let's get into some of the detail ...

As Wonderboy, you can walk, run, jump or even throw a weapon if you happen to have one.

To stay alive, you have to collect food such as fruit. This appears throughout the game, usually up in the air, so you have to jump to get it.

The food gives you vitality (strength) and if you run out of it you lose one of your lives. Your vitality rating is displayed at the screen top in a bright yellow and red bar graph.

You can lose vitality by running out of time or running into objects such as boulders, rocks, camp fires and so on.

Also, if you touch any of the different creatures which appear on your journey, you'll lose a life — as you can if you don't jump crevices.

Further into the game, some of these crevices can take you to other areas — tricky!

Let's look at Area 1, where you start off with your stone axes. You have about 3 of these and can throw them to splatter any nasty which confronts you. The axes don't travel far, so you need to time your throw just right.

On the other hand, your defence disks (if you can find them) can skim right across the screen to wipe out a foe.

All sorts of things pop up along the way, including snakes, bumble bees and spiders. If you get through all that, then you have to face the Guardian.

This evil piece of work chucks bouncing fireballs to you and you have to be pretty alert and nimble to dodge them. At the same time, (pow! pow! pow!) you are pumping axes and disks at the Guardian, trying to knock old ugly off.

The action can be nerve-wracking, but once you defeat the Guardian, you get access to the next area where it starts all over again in a different, more difficult scene.

In Area 2, you're on clouds travelling over the sea. Watch out for the leaping octopuses! In Area 3, you're in a massive cavern, battling a growing army of nasties, plus homicidal bats. Area 4 is a frozen ice cavern where falling stalactites add to your problems. Finally comes Area 5 where you're back on the surface again. But surprise, surprise — it's nighttime and that ghostly moonlight makes it hard to spot the greeblies.

At the end of each area, you meet the Guardian again and he gets sneakier and more vicious every time. After defeating Guardian 5, you rescue your girlfriend then run off to do it all again. You might even find the elusive angel which protects you from losing vitality and from the 'orrible critters.

Playing Wonderboy can be exhausting, but it's great fun. The only thing I didn't like was the way the screen tends to flicker when the action gets hot with lots of things moving about. Apart from that, the game is utterly absorbing and I think it will turn out to be a top seller.

Megacomp Scorecard

Wonderboy

SOUND 7   COLOUR 8   ACTION 9
GRAPHICS 9   BRAINSTRAIN 3
PLAY IT AGAIN SAM? 8
OVERALL OUT OF 100 73.3

Reviewed on	: Sega SC 3000
Also for	: C64, Master System, MSX
Software by	: Sega
Distributor	: Computatronics (Sega Version)
Price	: **$40** (SC 3000)
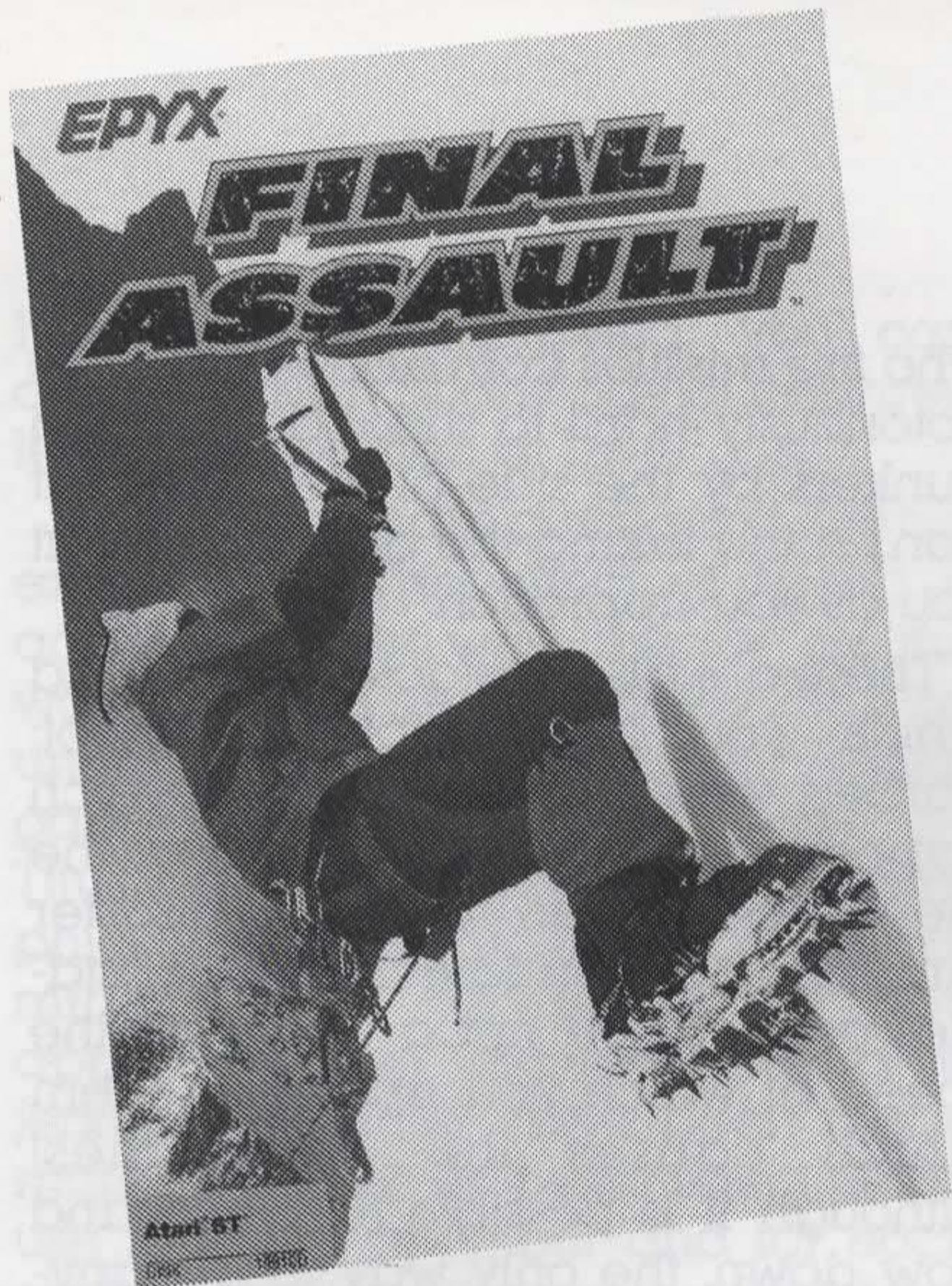
Peter Chin Quan straps on his reviewing boots and sets off from Megacomp base camp to conquer another craggy peak. Why? Because it's there!

Many people at some stage of their lives dream of climbing the worlds highest mountains. Unfortunately most of this dreaming is done whilst still at a very young age and thus is usually satisfied by climbing the furniture. At least that was the outlet for my climbing instincts.

FINAL ASSAULT is a game for those who have not yet outgrown the need to climb things but are still intimidated by the reality of mountain climbing for real.

The game gives you a choice of climbs from easy to very difficult. A choice of summer or winter climbs is available as well as the time of day the climb is to start. The first thing that must be done after deciding the above, is to pack a backpack of supplies and equipment to suit the climb. Equipment available to choose from range from the indispensable such as carabiners to the useless: microwave! Food ranges from sauerkraut to pizza. (The fellow who wrote this program is weird!)

Playing the game itself is fairly straighforward though a little dexterity is required in the player's joystick hand. Walking requires the stick to be shuffled from side to side to simulate the movement, while climbing up a near vertical wall of ice requires the stick to be pushed forward to plant the ice axes held in each hand, pushed down to raise and bed one foot, fire button pushed to haul the man up, then finally, pushing the joystick down

once more to lift and bed the second foot. All this has to be done in a smooth rhythm otherwise little progress is made

Overall the game is well written in that it appears to be a good simulation of the real difficulties of climbing where co-ordination and dexterity are high priorities.

One thing I didn't like was: When the peak is conquered the man madly waves a U.S. flag accompanied by the U.S. national anthem.
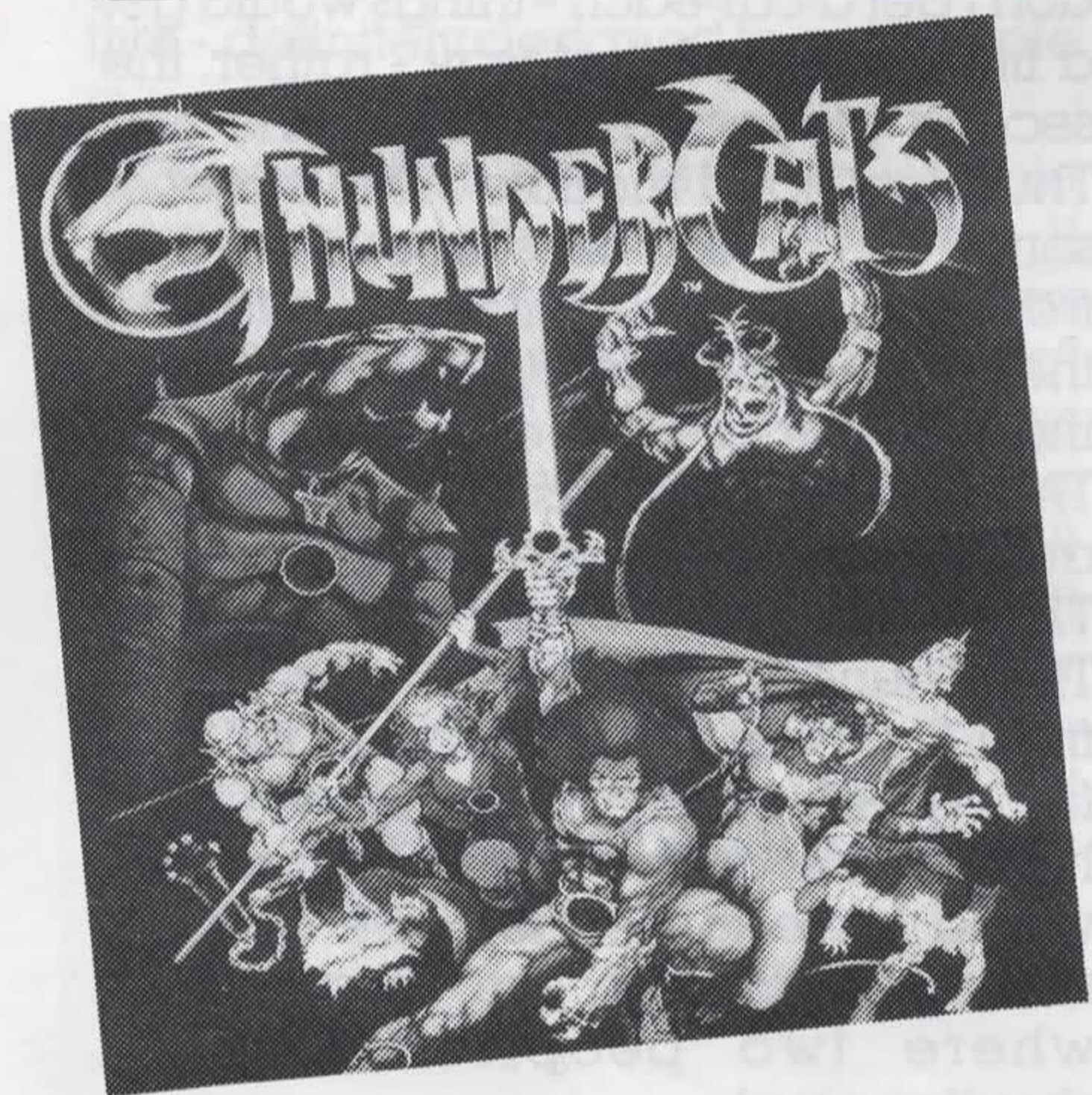
Who was that lady I saw you with last night? That was no lady, that was my Mum-ra. Peter Lindemann rolls out the Lino, ha, ha.

All of the early morning cartoon fans will be familiar with Thundercats. It's the latest in the long line of films and television shows to be made into a computer game.

In Thundercats you control the hero Lino. He's half human half lion which must cause him problems. Lino must save the other Thundercats and the eye of Thunder which have been kidnapped and stolen by the evil Mumra, a moth eaten character who you wouldn't want to meet in a dark alley. This guy is first class ugly, believe me.

In the first stage Lino is confronted with Eagle and small elf type creatures which Lino has to hack at. If these creatures touch Lino - well it's curtains and another life gone. Lino has to jump obstacles and ponds and has only 60 seconds to finish this section or Mum-ra appears on the screen and lets all his nasties attack you at once. You'd have a better chance slugging it out with Jeff Fenech than you would this lot.

In the next level Lino has to cross a crumbling bridge. Wolfmen and bats try to destroy you which isn't very nice of them. Lino has to move fast or the bridge crumbles under him. Maybe he should go on a diet. At the second stage Lino can pick up more lethal weapons such as lasers.

After this Lino must go on one of 4 missions called Fire, Water, Earth and Air. In Fire lino gets a jet buggy and he flies around dodging fire balls. The Water section is much like the section where Lino has to cross over lakes. With Air Lino has to jump platforms. In Earth Lino has to go through a forest

and cut down Mum-ra three times, Mum-ra has more lives than a cat.

When Lino gets this far he can rescue the other Thundercats then go through more forest levels to get to the final encounter with Mum-ra. If you can defeat Mum-ra (which isn't easy) you can get the eye of Thunder and win the game.

Thundercats offers a lot of variety in one game and it's also very challenging. This is not a game which can be conquered in five minutes. The only drawback I found with the game is that some of Lino's movements did not respond as fast as I would like. Just the same, Thundercats is a well programmed game at a reasonable price. I enjoyed playing it.

FIRE AND FORGET

FIRE & FORGET
AMIGA
512K and Joystick
Required
DISK 061007 UK
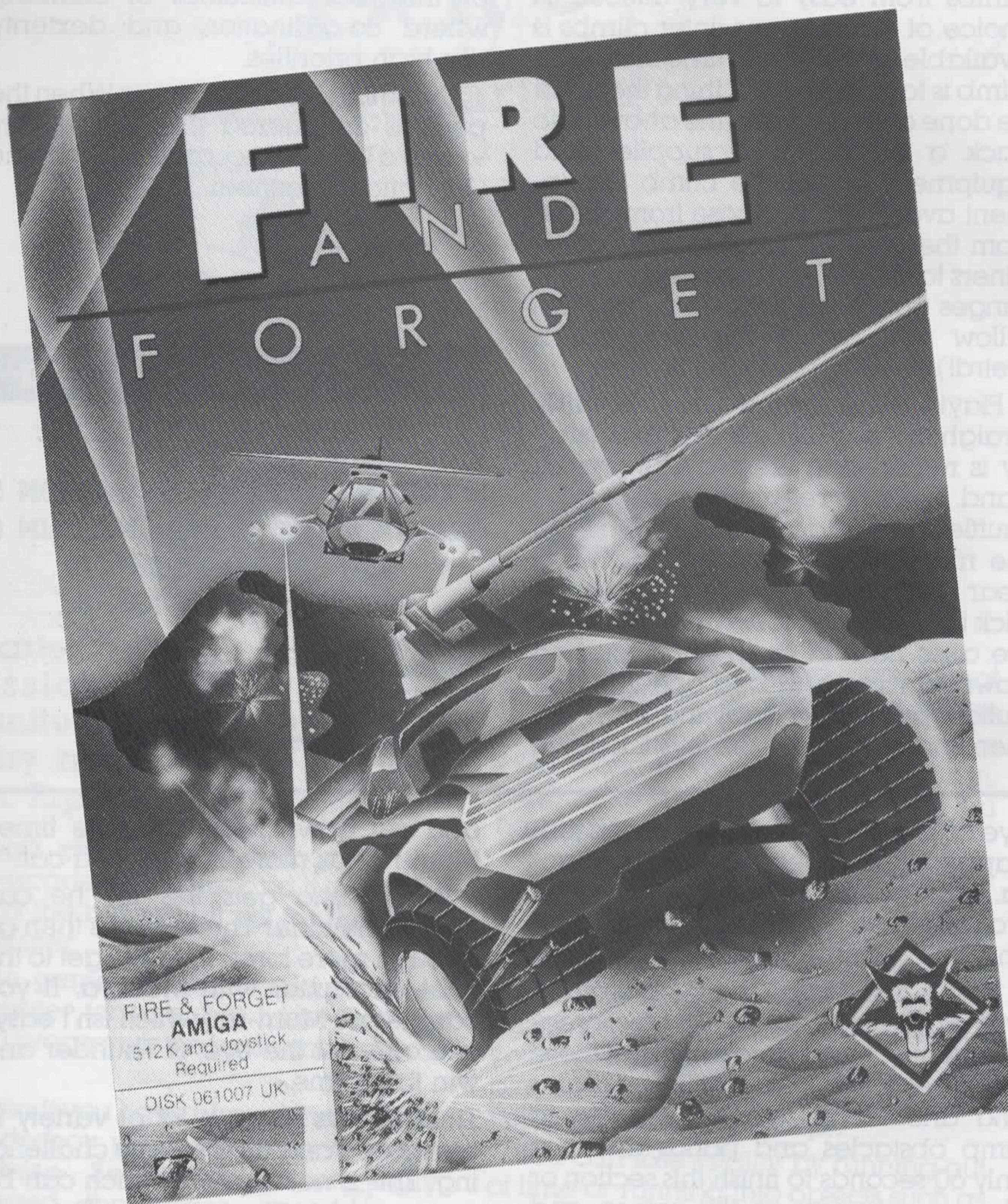
The rumbling you can hear isn't baked beans - it's Valentino Rossi chucking donuts in his Thunder Master triple turbo. Just the set of wheels you need for Saturdee noight, roight?

Car racing games are quite scarce on the Amiga, but here is one which may start a new trend. Fire And Forget from Titus combines high speed driving and shoot-em-up elements to produce a new, fast-paced game.

Speed is the order of the day with Fire And Forget. The aim of the game is to complete as many routes as possi-ble before the fuel supply in your V16 triple-turbo four-wheel drive vehicle - the Thunder Master - runs dry. As you can imagine, the fuel consumption rate for a car like this is rather high, to put it mildly. Fortunately for you there are numerous fuel reserves along each route, and these take the form of cones which are simply driven through in order to replenish your tanks with the Omega-kerosene fuel. If your tanks become empty, the game is over.

You have many enemies in the game who attempt to stop you from completing your mission. There are tanks which block the road and shoot at you with their cannons, helicopters who fire missiles from above (and are notoriously hard to shoot down) and bunkers by the side of the road that don't mind taking the odd pot-shot at you as you approach.

There are also obstacles on the road which you must avoid or shoot: barbed wire, rocks and mines which happen to be the same colour as the fuel cones, often causing disaster through mistaken identity. The obsta-cles as such are not a worry, it's the speed at which you approach them which causes the headaches! Although it is possible to brake and slow down, the only way to get any-where in the game is to stay at full throttle whenever possible. The road itself doesn't present much of a prob-lem - the car practically drives itself around the corners, though it is possi-ble to get almost sideways at high speed which causes temporary loss of control of the vehicle. Some roads do fork off in two directions, but the game can be won no matter which way you go. Steering, accelerating and firing are achieved by joystick.

If you have a spare joystick and a spare friend, the two of you can play the game at the same time. No, you don't get a car each - things would get a little crowded that way - rather, the second player has control of the 'MV Thunder Cloud module'. This is a jet of some sort which flies above and in front of the main vehicle, thus taking the brunt of the enemy's fire, and help-ing to clear a path ahead of it. The Thunder Cloud has its own fuel supply, and will automatically refuel from the Thunder Master when running low. The Thunder Cloud can also refuel from the cones on the road, but only from green ones, and will blow up if it hits a cone of any other colour. This would have to be the more exciting mode of play, as are most games where two people can play simultaneously.

At the start of each game, the player must choose between three levels of difficulty, but I think for beginners such as me, level one is highly recom-mended! After this, you are shown a map of the world with half a dozen special locations marked (from which you must choose one) and this is the route on which you will begin the game. As you successfully negotiate each circuit, you choose each succes-sive location on the map, and prepare to do battle there, too. If you manage to get through all six, you will go on to the next level and six new locations. As

I've already mentioned, you can choose to start at any one of the three levels, rather than at level one.

The graphics are quite good, but not exceptional. The effect of speed is achieved fairly well, mainly by the way the road seems to be racing by under your wheels. If you've seen a game called 'Crazy Cars', also by Titus, then you'll know what the graphics are like. The objects (tanks, mines, etc.) get larger as you approach them, but this occurs a bit jerkily and could have been made much smoother for better effect. Good use is made of colour and for each route there is a different 'background' landscape appropriate to the part of the world in which you're driving.

Sound is not a major bonus in Fire And Forget, just the whining of the motor and various exploding noises, apart from a short piece of digitised music when you first boot the game.

The instructions/documentation are pretty atrocious, even in error, but who needs it for a game like this? Actually, instructions are also provided for 'Crazy Cars', written by the same crowd. Maybe in some countries both games are sold as a single package....At least the packaging is attractive - definitely designed to get people in.

Overall, this is a fairly enjoyable game, especially with two players. It may appear a bit too difficult at first as everything seems to be happening at near light-speed, but after a few plays you'll be getting scores in the millions, and I'm sure that most people will eventually be able to get through all three levels, after which it may become a little predictable. If you're into racing games, then get a demo of it - you will probably like it, but I can't say it's a must-buy.

- Valentino Rossi

Megacomp Scorecard

Fire and Forget

SOUND 3   COLOUR 8   ACTION 9
GRAPHICS 7   BRAINSTRAIN 3
PLAY IT AGAIN SAM? 7
OVERALL OUT OF 100   61.6

Reviewed on   : Amiga
Also for   : Arati ST, IBM PC's
Software by   : Titus
Distributor   : QUESTOR
Price   : $59.95

Arnold Meganegger

Game got you bluffed? Don't ask your wimpy friends. Forget Rambo and the A Team. Call for big Arnie. From the furthest reaches of outer space to the deepest jungles of the Amazon, Arnold Meganegger knows how to blast his way through the most baffling game.
Write: Arnold Meganegger,
C/- MEGACOMP Magazine,
163 Mackie Road,
East Bentleigh 3165, Victoria.

Leisure Suit Larry

To get de wine to de casino you gotta ring dat Ajax liquor store and ask for de wine to be delivered to de honeymoon suite. Tell 'em Arnie sent ya.

Police Quest

Dat Sweet Cheeks Mary is some painful broad. To wipe her out, go back to your room and ring zero.

Hitchhikers Guide to the Galaxy

Dis is wild. When you are leaving earth you ain't gonna be able to see, hear or talk. Type SMELL 4 times. What happens next don't help much but you ain't got much else to do.

Bards Tale 2

I rilly groove on dis baby. When you wanna connect de segments you first gotta get all of dem, den go to de Temple of Narn. You use de segments to cast different spells.

Elite

My kinda action. When you want a mission you gotta wipe out de space pirates den steal a rocket. You're gonna have to get competent before you get de mission.

Kings Quest 3

No way you can cast a spell unless you mix de ingredients first.

Pawn

To buy whisky from dat shonky Honest John, type BUY WHISKY WITH COIN.

Bards Tale 1

To get into de Mangars, you gotta have an onyx key, a silver triangle and a silver square.
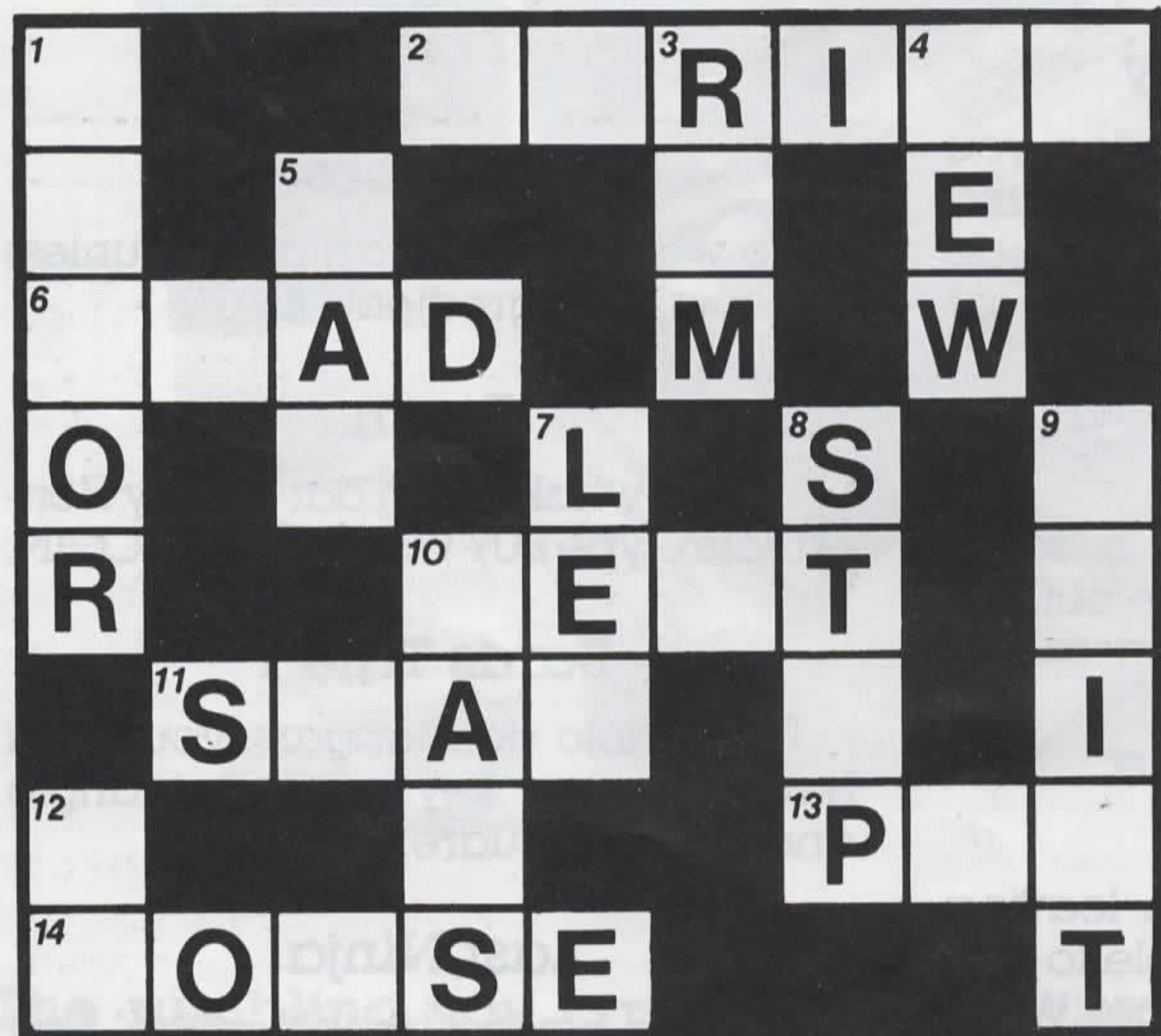
Last Ninja

If you're having trouble gettin' past de statue in dat palace place, try dis: get yourself de gold necklace and as you come to de idol, kneel. Den you can get out at bottom right, right?

Arnie.

Win with Megaword!

It's the BIG brainstrainer for Atari ST users! If you dipped out because our nerds botched the closing date in our first issue, don't worry! The new closing date gives you loads of time to get your entry in — and maybe be a WINNER! Entry is absolutely FREE, so get in quick for your share of all that lovely loot! (Our thanks again to Computer Oasis for providing the great prizes!)

Megaword No. 1 Clues

ACROSS:
2: No evaluation needed for this.
6: Gives out-of-memory warning if program too long.
10: Loops won't work without this.
11: A little one could reveal trouble.
13: Re-arrangement of wrong letters gives a sampling.
14: Difficult to find out how many computer owners have one.

DOWN:
1: Could be a mistake.
3: Complex programs need a better one.
4: You might not use many.
5: Length depends on program requirements.
7: Not required in some BASIC programs.
8: Sometimes there seems to be no end.
9: See what you say.
10: Essential when you want to turn off.
12: --! It's morning!

OFFICIAL ENTRY FORM: MEGAWORD No. 1

C's Workshop

Has your computer karked? Is your disk drive dithering? Our resident technical genius, 'C' is here to help you sort out your hardware bits & bytes!

Hi guys I'm 'C' and I run a computer hardware advice column on Cave 76 Bulletin Board Service in Melbourne. I'd like to hear of any little technical problems you might be having out there in home user land and will try to answer your questions in this MEG-ACOMP column.

For this issue I thought I would just give you a brief rundown on trouble shooting in your computer's hardware. When to take it to a service man and what is an obvious fault.

If your machine, whatever kind it is, is not working then there are a few questions you should ask yourself. Is it plugged in? Are all parts of it turned on? Is the screen brightness turned up high enough to see? Was the program I just ran faulty and has it crashed the machine? If the machine is not turned on then kick yourself and turn it on.

If the fault is caused by any of the above then you know how to fix it and thus do not need a service man. More tricky to find are problems that are caused by things like cables coming loose eg. from the screen to the computer or a cracked cassette or a bent disk or a broken wire or fuse. All these problems are common sense to fix and can be cured by a quick flick through the manual.

The kinds of problems that require servicemen are usually those that involve a large puff of smoke or a crackling sound or a small fire or hay-wire text on the screen during startup or hard disks that do not turn. These require a service department. But when you do ring up remember three things. Try to give the service man as much relevant information as possible as technicians are not mindreaders

and do not have all day. Try to find all possible information on your system that you can and who is the right service group for your machine. Finally, expect to have to pay for the service.

See ya next issue!

BLICK

Yonks ago, there was this little chick named Virginia, who wrote to a big newspaper in New York asking if there really was a Santa Claus.

Now, I don't want to demolish any of your cherished beliefs, but the journo who replied and told her she could believe implicitly in furry ole fat freddy must've been well and truly into the yuletide suds.

The reason for this misanthropic attitude is personal, but I'll tell you, anyway. What the hell — it's about time somebody blew the gaff on this diabolical piece of chicanery.

Every Christmas since I can remember, I've sat in front of the fire-place, waiting for the big feller to come yo-ho-ho-ing down the chimney with a bagful of goodies, but so far all I've scored has been an annual carpet-weave impression on my bottom.

A few years and three or four elections ago, I wouldn't have opened up like this to you, but now that I'm staring 30 in the face from the wrong side and still have no booty to show for my early vigil, my faith has worn painfully thin.

And the discrimination! I queued up to see Santa at Myers in 1985, and when I tried to sit on his knee, a couple of bruisers disguised as reindeer bundled me off to the side entrance.

The little kid next door was in front of me in the queue and he scored a BMX bike. Maybe a hundred bucks or so is the limit with Santa Claus Esq. I should never have written that letter saying I wanted an IBM PC.

That puts you in the picture. If you make it to Myers this year, keep your demands under two hundred bucks and you might do alright.

The one event that looks like brightening things up for me is the Megacomp Christmas party. I'm really looking forward to it.

The Richmond Roisterer who sleeps in the Executive Editor's office has promised it will be a real blast, which is a bit of a surprise, because he's usually tighter than a python in a conduit.

A few of the grumblers around here have complained about having to bring a present and about the party being held on a Saturday. Some have even objected to paying $5 for a ticket to get in.

But ole RR has spared no expense, I can tell you. All last week, his secretary, Ms. Kneetremble, went around the clubs collecting polystyrene cups. Used, but clean.

He even let Clarrie Floth off sticktape duty to pick up a boxful of those little packs of airline biscuits from the tip. This is going to be one classy party, mark my words.

There's only one thing that worries me.

He expects us all to come in via the chimney, carrying our presents. He says he'll be sitting on the carpet in front of the fireplace, waiting to greet us.

I know how it feels, and I just don't have the heart to tell him.

Blick
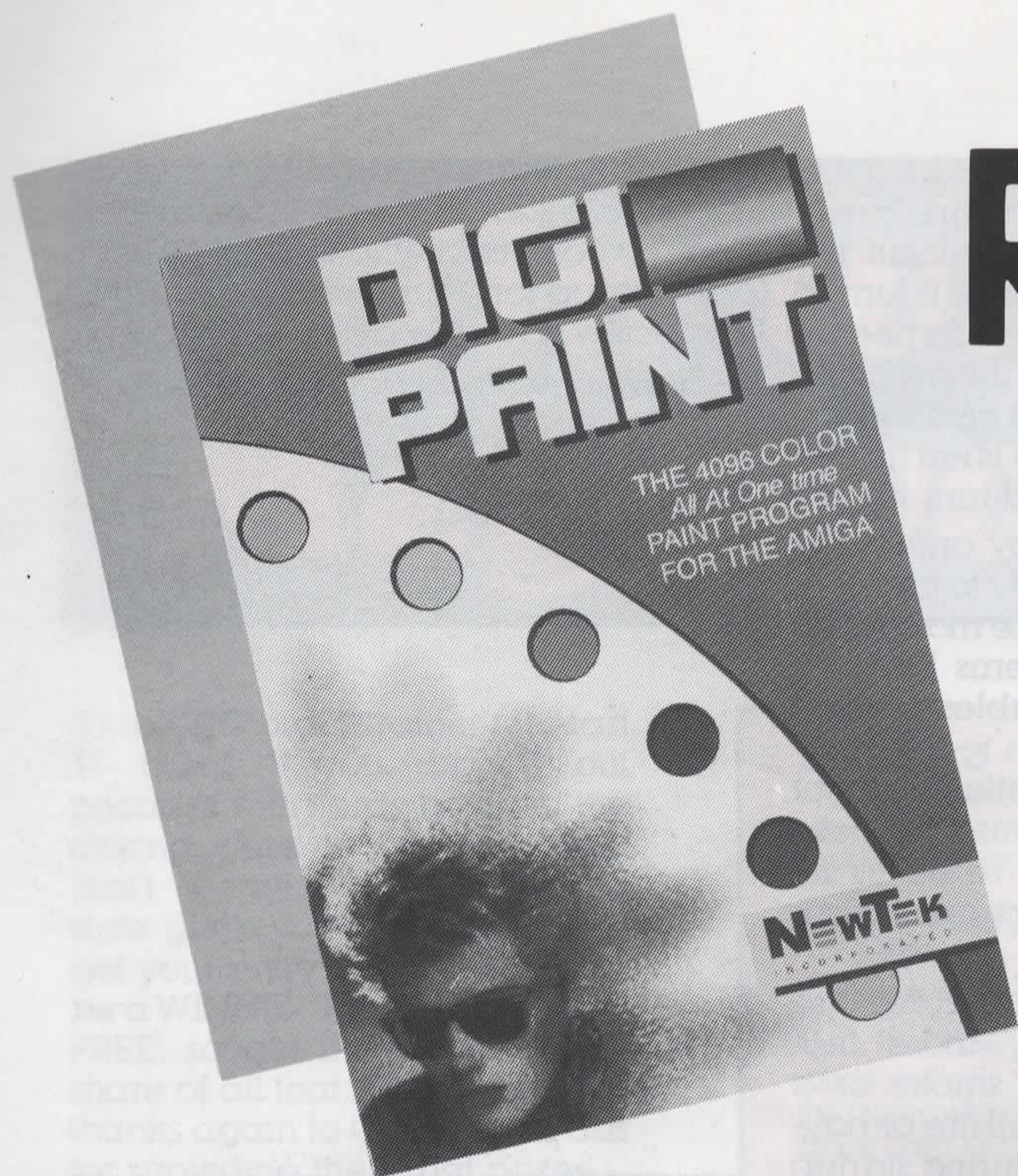
Roll over R

here c
Am

Photon Paint (MicroIllusions

Valentino Rossi dons his smock and dives into the paintbox to come up with a blockbuster, side-by-side review of 2 great paint programs!

There can be little doubt, even amongst Commodore skeptics, that the Amiga has outstanding graphical abilities which are only now, after more than two years, being closely pursued by its rival computers. In the early days, graphics/paint programs were 'restricted' to thirty-two different colours on-screen at any one time, though a much larger range, or palette, of colours was available from which to choose these colours. Even at that time, most people knew of the Amiga's special Hold-And-Modify (hereafter referred to as HAM) mode which, it was said, could display all of the four thousand-odd possible colours at the one time. The digitised pictures which soon appeared were obviously using this HAM graphics mode, if only you could paint using it.

It was, of course, only a matter of time before a HAM-paint program hit the market which would free the creative user from the restrictions of thirty-two colours. Under scrutiny in this article are two such paint programs: Digi-Paint, which has already been around for some time and Photon Paint, which is quite new on the scene. Because they are so similar, we shall

present them in a comparative review which will hopefully show up the good and bad aspects of each.

There are a couple of general points to note about the HAM mode itself - while it is true that all 4,096 colours may be displayed simultaneously, there are minor restrictions to its use:
* Low (320 x 200) or medium (320 x 400) resolution must be used.
* Unwanted colour 'fringes' may appear in your paintings.
* 1 megabyte of RAM is needed for some tasks, though not essential. Because these are hardware limitations inherent in the computer itself, no amount of software 'fiddling' can eliminate them (though they can be reduced somewhat) and so all programs of this type must live with them. Now, on to the programs.

Screen layout

By their very nature, paint programs must leave as much of the screen free as possible for drawing, while still enabling the user access to the more frequently-used options. Photon and Digi both have a moveable horizontal bar for this purpose, for immediate selection of free-hand, lines, circles, etc. in the form of icons, as well as the familiar menu selections. This bar (called the "toolbox" by Digi and the "fast menu" by Photon) can be made to disappear completely when

required, so as not to obstruct the painting.

Basic drawing functions

Both Digi and Photon have a good range of the basic drawing functions. These include Free-hand, Line/Polygon, Circle & Square drawing (solid and hollow), as well as Magnify, Text, Undo and different brush shapes. (Photon has an Arc option, which is missing in Digi). These operate almost identically in each program.

Photon has the standard "Flood-fill" option which will colour any enclosed shape with either a solid colour or shaded effect.

Digi also has a Fill option, but this must be selected before the shape is drawn. An object cannot be coloured-in as easily with Digi as with Photon. Both have a Scissors icon which allows a portion of the screen to be cut out and used as a brush and even saved to disc for use in other pictures.

One fundamental difference between the two programs when using these functions is that Digi will make you wait while it re-computes what you have just drawn, while Photon is immediate in this respect. This is a major drawback for Digi which will initially cause some frustration to the user, but certainly not enough to discourage its use completely.

embrandt
omes
iga!

vs Digi-Paint (NewTek)
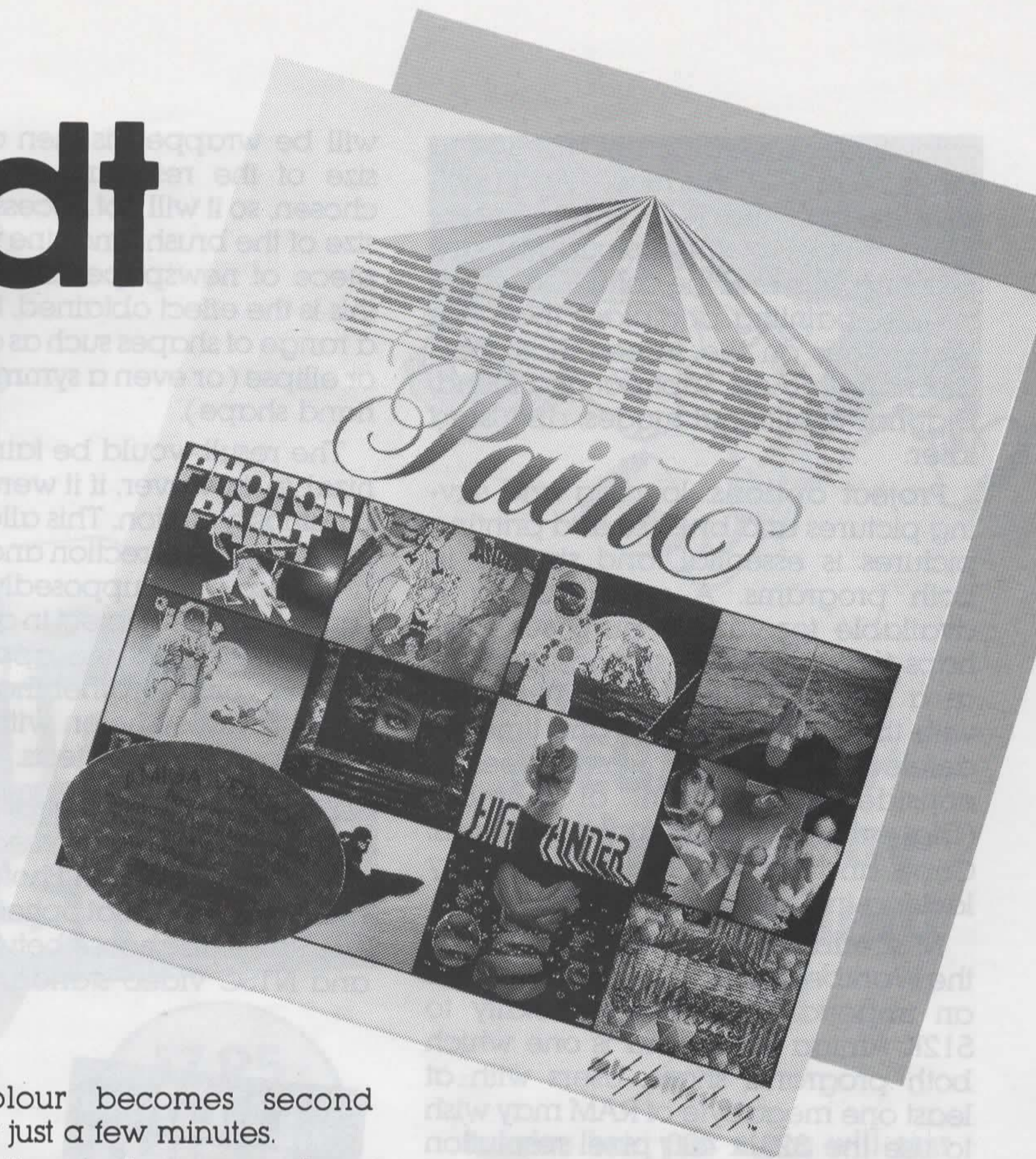
Colour Selection

You may be wondering just how a program (or more importantly, the person using it!) can deal with such an enormous (by personal computer standards) range of colours as that which the Amiga possesses. If you are at all familiar with the more usual paint programs, you will have seen that there is a separate icon for each colour which can be mouse-selected and used immediately. This would be clearly impractical for a large number of colours and so another method has been employed, one which is used by some commercial painting applications.

Three large squares, located in the "toolbox" or "fast menu", are filled with various shades of colours. When the mouse cursor is placed over one of these squares and the left mouse button clicked, the colour under the cursor becomes the one which is then used for painting. Nothing unusual there, but if the mouse is moved around with the button held down, the other two squares, or "colour menus", will display all possible shades of the colour under the cursor. Three slider gadgets (one each for the Red, Green and Blue components of the colour) may then be used for fine adjustments. Photon has a further three sliders for Hue, Saturation and Value. This method is actually much easier to use than it is to explain, and choosing a

desired colour becomes second nature after just a few minutes.

As well as these colour menus there are sixteen "base" colours available. These are not affected by the idiosyncrasies of the HAM mode as they are contained in the Amiga's colour registers, and may be used without fear of being distorted in any way. Photon also has a further forty-eight small colour squares for quick selection of commonly used colours, but they are not "base" colours.

Photon also has a few additional colour-modifying features not found in Digi. A spread of colours can be automatically obtained by choosing the first and last colours in the spread, and the number of increments to be used. A range of shades between the two chosen colours will instantly be placed in the small colour squares. Also, Photon allows the use of a "background" colour, which can be used in much the same way as the normal foreground colour (by using the right mouse button instead of the left) and for more advanced uses such as telling the program that this is to be the "transparent" colour. The colour chosen to be transparent will not be drawn on the screen, and this technique is useful for placing pre-drawn brushes on a painting without unwanted background. Both Digi and Photon have this transparency feature,

although Digi only allows black to be transparent.

Both have a PickColour option which allows the user to select a colour from the screen, as well as a Copy colour option which is almost useless. Photon also has a Swap colour option which is just as trivial. Overall, Photon has the better range of colour selection/modification tools.

Similiar Functions

Digi-Paint and Photon Paint both have a number of advanced features, some of which are, at the very least, similar to features found in the other. Here I will briefly discuss these similiarities (see table).

Brush functions: loading and saving brushes from and to disc. This allows portions of a picture to be cut out and stored on disc to be used in other pictures. Blending a brush - a brush may be "pasted" onto a painting either solidly, or as a mixture of itself and of the background on which it is placed (Photon gives a greater degree of control over this feature).

Drawing modes: drawing may be done using different modes, and each mode changes the way in which the

colours you are using are applied to the screen. For instance, "Add" will literally add the RGB (Red, Green, Blue) values of the colour you are painting with and the colour on which you are painting, and place the resultant colour on the screen. Both programs have Add, Subtract and Blend. Digi has additional modes, discussed later.

Project options: loading and saving pictures and brushes and printing pictures is essential, and similiar in both programs. A spare screen is available for various purposes; perhaps for temporarily storing a picture as a backup. This can be swapped with the main screen at any time, or deleted completely, which frees a considerable amount of memory (Digi also has two further options, Copy and Merge, which are sadly lacking in Photon).

Miscellaneous: the ability to turn off the Workbench to conserve memory is an important feature, especially to 512K Amiga users, and is one which both programs share. Users with at least one megabyte of RAM may wish to use the 320 x 400 pixel resolution mode, and this is possible with both Digi and Photon although with Digi the screen mode must be chosen before any painting has begun and cannot be changed from within the program.

Differing Features

Each program has a number of features which are not found in the other. Some are trivial, while others are important omissions. The main features will be discussed here.

Photon Paint has by far the largest range of brush-modifying options, Digi-Paint having only Load and Save. The more "usual" features are present, such as Flip horizontally and vertically, Resize, Rotate and Bend which are self-explanatory. A unique feature is Twist, which will warp the brush into a spiral shape of varying degrees. Another interesting option is Tilt, which will change the apparent 3-d perspective of your brush, using Pitch, Roll, Yaw and Distance values. The mouse or numeric keypad are used for this process which can give some stunning, and useful effects.

Perhaps the most interesting feature of Photon Paint is its ability to "wrap" a brush of any size or shape onto a solid 3-d object such as a sphere or a cube. After drawing the picture you wish to wrap, it is then cut out using the sissors-/lasso tool and the shape onto which it

will be wrapped is then chosen. The size of the resultant object can be chosen, so it will not necessarily be the size of the brush. Imagine wrapping a piece of newspaper over a football; this is the effect obtained, though over a range of shapes such as a tube, cone or ellipse (or even a symmetrical free-hand shape).

The result would be fairly unrecognizable, however, if it were not for the Luminosity option. This allows the user to specify the direction and intensity of a light-source, supposedly shining on (or behind) the object in question. This gives the object the appearance of having volume rather than just shape and provides Photon with some of its most spectacular effects.

As mentioned earlier, it is possible to draw in either low or medium resolution modes, but with Photon there are more screen format options available. The user can choose between the PAL and NTSC video standards, and can

also choose between normal and overscan. When overscan is chosen there are no visible boundaries on the screen, and it is possible (memory permitting) to paint with 352 x 240 pixels in low resolution (non-interlace) and 352 x 480 pixels in medium resolution (interlace). Note that the resolution is not changed with this option - there may be more pixels, but there is also a larger screen area. When using overscan and interlace together, at least one megabyte or RAM is required to do anything useful.

It is also important to note that many of Photon Paints' features can be operated from the keyboard by one or two-key combinations, such as HELP for the Fast Menu or ALT L for Luminosity. Digi-Paint has no keyboard equivalents.

Digi-Paint has a larger range of drawing modes than Photon Paint. As mentioned earlier, Add and Subtract are similar in both, but Digi also has Tint, Light Tint, Minimum, Maximum, Xor, And, Or and Shade. Most of these have limited uses, though they can create some spectacular (and often unexpected) results. The exact ways in which these may be put to use are many, and completely up to the inventiveness and creativity of the user.

Shade is probably the most useful, and in many ways mirrors the Luminosity feature of Photon. A light source direction is chosen, but not intensity, and subsequent shapes drawn with the Fill and Shade options "on" will be coloured as though they are a solid object. This includes the standard Circle and Square shapes, as well as any free-hand shape which can be drawn.

Tint and Light Tint have predictible results and operate in the way their names suggest. They can be used (as described in the Digi-Paint manual) to "colourize" a black-and-white picture, among other things. The area which is to be affected is traced around, and the rest of the picture will remain unaffected. This brings us to an important feature of Digi which is completely lacking in Photon.

While both programs have the ubiquitous "Undo" option, which allows the previous action to be taken back or undone, only Digi has an "Again" feature which allows the previous action to be repeated. If the advantages of this are not immediately obvious, consider the plight of the poor unfortunate who, after having spent perhaps one or two minutes painstakingly tracing the outline of a complex shape with the intention of tinting it with a certain colour, has just released his finger from the mouse button and realised that the "Xor" option had been chosen by mistake. Instead of re-tracing the picture, all he needs to do is change the "Xor" to "Tint", choose "Undo" to restore the picture, then choose "Again". The program will remember the exact path which was originally traced. This feature has many other uses, and will be found indispensable after initially getting used to it.

46.

Digi-Paint also has several special effects which operate on the entire screen. Double size, Halve size, Mirror Flip and Switch Half all affect the entire screen, as does the Soften option which gives the picture a "washed" look which, as the name suggests, gives a softer appearance, but loses some detail.
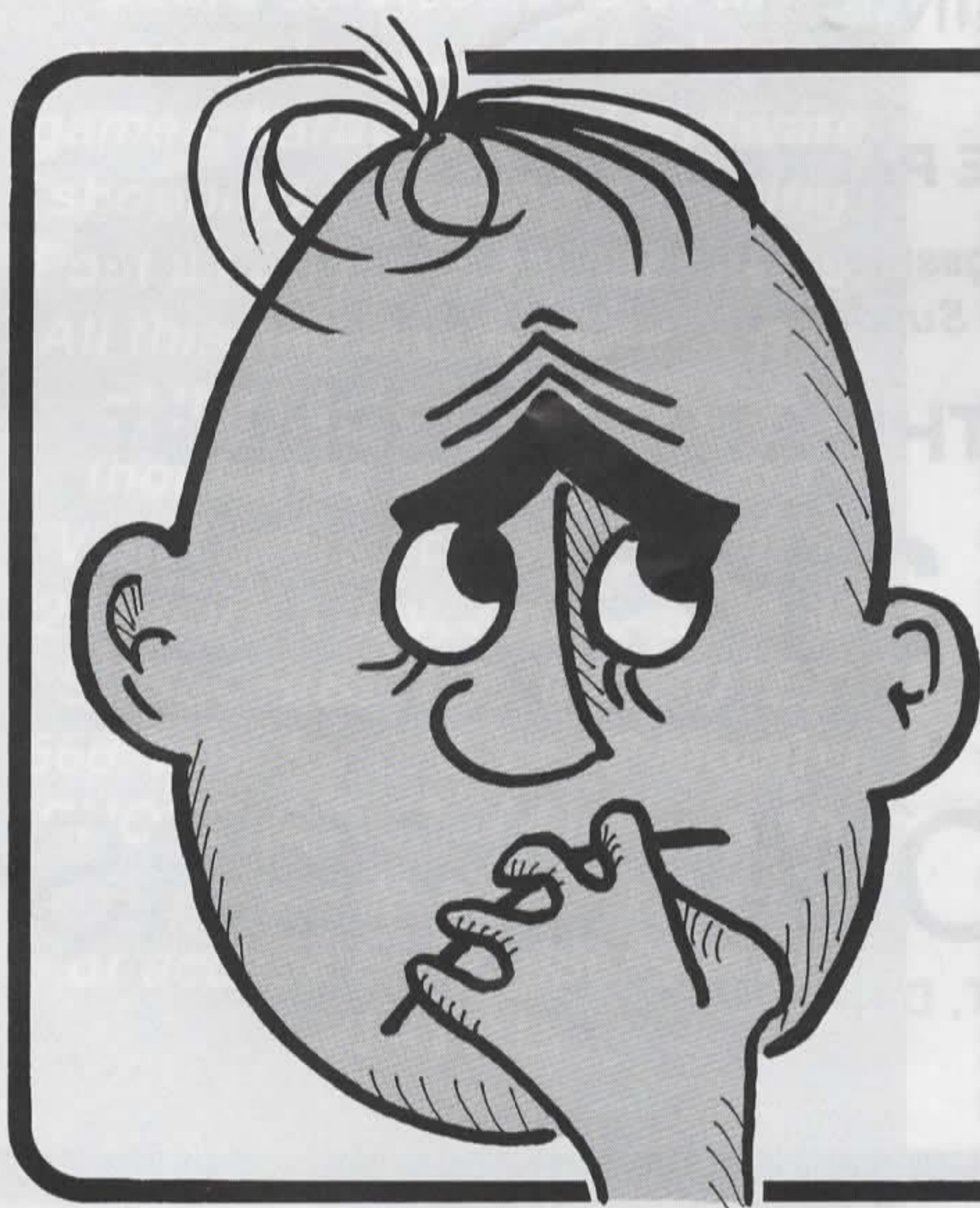
Another extremely handy feature of Digi-Paint is the ability to abort any process which is currently under way. Some drawing processes take quite a while, and it is useful to be able to back out of an operation at any time, restoring the picture. Even a disc Load or Save can be stopped in this way. Photon lacks this feature, but does have a "count-down", which displays how much longer a process will take (not in seconds, but in the number of scan lines left to draw).

Documentation and packaging

As could be expected, both programs come in attractive packaging. Photon Paint comes with two discs, one being the program disc, the other containing some good sample art, while Digi-Paint has one disc, and very little sample art. The manuals are both adequate and both contain various tutorials, to be used in conjunction with some of the supplied artwork.

Digi-Paint's explanations leave much to the user's imagination (this is even admitted in the manual) while Photon Paint has a good depth. Both are clearly written, and easy to follow. Photon's manual is the better of the two, and is spiral bound which will tend to last longer and be easier to handle, though lack of an index is a strange omission. Photon Paint also comes with a keyboard reference card.

Table of features

Feature	Digi-Paint	Photon Paint
Basic drawing tools *	X	X+
Special brush effects		X
Again	X	
Undo	X	X
Colour selection/modification	X	X+
Special drawing modes	X+	X
Interlace mode (400 lines)	X	X
Overscan		X
3-D surface mapping (Wrap)		X
Perspective drawing		X
Flood fill with shading	X+	X
Whole screen effects	X	
Spare screen	X+	X
IFF format files	X	X

* Basic tools include freehand, line, circle, square drawing, etc., also magnify, text, scissors and brushes.

+ Denotes extra features

Not every feature of each program has been mentioned so far, for instance Photon Paint has a "Pixelize" option which will produce a mosaic effect in a painting, while Digi-Paint has a "Rub Through" option which reveals portions of the spare screen (if any is present) as the current screen is being drawn upon, instead of using the current paint colour. Both programs have a "dithering" option, which allows painting or filling not in a solid colour, but in a "dithered", or slightly mottled, paint consisting of a small range of colours close to the selected colour.

On a one-for-one basis, Photon Paint easily has more options than Digi-Paint. When it comes to really useful features, however, there is very little separating the two. If one program had a few of the original features of the other, the choice would be a lot simpler. I have not attempted to make a decision as to which is the better, but you should now be in a better position to decide between them. If you are serious about buying one of these programs, you should see about a hands-on demonstration to obtain a feel for the powerful aspects of each.

manuals are simple. Well, they are if you have used a computer already or have pulled one apart. If you want to upset a friend's Christmas, just give them a computer complete with the users manual - as a gift. They will be ready to be committed by Boxing Day.

The problem is that too many computer companies are run by high-tech yuppies who believe you and I come from the same position in life as they do. No matter how hard they try they cannot, or will not simplify their manuals.

Manuals should be written like the old JOHN & BETTY books.

EXAMPLE /1

"Look John can run, Betty can run"
"John can skip, Betty can skip"

EXAMPLE /2

"Remove Computer Cover"
"Count three slots to Slot 3"
"Insert Memory Card into Slot 3"

All up I must have spent 100 hours just learning everything from the ground up. Later, I developed a friendship with Duncan Boileau who runs the Graveyard Bulletin Board in Sydney, and he became a great help whenever I hit a snag.

So I suggest no matter what type of computer you settle on, IBM, APPLE II, APPLE MACINTOSH, TOSHIBA, NEC, MICRO-BEE, AMSTRAD, ATARI or AMIGA, try to find someone who owns the sort of machine you wish to buy. Not only will they be able to tell you what the machine will do, but whenever you hit a snag, advice is only a phone call away.

Computing Australia Magazine recently reported that the Apple Company world wide made more money from personal computer sales than IBM competing for the same market share in 1986-87. (Apple: $126,720,000. IBM: $112,767.000).

Seeing that IBM in most cases is the more expensive machine how many units world wide did Apple actually shift, over their entire II/Mac range?

Great News for both current and future Apple II series owners is that cards and drives have now been developed to run 8088,80286 processor based soft ware, (also known as MS-DOS the IBM machine operating system) that allows you to run IBM programs on an Apple using a PC TRANSPORTER card. However, after checking your bank balance you might find it cheaper to buy a second hand IBM clone.

Computer BULLETIN BOARDS

A new MEGACOMP feature from Andrew Pam *.
If there's ANYTHING you want to know about Bulletin Boards, write to Andrew Pam, C/- Megacomp, 163 Mackie Road, East Bentleigh 3165 Victoria.

What exactly IS a BBS anyway? In the physical sense, it's just a computer that you can call up over the phone from your computer with a modem. But what makes various bulletin boards different is the services that they provide for you.

All bulletin boards provide at least a rudimentary facility to leave messages for other users, usually sorted into categories determined by the system operator, or "Sysop". This is a tremendous avenue for discussion and conversation with other people with similar interests, and can be very stimulating and interesting indeed. Most systems also allow users to send private messages.

As if this weren't enough, almost all BBS's also allow users to send and receive files, which naturally enough leads to the better ones building up MEGABYTES of useful programs, pictures and text files to swap. Many of the most useful utilities I have are shareware distributed largely through bulletin boards, and it's a great way to get regular updates of your software!

Recently, more and more BBS's have been joining networks, of which FidoNet is the biggest, having thousands of boards worldwide. There are plenty of smaller local networks, though! These BBS's allow users to send messages from one board to another, via "Netmail". Much more interesting, though, is the facility for "Echomail" conferences, in which messages posted on the conference are "echoed" to every board participating, thus allowing people from all over the state, the country or even the world to join in.

Some BBS's offer still more facilities, such as online games, useful databases that you can search online, or even several lines, allowing users to chat with each other while online in much the same way as a conference phone call. The potential is enormous, and has far-reaching ramifications.

But most important of all is the attitude of the Sysop and the users of the board. If the Sysop exercises no control whatsoever over the users, inevitably loud and rude people will begin to take over; on the other hand, if the users are bossed around too much, they won't enjoy themselves, which is of course a very important part of the whole experience.

Here then are some bulletin boards in Victoria that I have found to be fairly good. If you would like to see a regular column on the subject, have information about BBS's to contribute, or have any other questions on the topic, please send them in!

Aces High

Phone 878 2918 24-hours daily. Supports 300, 1200 and 1200/75 baud. The Sysop is Daryl Harvey, and the board isn't a member of any network, running with GBBS Pro software under ProDOS on a Apple. Aces High offers a wide range of online games, and is mainly concerned with gaming. Good fun.

Custom Progamming

Phone 848 3331 24-hours daily. All Bell and CCITT baud rates supported up to 2400 baud. The Sysop is Alan Williamson, and the board is a

member of FidoNet running with Opus software under MSDOS on an IBM clone. Custom Programming, like most, carries files mainly for the Amiga and IBM PC, and specialises as the name suggests, in programming tools and things that interest programmers. High recommended.

The Real Connection

Phone 288 0331 24-hours daily. All baud rates supported up to 2400 baud; a second line on 288 0810, is also available for 300 baud callers. The Sysops are Carla Miller (The Real Article), Andrew Moore and Julian Perry. The board is a member of a local network and runs with Opus software under DoubleDOS on an IBM clone. The Real Connection has always had a wide range of interesting topics to choose from, and software for a range of home computers. Good for a lively debate!

* Andrew Pam hails from Melbourne where he runs a small computer consultancy called "Serious Cybernetics". He's an old hand on Bulletin Boards in Oz, and used to operate the "Haus Holzloeffel" and "Cave 76" boards, which he says were based on a personally customised version of World War Four BBS sortware written in Turbo Pascal. If you're on-line one day and you spot someone called The Avatar, say gidday — that's Andrew.

BASIC BITS GOES A.B.C.

Charles Tanaka looks at A.B.C. — not Channel 2 but a new node on Viatel

Massive changes have taken place on this well-known Viatel node. First, it has returned to its original Microcorner suite on page 31120.

Second, to accommodate the new expanded service, Basic Bits is now called A.B.C., which is as easy as.

Third, the node now includes AMSIG, which is a new service for Amstrad users. Games, programming, contacts, software - everything you need and expect for the solid Brit.

Fourth, Basic Bits itself has been revamped and will be brighter than ever. New projects in the pipeline include a games/leisure section called Diversionz.

Fifth, a new service - Crazy World - featuring games, Rage Page, The Wall and information for Geelong videotex users.

Sixth, A.B.C. will be producing a newsletter for members. Metaphorically speaking, Marika and Hermit have had their noses to the grond sniffing out juicy news, so it's likely to be X rated. Vilifications are welcomed, as are the polaroids you've been thinking of sending to Derryn.

Megacomp knows how much work has gone into making A.B.C. a really livewire node. It's well worth a look-in on Viatel page 31120. For more info you can phone (03) 337 0686, or write to: A.B.C., P.O. Box 111, World Trade Centre, Melbourne 3005.

100 MORE NAMES FROM VIATEL!

In our last issue, we listed 100+ names from the Microtex 666 Boards on Viatel (Chatline, Black Board, Blue Board).

We thought it might be interesting, just to show people how popular the boards are. But holy moley, we didn't expect the reaction we got!

Viatellians beseiged us to ask why we'd left THEIR names out. OK, OK - here's a second 100+ list, and if your name's not here, write and tell us and we'll do it again in Megacomp 3!

● ABC ● ACTIF ● AMIGA MAN ● ANDY ● ANDREW ● AUNTY JACK ● BAP GIRL ● BAROQUE ● BEETZ ● BENJI ● BLISS ● BLUE EYES ● BYTE BUSTER ● CC ● CHASSA ● CHIRON ● CHOW ● COSMIC ● CRACKER ● DJ ● DANCER ● DAZ ● DARKING ● DR. BYTE ● DR. WHO ● DOCTOR ● DUFF ●DUNJON MASTER ●FILM FAIRY ● FESTER ● FROGGY ● FUNGUS ● FWOGGY ● GALAXIAN ● GEO ● GNOME ● GOMI NO SENSEI ● GUNNY ● GUY ● HADRON ● HORDAK ● HUN ● JBNZ ● JT ● JEFF ● JEWELLS ● JOC ● JOE EGG ● KK ● KAT ● KAPTAIN KOALA ● KAREN ● KARKUS ● KEVIN ● KINKY CHRIS ● KITTEN ● LAZARUS LONG ● LEE ● MG ● MR. X ● MAC ● MAD HATTER ● MADMAX ● MALCOLM ● MAVERICK ● MAXY ● MAX HEADROOM ● MAXY ● MERLIN ● MOBY ● MOI ● MIYAGI ● NEC ● NFG ● NINJA ● NOTA SOUL ● 007 ● ONE-EYE COCK ● PT ● PAUL ● PINOY ● RSKIN ● ROEBOURNE ● SBEND ● SHAZZA ● SHOTA ● SHRIMP INC ● ST. GEORGE ● SIDSYNC ● SNOWFLAKE ● STRAWB ● SUNDRY ● TR ● THING ● TIGERMAN ● TOAD ● TOM TOM ● TOUCAN ● TRYO ● UK's ● UNA MUJER ● UNIT-03 ● VL ● WAH ● WENDY ● WINO ● WOZZIE ● XPT ● XYZ ● ZOX

- Jerry Blick

MARKETPLACE

User Groups

Amiga Users Group Inc.

The Amiga Users Group is a place where information and knowledge about the Amiga is discussed and exchanged. The group holds monthly meetings at the Victoria College, Burwood campus, on the second Sunday of each month at 2pm, in lecture theatre 2. At these meetings there are demonstrations, guest speakers, question and answer sessions and of course, lots of Amigas so you can get hands-on experience with the latest hardware and software.

The group maintains a library of books and magazines dedicated to the Amiga. It also has a large public domain library of software.

Amigalink is the Bulletin Board run by the group. You can contact Amigalink by phoning (03) 792 3918. The group also has a newsletter for members.

If you would like to know more about the Amiga Users group, write to PO Box 48, Boronia 3155, Victoria.

Australian Amiga User Association

The AAUA was formed in 1986 and its aims are the interchange of knowledge on hardware, software, education, business and related applications. The Association has extensive connections with both Commodore and overseas Amiga User Groups.

Open days are held periodically, during which there are discussions, demonstrations, talks and lectures. These days have a friendly social atmosphere and are looked forward to by members and their families.

There is a bi-monthly newsletter and a 24-hour multi-mode (V21, 22, 23) Bulletin Board Service for members on (047) 58 8006. There is limited access for visitors.

Enquiries: Australian Amiga User Association, PO Box 389, Penrith 2750, NSW. Alternatively, you can make contact through Viatel page 473534880.

Melbourne Atari Computer Enthusiasts

M.A.C.E. caters for XL/XE, ST and Mega users. It meets on the second Sunday of each month (excluding January) in the Rotunda Building, Monash University, from 10.30am to 3pm.

Apart from the diverse range of subjects covered at meetings, the club also offers members access to large public domain and freeware libraries.

As well, members often form their own sub-groups to cater for their own particular interest areas. Some of these have centred on screen art, adventuring, computer languages, education, midi music, hardware modifications and technical support.

Current membership fees are $25 p.a., with a once-only joining fee of $5. Further information is available from : M.A.C.E., PO Box 340, Rosanna 3084 Victoria.

A.C.E. (Atari Computer Enthusiasts N.S.W.)

The A.C.E. User Group caters for all Atari computers. Its aims are instructing both beginners and advanced users in programming techniques, exchanging public domain software, hints, tips, ideas amongst members, as well as looking at the Atari's features.

The group produces a bi-monthly magazine called "Inside Info". It also runs a public domain library and a Bulletin Board.

The Group meets on the second Monday of the month at 6pm, at the YMCA, Cnr. Wentworth Avenue and Liverpool Street, Darlinghurst, NSW.

Melbourne MSX & Spectravideo User Group

The Melbourne MSX & Spectravideo User Group is aimed at helping users discover more about their computer. The types of computers the Group covers are the Spectravideo 318, 328, 728, 736 and Xpress, as well as all MSX machines such as the Sony Hit Bit, Yamaha MSX, Pioneer PX-7, Mitsubishi MSX and Toshiba MSX.

The Group meets on the first Saturday of each month at the Nunawading Civic Centre, from 1pm to 5pm.

Joining fee is $20. Members get a monthly newsletter which includes programs and other interesting items. The group is building a public domain software library. For further information, telephone Mrs. Sandra Phelan, (03) 546 3035.

Sydney Sega Users Group

The SSUG caters for users of Sega computers and, more recently, for Sega Master System owners.

Our group has approximately 100 members and endeavours to produce a bi-monthly magazine that covers things such as hi-scores, hints and tips, software reviews, program listings and tutorials.

We hold monthly meetings at Gladesville in Sydney. These usually occupy most of the day and are pretty much of a family event. (Bring a packed lunch or grab some takeaway!) We try to cater for everyone by rostering the day, so there is a time slot for playing games, one for learning programming, one for buying software, and so on.

We have a 24-hour Bulletin Board which operates on baud rates of 300/300, 1200/1200, 1200/75, and soon 2400/2400. You're welcome to call on (02) 522 6514. The name of the board is 2000 and Beyond and our friendly sysop is Greg Kuhnert. If you would like to know more about us, please write to: Sydney Sega Users Group, C/- PO Box 17, Ryde 2112 NSW.

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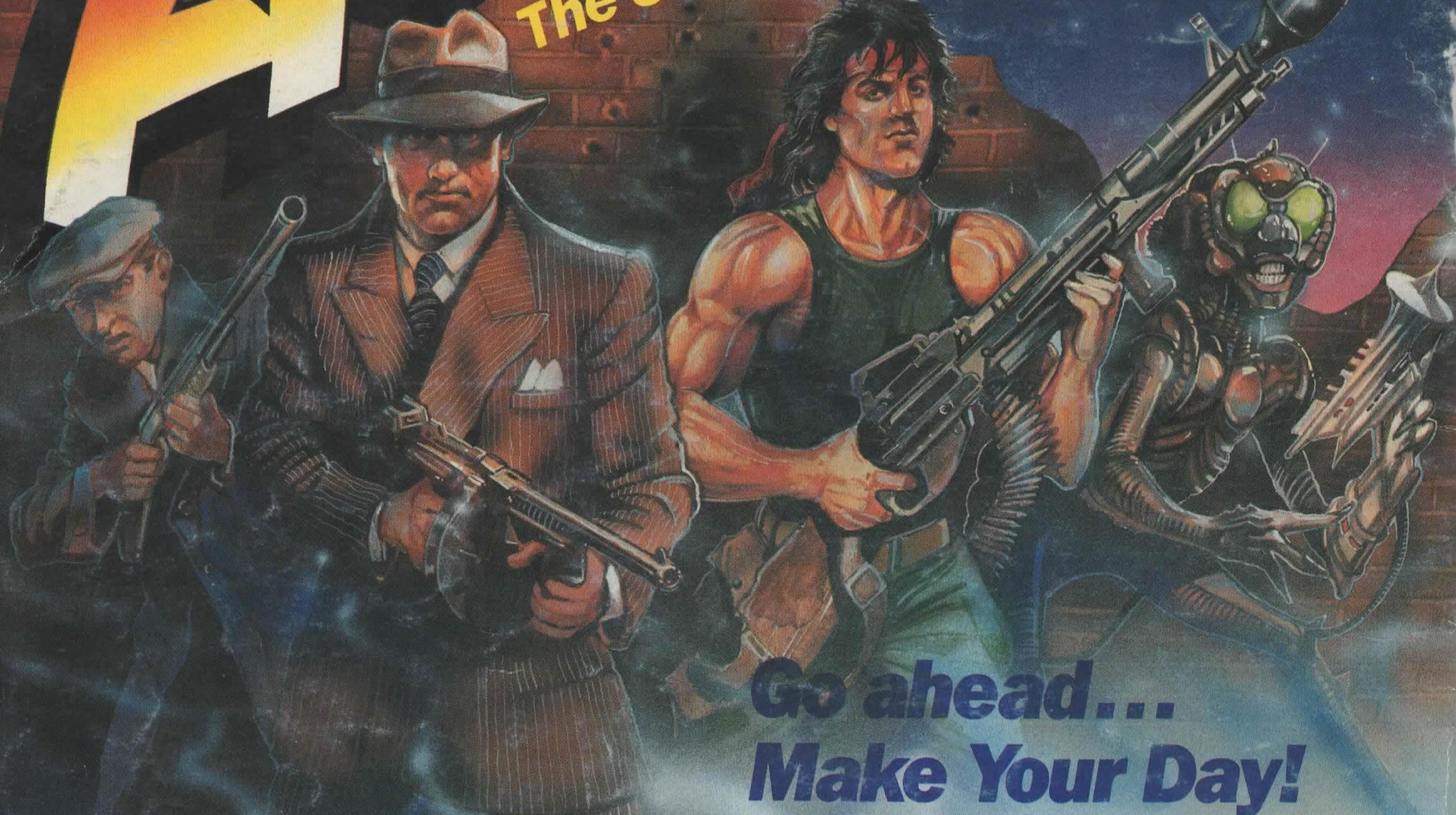
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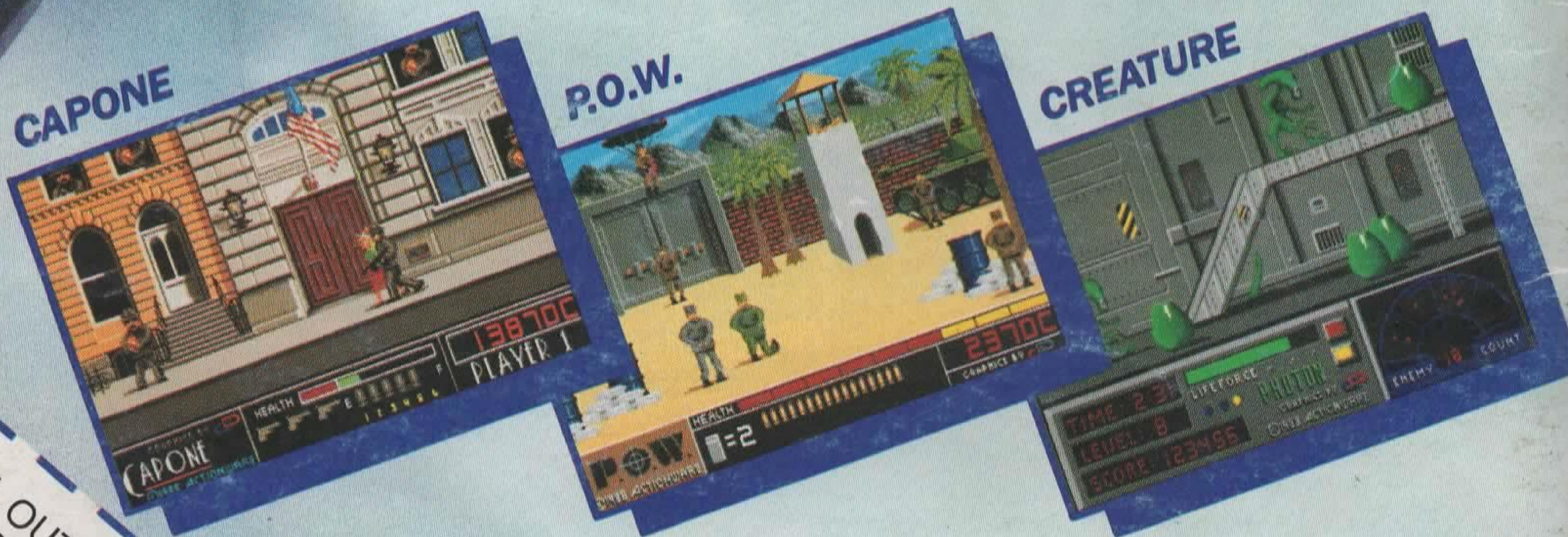
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