

**NEW**

**PAGE 6 PUBLISHING'S**

# ATARI

**USER**

Issue 41    £1.75

December/January

**XL/XE**

## SNAKES ALIVE!

A great game for  
up to twenty players!

**COLOUR DUMP**  
for the STAR LC-10

**CONFESSIONS OF AN ADVENTURE AGENT**  
Teach your children maths the fun way

**ST FILE**



**STOS** - a Type-In game and more!  
**MAKING MUSIC** - Interested in computer music?  
**INDIANA JONES - THE GRAPHIC ADVENTURE**  
**POSTMAN PAT - FUN IN GREENDALE**  
Reviews include  
Paperboy - Rick Dangerous - Shinobi - Gilbert - Asargh

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**THE BEST XL/XE SOUND AND GRAPHICS DEMO EVER?**

'The magazine  
for the Dedicated  
Atari User'

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Issue 41 December/January 1988



**SNAKES ALIVE!**  
An excellent game from  
Bill Halsall for up to  
twenty players!

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## SUBMISSIONS

PAGE 5 welcomes and encourages to read are all 8-bit, articles, programs and games for publication. Programs that are submitted on disk or cassette, articles should wherever possible be submitted on text files on disk. We seek to encourage your participation and do not have strict rules for submission. If something interests you, write a program or article and submit it. Separate payment will be made for all published programs and articles.

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**NEW ATARI USER**  
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Editorial copy due 15th December (any)

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## BYTE BACK BRINGS EM BACK

Just when you thought Atari software was becoming hard to find along comes a new independent budget label who have not only secured the rights to all of the Best Hit titles but also intend to convert titles from other machines. Byte Back have at least eighteen titles lined up for release on the Atari 8-bit.

First releases are **COB-LOC PRIVATE** (reviewed this issue), which has been converted from the ST, and the Red Rat title **SCREAMING WINGS, DOMAIN OF THE UNDEAD** and **LITTLE DRYS**. Later releases will include the famous, and highly respected, **SPEED RUN**. Amongst the titles being converted from other machines look out for **KENDO WARRIOR** a big hit in the C64 and Spectrum. All the titles will retail at £2.99.

The label is the brainchild of



Richard Dalby who has previously worked for a company who funded the distribution for Firebird and Mastertronic and if you check in the large multiple (M4) and casual newspapers you will find that almost all the Atari software available in those outlets is on these two labels. It would seem therefore that Byte Back will have no problems in getting their titles out to the customers. One innovation that has caused a

huge stir in the computer industry is Byte Back's decision to go outside the computer press for their advertising by becoming one of the first companies to advertise in the Beano and Dandy comics. Explaining his reasons for choosing this novel field of advertising, Richard Roberts said "At £2.99 budget software is an impulse buy and as Byte Back will be on sale in local

newsagents and high street stores, we felt that we should try advertising directly to the kids who regularly visit those shops". Beano and Dandy have a circulation of over half a million with a readership (probably double and there seems a strong likelihood that a good number of those readers own computers. So look out for the Beano and Dandy, now you have no excuse to be embarrassed at buying comics!

## ALTERNATIVE BIKING



**PRO MOUNTAIN BIKE** is a new title for the Atari 8-bit range from Alternative Software. You will need a strong joystick rather than strong legs in this simulation in which you must ride your mountain bike over many obstacles, use the gears to get up the mountain and carry your bike when the going gets too tough. There are logs, potholes, rocks, swamps, steep and loose to be your way as you battle against a friend or the Atari. Mountain biking has never been so cheap, just £2.99 from your usual Atari dealer and it should be available now.

## PAPERBOY AT LAST?

A brand new label recently launched will be including the Atari 8-bit in its planned releases and they have some very classy games lined up. The label is Harlequin and it is set up by Stephen Gosse and Tony King who have had long experience in the distribution side of the computer industry and are well placed to ensure that products on the Harlequin label reach the end user. Among the many exciting deals lined up are the rights to the entire Pygmaos catalogue which will mean that top class 16-bit titles like **MIRAGE** will be coming to the 8-bit Atari 8-bit line are titles from System 3 including **LAST NINJA 2** and the company are negotiating with Data in the hope that they can also

bring **PAPERBOY** to the Atari.

All titles will be available on both cassette and disk as 'full price' games retailing at £3.99. The company will also be producing titles for the MSX system.

In order to bring these plans to fruition, Harlequin need more confident Atari machine language programmers who are capable of coping with conversions. They already have a team of three top class Atari programmers but need others to ensure that as many of their games as possible can be converted to the Atari. If you can program in machine code and handle conversions from other machines give Stephen Gosse a ring now on 0234 583062.

## HAWKQUEST RELEASED

Yes, our preview did pay dividends as the end of November will see the release of **HAWKQUEST** (see issue 19) by Red Rat Software. This complex and highly entertaining game will initially be on disk but Red Rat have the authors busily working on a cassette version which will be released as soon as possible after the disk version. Red Rat Software decided that they would like to release the game after reading our review.

You may remember that **HAWKQUEST** is a huge inter-planetary game with five planets to explore each of which has a main game and a sub-game. The graphics are outstanding and the game achieves a brilliant combination of arcade shoot-em-up and action adventures with sheer fun and addictiveness not seen in an Atari game since some of

the classic American multi-disk games of some years ago.

**HAWKQUEST** will retail at £19.95 for the two-disk package which might seem a little expensive in today's budget age but you should remember that games of this scope and quality used to cost over £50 when imported from America a few years ago! The tape version will be in two parts due to the length and complexity of the game and will retail at £17.95 for each part.

**HAWKQUEST** is the most exciting game release for the Atari 8-bit in recent years and we highly recommend that you show your appreciation to Red Rat by making sure you have a copy in your collection. New Atari 8-bit users are proud to have been instrumental in bringing a great Atari game to the market, a game that shows just how good the Atari 8-bit is.

# NO MORE LEVEL 9

Level 9's latest release SCAPHAGHST will be their last on the Atari 8-bit so, in a surprising move, they have decided to drop out of conventional adventure and concentrate in future on 16-bit role playing and arcade games. The Austin brothers have developed a game's writing system on the ST which will enable them to write sophisticated action games with cinematic effects which can easily be ported over to other 16-bit machines.

At the PC Show, Pete Austin explained that sales of the traditional adventures had fallen off over the past few years and that they had set down about a year ago to try and decide which way the market would go. They felt that action games were what the public now wanted and so set out to develop a system that would allow them to create arcade style games that could include some of the story depth that Level 9 had become famous for in their adventures. At least four games are underway but Pete would not comment on the details as publishing agreements had only just been reached with an American company. One of the games being demoed at the PC Show was FAL, a game based on the British Raj and the sort of death that Level 9 hope to bring to the game is shown by the fact that Pete Austin had read over 20 books



Level 9's last Atari 8-bit release

on the British Raj in order to develop the story! While many arcade games tend to be similar, Pete Austin is determined that Level 9 games will be packed with fine detail. One such aspect that he has spent a lot of time on is making sure that all of the character in a game blend.

So we have the end of an era. Good news, perhaps, for ST owners who may see some word improvement in standards but bad news for Atari 8-bit owners who will lose one of the companies that has always included the Atari in the release schedule of every game they have programmed.

Reports on Scaphaghost are that Level 9 have kept up their high standard and introduced a few new thought provoking ideas. Full review next issue.

## Expand The Capabilities Of Your 8 Bit Atari



### Printer Connection

ICD's Printer Connection is a Customised parallel printer interface for Atari's 8 bit computers which plugs into the computer's serial slot drive port and then directly into your Electronics printer. It works with most parallel printers and for software without the need for special driver software and includes a built in printer cable. **£29.95**



### L8 Doubler

Expanding the 1050 disk drives strength is what ICD's L8 Doubler is all about. A true performer in the area of hardware modifications, the chip set quickly transforms your Atari into a powerhouse, rivaling with innovative features never before possessed by a 1050. Features like true double density for greater storage, single and double density formatting, an optimised I/O rate designed to block your speed when combined with **SpeedDOS** and full compatibility with existing Atari software. **£29.95**



### SpeedDOS

### SpeedDOS

Your Disk Operating System has been entirely accelerated at the last DOS for the 8 bit Atari range. **SpeedDOS** from ICD supports everything from 870 disk drives through RAM disks to hard disks. A special menu allows rapid transfer, ensure and locking/unlocking of files using only the Space Bar, Control, Shift and Status keys. The utility package supplied also features a 30 character keyboard buffer, memory patching between disk densities, a floppy file game menu, subdirectories and time-date stamping. Ideal for use with the new **AT500**. **£29.95**



### SpeedDOS II

**SpeedDOS II** gives you all of the power of **SpeedDOS**, but on a cartridge (with built-in cartridge port for attaching other cartridges) so the **SpeedDOS II** more when you need it. **£49.95**



### P-R Connection

Now you're no longer limited to Atari compatible printers and modems. The **P-R Connection** plugs directly into the serial slot drive port of any Atari 8 bit computer and provides the user with a standard Commodore printer interface and two RS-232C serial ports. It also draws its power from your computer which means one less cord trailing for a power point while its compact size leaves your work space virtually clutter free.

The **P-R Connection**'s serial ports use a fully compatible RS-232C interface with the same signals and features. **£69.95**



Frontier Software  
P.O. Box 113  
Marquette  
North Yorkshire  
YO2 0BE.  
Telephone:  
0423 367140  
53607.

Frontier Software also distribute a 8 bit DOS products such as Action! (£49.95), Basic 8E (£49.95), Basic XL (£29.95) and MAC-80 (£29.95) and their associated tools (£79.95) and the remaining ICD products - Rambo II (£29.95) and N-Time II (£49.95). Please write or phone for our catalogue.

All prices include VAT. Please add £2.50 for postage and packing on orders of less than £100.00. Frontier accepts VISA and ACCESS (Mastercard). All products available from all good dealers or direct from Frontier.

## A NEW 130XE?

There are reports in the States that Atari have revamped the 130XE by replacing the RAM chips and rewriting the Operating System to test the extra 64k of memory. There are, apparently, no changes in the capabilities of the computer so you have no need to sell up and buy a new one, but it does show that Atari are still committed to the 8-bit range. They have in fact even gone to the trouble of rewriting the manual!

We are not sure whether the new versions are on sale in the UK, but as they remain totally compatible with other XL and XE machines there is no need to worry about what machine you might have.

# MAILBAG

write to  
Mailbag  
P.O. Box  
54,  
Stafford  
ST16 1DR  
ENGLAND

## WHY BUY A DISK DRIVE?

About six months ago I purchased an Atari 131XE and I am absolutely enthralled by it but I was wondering what the advantages were for buying a disk drive as it has a tape recorder and can get some good games on cassette as well as on cartridge. So what is the advantage in buying a disk drive?

### Douglas Cunningham Leeds

It all depends on what you want to do with your machine. A disk drive is far more versatile and a lot faster than using tape and if you want to see your machine for programming or more 'serious' things like word processing then we would suggest that a disk drive, despite its high price, is almost essential. If you only play games then you might not consider it the outlier worthwhile especially as the games you may be wanting to play are not going to cost much. A few years ago there was every reason for games players to buy a disk drive as almost all the games available were on disk as well as cassette and there were some highly sophisticated games that were only available on disk but the situation now is quite the reverse. It is now very rare for games to be stored on disk and quite difficult to transfer many tape games to disk so, if you are happy to just play games you may as well stick to your cassette. When you will miss out on is the huge number of excellent public domain programs in the Page 6 Library and you will be disappointed never to having to wait 15 or 20 minutes for a game to load that would load in thirty or forty seconds from disk. A disk drive might not seem an essential purchase now but we guarantee that if you do buy one you will wonder how you ever did without it!

### PORTABLE XL

I have got a few problems which I hope you can help me with. Firstly is it possible for me to run my 80081 and its accessories, like the D112, on batteries, and if so, how? Secondly I was thinking through some basic

issues of Atari User when I came across a chart showing what each pin in the joystick, monitor and necessary sockets did. My interest was aroused when I saw that the joystick socket could be used as an output socket. I set to work trying to write a program which would control my model train layout when I came across a snag. How do you use the joystick socket as an output device? I read D112/104 but the computer just replied with 'Error F.

### Simon Lewis London

We have no idea if the XL could run on batteries, does anyone else know? It may be possible but being to mind the joke about the world's finest hearing aid, impossible to see but it takes both hands to carry the battery! The joystick port's pins indeed be used for output but to be effective they need to be programmed in machine code. We suggest that you get hold of a copy of *Mapping the Atari* which will give you essential information regarding the memory locations required to control the joystick pins and then check out some of the articles by Len Gidding in back issues of Atari User. Len was responsible for producing many gadgets that can be controlled through the joystick ports and you may be able to adapt some of his routines. Unfortunately we don't have any built issues of Atari User available for purchase and there are no plans at present to cover this subject in New Atari User; at least nobody has submitted an article for publication.

## NOT SO SUPER TYPO

I have typed in your *Smally Text* editor from issue 37 and tried to create the machine code listing called SCROLLTEXT.BIN from it. The program started to create the file but before it was complete it came up with 'Error F on line 70' which means a number greater than 255? I typed in the listing using SUPERTYPO II from *Smally magazine*. This program allows you to type in the character letters as well and tells you if you have made a mistake by keeping off you and turning the

screen red. Before I saved the listing I double checked it with the previous listing from the port type II and everything was a match so could you please explain to me what went wrong with the listing?

### Tom Hotal Australia

There is nothing wrong with the listing. If there were we wouldn't have had all the curly messages we received sent to us. The reason I came across Super Typo II yet on Atari, suddenly stopped sending to our exchange copy as don't comment on its compatibility with TYPO II but if you say it doesn't then even if the program isn't there then there may well be compatibility problems. With very long programs it is sometimes possible for the listing to become corrupted when other utilities are used and this could be the problem. It might not show up when you type the program in but when it is RUN the program may expand its memory and destroy part of itself. We suggest that you use TYPO II and load in your saved listing. Then for each line to the screen, move the cursor up and press RETURN to generate the TYPO II code and check this manually. If you still don't find an error then the problem may be somewhere else. Are you using DOS 2? If so check it away and use DOS 2.5 as that could be your problem. Are you using some other DOS? If so it could take up more memory than DOS 2.5 and this could be the problem. Other than that we give up. Finally, please note that the offer of an exchange disk for really messages is now closed so please don't send in any more.

## BUSINESS USE

I would like to congratulate you for making all the efforts to produce a brilliant magazine. I hope that you can help me to solve a problem. I have tried many times to write an inventory program for my small shop where I can enter daily sales by entering an item code, quantity sold and total price and then the next day send and so on for the whole day. The computer should calculate the quantity to stock, total quantity sold and total sale



and then save them on a file and this file should be updated by entering the daily sales.

Please can you tell me if such a program is available that will work on my 80081, and 1000 disk drive and if the magazine is going to present this type of program in the future.

#### **Moosa Al Fouadi Kuwait**

The 80081 can certainly handle this type of situation and the program is not particularly difficult to write but, unfortunately, we have no place to publish such a listing in view of its limited interest. We do know that there are a number of our readers who use their XL or XL computers in shops and businesses so maybe there is someone reading this who can help Moosa out with just the program he needs. If you think you can help stop Mr. Al-Fouadi a line to New Apple User. We will pay your letter on.

## **HIDI, WHAT HIDI?**

With reference to your issue 38, I read the article on Mail and it said that Mail was available on the XL/512 as MailMaster and would be reviewed in the next issue. On reading the next issue, I was disappointed not to find anything about it. If there is a Mail interface and software could you please send me details.

#### **G. J. Boyce, St. Lucia**

Hi, but you don't read your New Apple User properly, do you? If you checked the bottom of page 26 of issue 38 you will find that we had found problems in getting the Atari plugs necessary to make up the interface. There is indeed a Mail interface on the XL/512 but it is no longer available from the original manufacturers. We have obtained an agreement to market MailMaster. If we can come up with sufficient Atari plugs, we have located XL plugs and are having this many interfaces made up. They could be the only ones made as it might be wise to stock yourself now. The price is likely to be around £28.95 for the interface and software. More plugs are still available for only 15

pounds of 800-up and there is no way we are going to sell that many Mail interfaces. There must be a dealer in the States from whom these plugs are available in small quantities, so look about one of our American readers doing a bit of research for us?

## **EDUCATIONAL GAMES**

Please could you print me a list of educational games for the XL/512 for children aged 10 or over or for adults and advise where to get them.

#### **Michael Drew, Middlesbrough, Essex**

Right, are you ready? The best game is ... Then there is ... And of course there are ... Sorry about that Michael but this is an area where the Atari has always been lacking and there are no 'games' of this nature that we know about. We have published a few few things in the past which are in the educational area and program like ABC TEST from issue 37 can be easily adapted for your own quizzes. Here are some

excellent trivia and quiz programs in the Page 4 Library and we have recently come across some excellent free education programs that will be added to the Library in due course. There are all on disk, if you want programs on cassette, I'm afraid you have next to no chance.

## **PRINTING PICTURES**

I have an 80081 and a Texas Instruments EPROM dot matrix printer. I also have the Australian Touch Tablets and cartridge. I have saved many pictures to disk but I have been unable to print them out. Is it possible to print out using the TouchTablet only or must I acquire a separate utility to do so? It so can you recommend a utility or program?

#### **J.M. Sheehans Melbourn, Essex**

We can't print out from TouchTablet, not as far as we know from your currently available point packages. A separate utility is required and the one you are dependent on your printer. The Texas

is supposed to be Apple compatible but a lot of printers seem to be 'compatible' when it comes to printing dot graphics. There are no commercial programs available that you might like to try (Disk 44 - Graphic Connection Art from the Page 4 Library which has a program to dump dot-matrix pictures to Epson, DEC and other printers. It should work on the Texas but we don't have the facilities to test it. The utility does not seem directly with Atari. Atari printers, you have to save them in different format first. Steve Williamson's teacher Cook Library this issue tells you how. The disk is available from us for £1.95 and if you don't have a catalogue gift us a ring for there are loads of other utility disks available. We get asked this type of question quite often and obviously can't try out all the different printers so have about readers to work on their particular printers? We could maybe compile an article for general guidance. If you have a printer, tell us what one and what doesn't work on it, either commercial programs or public domain.

# **THOSE LISTINGS!**

## **SMALL BUT PERFECT**

I have owned an Atari 6502 for several months now. As a person with not very good eyesight, I find your listings hard to see but I have, however, managed to get every listing I have typed in to work thanks to your TYPO list listing. I had trouble getting the old Atari User listings to work so I wrote to E.D. Hughes mention in your issue 38 and received excellent service. For £1.50 I received, return postage, an A4s USG cassette full of Atari User listings. My thanks to Ed Hughes and to your magazine for putting me in touch with him.

#### **T.H. Nott, Leeds**

There you go, all those who with complaining that our listings don't work, just use TYPO!

properly and you should have no problems. As for the listings being hard to see, you may sometimes see that that is the only way we can get so many listings in each issue. As a solution to the problem read on.

## **TAKE UP EMBROIDERY!**

With reference to readers' complaints about the printing of listings being too small and unreadable, I would like to offer the following solution. GO along to an embroidery shop and purchase a magnet board which will be complete with magnets and also a magnifying bar with magnets attached to it. Place the board behind the page to be read and then slide the magnifying bar down the listing line by line as it is

typed in. It will be found that most print will be seen much easier and also the page will be kept as work progresses. If the print is big enough to be seen there the magnets supplied with the board can be used instead of the magnifying bar if desired. I use this method all the time as it speeds up the whole process of typing listings. I hope this small tip will be of use to the other readers who have difficulty in seeing small print and get as much pleasure from typing in your listings as I do.

#### **Rowald Scourfield, Chichester**

Thanks for the tip, seems quite a good idea. An extra pleasure comes playing about the back of support from embroidery shops in your area!

# LIST IF

## A NEW COMMAND ADDED TO BASIC

I became an Atari user almost by accident. The computer that I really wanted was a BBC, but as they were too expensive I bought an Atari instead. Now that I have used my Atari, and also a BBC at school, I am pleased I didn't waste my money. Yes, BBC Basic has lots more commands and is faster than Atari Basic (not so much faster than Turbo Basic though), but the programming environment is awful! The BBC text editor only allows you to type in a line at the position of the current prompt. On the Atari, we would be able to type in a line and have it entered anywhere on the screen. If we wanted to alter a line in a program, we would simply move the cursor to the item we wanted to change, change it, press RETURN and it would have been done. Not so on the BBCs. You would have to move the cursor to the relevant line, use the COPY key to copy the line up to the part to be altered, change this, move the cursor to skip over the old unaltered section and copy the rest of the line. Another annoying feature of the BBC is that it is very easy to switch off the CAPS LOCK while switching on the SHIFT LOCK, and you don't notice you've done it until you try typing in numbers. And can you imagine programming without the CONTROL-DELETE and CONTROL-INSERT keys, without the SHIFT key, or even the CLEAR key? It also doesn't detect syntax errors while you are typing them in, only when it reaches them in a program, and unlike the Atari it doesn't stop at wrong program lines. It was while using a BBC BASIC at school and coming to a better programming environment that I discovered one useful feature which the Atari lacked. This is the LIST IF... command. What this does is to list selected lines of a program e.g. the command LIST IF PRINT would list all the lines of a program containing the word "PRINT" somewhere, such as a PRINT statement, a variable name or it words like PRINT\$. This is very handy in long programs as you can imagine, and it was while complaining to my computing teacher about the BBC's programming environment that I was allowed to admit that this command was useful and that I wished I could have such a command for my BBCs. To which he replied:

"Why not write one yourself? You have no doubt already guessed that my real thought was on the lines of 'but a little bit difficult' but due to the structure of the Atari OS and the flexibility of good old Atari Basic I was able to find a way to do any one of them to do it.

Atari Basic allows you an enormous range of input/output commands on any device you like. It caters for this by a command known as the 'device string', that letter codes identify you use in OPEN, LOAD, SAVE, ENTER and other commands (e.g. LOAD "floppy:disk" or OPEN "RAM:7"). One other command is use a device that is the LIST command. If you could create a device that listed a line of a program, looked for a certain word, and printed the line only if that word was found, you could LIST a program to it and it would act as a LIST IF... command. Well, this is what I have done. The device is not a hardware device, but is in fact a small machine

code program. Due to the way BASIC is handled by the Operating System, you can create such a device and arrange for it to have a device string of your choice. I chose a question mark (only the first character is recognized), so that the LIST IF... command is used by typing LIST "??". For example, if you wanted to type in LIST IF PRINT as before, you would type in LIST "??PRINT". This has the limitation that quotation marks cannot be used for (except in Turbo Basic where you would type in LIST "??"" which would be equivalent to LIST IF "?").

If you read the APRIL/MAY issue of PAGE 6 ATARI USER then you will no doubt have seen or even entered the INDEX utility by Robert De Latorre. If so, then you may be wondering why you need another such utility. Well, the command version is obviously easier to use, and it also has the advantage that you can use it in a program in memory, and also use the normal editing commands to edit the lines there and then, rather than having to load the program in from disk to do so. The really good thing about this system is that it is not language dependent, and as long as you can find a suitable file directory for the machine to go, it should work in other languages. In Turbo Basic it has an added use with the DUMP command. You can use DUMP "??" to list all strings, DUMP "??" to list all arrays, DUMP "??" to list all labels, DUMP "??" for numerical variables and DUMP "??BANK" for procedure names. You can check groups of lines in the normal way e.g. LIST "PRINT", FOR, AND and you can still use CONTROL+I to halt the listing. You can even use the device in your own programs if you find it useful, but you must bear in mind that numbers at the beginning of a string PRINTED to the device will not be checked. This is because when used with LIST if you want to find every occurrence of the number 10 then line 10 should not be included as an occurrence, so the device skips over the line number. Of course, you can always follow Robert's suggestion and convert PRINT to a kind of 'search and replace' program, then the two utilities could complement each other.

The assembly source code of the "??" handler has lots of remark statements in it so you should be able to follow it fairly easily if you know a bit of machine code and if I give you a little bit more explanation. Device names are stored in a table in RAM called TABLE for handler address TABLE. Each entry in TABLE requires three bytes. The first byte contains the device name, which, in our case, is "?", so the ASCII code for "?" is stored in the first byte. The second two bytes point to an address in memory of another table especially for that device, called a VECTOR TABLE. This table gives all the addresses to go to when you perform OPEN, CLOSE, GET, PUT, STATUS, SPECIAL (i.e. BBC commands) and INITIALIZATION commands. These entries are cleaned as BEEP, hence the need for the BEEP protection.

Most of these commands are not needed in our application, and they should return from some of the routines with an error

by S. J. Shephard

```

01 0 0000 *****
02 0 0000 ***** LISTING 1 - ATARI BASIC *****
03 0 0000 *****
04 0 0000 *****
05 0 0000 *****
06 0 0000 *****
07 0 0000 *****
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09 0 0000 *****
10 0 0000 *****
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99 0 0000 *****
100 0 0000 *****

```

LISTING 1 - ATARI BASIC

```

01 0 0000 *****
02 0 0000 ***** LISTING 2 - TURBO BASIC *****
03 0 0000 *****
04 0 0000 *****
05 0 0000 *****
06 0 0000 *****
07 0 0000 *****
08 0 0000 *****
09 0 0000 *****
10 0 0000 *****
11 0 0000 *****
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92 0 0000 *****
93 0 0000 *****
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99 0 0000 *****
100 0 0000 *****

```

LISTING 2 - TURBO BASIC

message. You do this by loading the Y register with a 1 for no error or 0, or the error number if there is to be one (in our case error-146 during PUT and SPECLAL commands). The only commands that have been used are the OPEN command and the PUT command. The OPEN command simply finds the address in memory of the string you are searching for (e.g. in LIST "PRINT" it finds the address of PRINT in memory). It does this because an OPEN command the address of the whole device string is stored in two locations, and the search string is simply two bytes along from this. It then has to store this location in two two-page addresses and return. The PUT routine contains the crux of the program. The program line is fitted to this routine one byte at a time, which is transferred to the Accumulator. Each byte is then stored in the line buffer until the end of the line (signified by a RETURN character) has been reached. When this happens, the program checks the search string against the program line. If the end of the search string (signified by two different characters depending on how the device is used, so both must be checked) is located then it has been found and the line is printed. If the end of the line is found first then the line is not printed. And that's all there is to

## ASSEMBLY SOURCE LISTING OVERLEAF

If the starting address can be changed to suit your language, and if you have a disk system with Atari Basic or a Turbo Basic system then you can just type in the Basic listings given.

If you want to read more about the Atari's control input/output system or how to write device handlers, you can find information in *MAPPING THE ATARI* (HAYES is at 746) or in *ATARI USER* (vol.2 9-12, especially vol.3 no.2, and also vol.3 8-9). *SMITH* protection is explained in *ATARI USER* vol.1 no.4. You can also try looking up all the locations used in the assembly listing in a copy of *MAPPING THE ATARI*. All the ATARI URLs mentioned are unfortunately out of print, but you may be able to get them through CONTACT if you don't already have them. *MAPPING THE ATARI* may be available from the *PAGE 5 NECESSARY SHOP*, as is Turbo Basic, so buy it now and then those inaccessible books comes up with pertinent remarks about programming system needs or the lack of!

# LIST IF ASSEMBLY SOURCE CODE

```

1: LIST OF BASIC CODE
2: END STATE WITH
3: END STATE/STATE/STATE
4:
5:
6: ADDRESS/STATE ADDRESS
7: CHANGE AS ADDRESS
8: STATE/STATE ADDRESS NUMBER
9: END STATE/STATE ADDRESS
10: END STATE/STATE ADDRESS
11: END STATE/STATE ADDRESS
12: END STATE/STATE ADDRESS
13: END STATE/STATE ADDRESS
14: END STATE/STATE ADDRESS
15: END STATE/STATE ADDRESS
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196: END STATE/STATE ADDRESS
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199: END STATE/STATE ADDRESS
200: END STATE/STATE ADDRESS

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# CONFESSIONS OF AN ADVENTURE ADDICT



*Allan J. Palmer describes a modern day mis-spent youth and confesses that his obsession actually forced him to upgrade from 16K!*

**W**hat makes Adventure games so popular? Why are games like *DORIS* and *The Power* such big sellers in the computer software field? There is no denying the impact that Adventure has had on the home microcomputer. PAGE 6 has

framed articles/entries on more than 20 different Adventures to its first 23 issues. These "confessions of an Adventure addict" reflect my thoughts on how Adventures have grown since the coming of the microcomputer.

I have always had a suspicion that the real catalyst that made the home microcomputer revolution take off in the early 1980's was the lure of Adventures. All those programmers, who were playing the original *Colossal Cave Adventure* by Crowther and Woods and *Dungeons* (by M.L.T.'s Dark creators) on their university or company mainframes just had to have more of the same stimulating puzzles that the Troll and the Cyclops presented. Certainly, I freely admit that Adventure was one of the reasons why I first contemplated purchasing a home microcomputer, especially after reading descriptions of available micro-Adventure games in issues of the American magazine, *Creative Computing*.

Well, when I did purchase my first microcomputer (an Atari 800 - yes, I have owned and enjoyed an Atari for some time), it was not long before the first Adventure was added to my software library. This was after the necessary upgrade, of course - for you newcomers out there, the Atari 800 was originally only supplied with 16K RAM, and you could purchase additional 16K RAM modules to bring it up to 48K! The Scott Adams' Adventures required 48k on the Atari, so the purchase of extra RAM was necessary. At that time, Scott Adams was the star of the computer Adventure scene, having created a line of Adventure games that were available on a wide range of micros.

The first Adventure that I played was *Plato's Adventure*, and from then on I was hooked. In *Plato's*, the basic verb/noun input, together with brief location descriptions create a rather tough and ready when compared to the complex games with multiple word input of later Adventures, but in these days, the very fact that something like *Adventureland* was available was most satisfying to all enthusiastic puzzle solvers. Gradually I made my way through the Adams' Adventures, although I still have *Savage Island Part II* in complete. Mind you, by this time I had fully expanded the memory of my Atari 800 and added a 5.25-inch drive to the system which opened an even greater range of Adventures to me.

On this side of the Atlantic, a British software house began to make its mark on the Adventure scene. Level 9 Computing released *Colossal Adventure*; a well implemented version of the original Crowther-Woods Adventure that duplicated the mainframe game and even added a 70-screen endgame feature. A review of this game appeared in issue 10 of PAGE 6, the first Adventure special (possibly prevents me from identifying the reviewer). When Level 9 scored over the Adams' games was their capability of compressing text in such a way that location descriptions ran over several lines (in some cases a full screen). This greatly enhanced descriptive element added more atmosphere to the game, which in turn enhanced the enjoyment and playability. At that time, it was not known how extensive Level

PS) Adventure usage would become in the future.

The name of Infocom was clearly legible in the software boxes responsible for ZORK, the next step up in Adventure. Available only on disk, then not constrained by memory limitations like the cassette-based Adams' games, Infocom Adventures enjoyed a greater depth. Whereas you could stop *Adventureland* or *Ghost Town* on one or, at most, two 5.25 disks of paper, with Infocom games it was generally a good idea to have two or three sheets of 4.5 paper available.

When I went to purchase my first Infocom, the shop did not have **ZORK I** in stock (a sign of its popularity), so my first exposure to Infocom was trying to solve the locked-room murder mystery in *Deadline*. I have to admit that this game still remains one of my favorites, even now. Perhaps being a fan of detective fiction makes me biased, but the detail, ability to interact with other characters, and the possible outcomes have always enticed this game to me. If you have not played *Deadline*, I urge you to give it a try. I believe that newer versions correct the bug that I encountered on my earlier version - under certain circumstances, it is possible for a second body to be found, then if particular actions are taken, a living counterpart of the body appears and shortly thereafter (not surprisingly) the game locks up and crashes.

The scale of Infocom adventures, their originality and subtle humor caused that most of their products were added to my growing collection of Adventure software. I played the ZORK trilogy and found that **ZORK II** appeared the most difficult, although review tended to suggest the final part as being the hardest to crack. Gates opens backward across the *Star Wars*, and the bizarre sci-fi/fantasy/humor combination of Douglas Adams led to the infamous  *Hitchhiker's Guide to the Galaxy*. I must admit that I always felt that *HitchHiker's...* was a bit too linear for my liking, you seemed to have to complete set pieces one before moving on to set piece two, before moving on etc. I must prefer Adventures where you can attack puzzles from more than one direction, or where you are not totally hampered from moving because there is only one direction to go in. ZORK was most enjoyable because of the number of different areas available for exploration.

One other Infocom Adventure that I must mention is *Witchbringer*. This introductory level game written by Brian Harty (later contributed to BHALOC magazine) is a gem. I wholeheartedly recommended this to novice Adventurers and to locked-room victims alike. It has helpful hints for the newbies, together with a well structured plot that is so excellently implemented. Experienced players may find this game easy, but I guarantee that they will still find the story compelling with a marvelous sense of wonder about it that should bring a smile and enjoyment to even the most cynical. Well done Mr. Harty!

This would seem like a good time to mention the subject of 'Text vs. Graphics'. Adventures exploited the textual capabilities of the original micros. With increased graphics capabilities, software producers tend to make the opposite: dull looking Adventure games competitive with the flashy, multi-colored adult 'em-ups. Scott Adams' tried it with *S.A.G.A.* (Scott Adams Graphics Adventure system) - the original twelve Adams' games had pictures coded for each location, but this did little to really enhance the product. As you may guess from my tone, I support the text-only school and share a new perspective by Infocom that pictures are unnecessary when they can be created by the world's greatest microcomputer, i.e. the human brain.

I will admit though, that there is one instance where I felt that graphics did work to a limited extent. The obscure *Quantipede*

written from Scott Adams which utilized characters from the pages of MARVEL Comics seemed a very apposite use of graphics, as the originating medium of the characters and storyline was in itself a pictorial system. Limitations in memory restricted the quality of graphics and this resulted in pictures representative of those appearing in the comic book medium. Note that this is not intended to be derogatory regarding comic book artwork. I have a long standing interest in comic strips and comic books and do feel that in addition to some draws, there is some superb artwork appearing therein. As yet, I do not believe that there is adequate capacity to generate enough pictures of sufficient quality for all locations and situations to virtually enhance an Adventure. Current attempts fall short of the mark.

This, viewed naturally, brings us on to one of the more recent stars of the Adventure arena, namely *The Pawn*. I must admit that the presentation, with scrolling screens is quite neat and that the pictures are not bad, but there are so few pictures compared to locations, and some convey little if any detail beyond the text. It does not seem right that after taking an object that is visible in a picture of a location that it will remain there - to enhance the play, the object should be removed from the location.

So, where does this bring us in this month through the world of Adventure games? Well, there are plenty of games that I have not mentioned. Thank in PACE II issue 10 again, Garry Francis and Len Ellingham produced a list of all known Atari Adventure software - that list ran over two pages of the magazine, I wonder how many pages it would take now, and how many of those software items are still available? Among the omissions are *Silver Dagger* offerings, and the *Mysterious Adventures* from the coding sheet of Brian Harty that were another British competitor for the crown of Scott Adams. Somehow, I am sure that Adventures will remain one of the most of not the most popular types of software for all types of microcomputers the world over.

Certainly, Adventure has created its own subculture amongst microcomputer enthusiasts. Columns devoted to the subject have been a regular feature of many a microcomputer magazine. Both Campbell's columns in *Computer & Video Games* appear to score for the one with the most longevity - Garry Francis contributed a column in PACE II issue issue 8 until recently and that was until a magazine devoted solely to the subject (stands up those who remember MicroAdventure's). Helpings to assist those stuck in puzzles in different games crop up regularly - some are basically correspondence clubs, others may appear as part of Bulletin Boards. I certainly found it enjoyable when I volunteered my name for assistance in the Adventure column of Atari (Over correspondence was received from all parts of the U.K. together with several overseas addresses, and (surprisingly?) not just from Atari owners - Adventure, it seems ignores machine specific boundaries. And perhaps that is why Adventure is so popular...

But we never found out whether Allen enjoyed this situation or whether he will still be fighting and trying to find some doors or be forced over his pension book down at the local Post Office ...

Do YOU have a computer adventure that you don't mind sitting in public? How about Contributors of a Game (inside or outside of a Mainframe) or Contributors of a Flight Simulation Machine? If you can write it up well and mention the good and bad points of lots of different Atari software or perhaps chances are we'll print it.

*Bill Halsall was inspired by a letter in our Mailbag column asking if there were any games for up to twenty players and has come up with the answer. You can't all play at once though!*

# SNAKES ALIVE!

**F**angs ain't what they used to be! The snakes now like lightning, the ladders quickly disappear, and somebody left some mines lying around which blast you into orbit! With a choice of 3 rooms in 50 stockades a good memory also helps! Up to 20 can play in an attempt to get to the 5th and final stockade in the fastest time possible, this figure being displayed at the end of the game.

## PLAYER DETAILS AND GAME PLAY

The game uses a joystick for all state input and movement of playing pieces. To input the number of players and their names use the joystick forward or backward to obtain the required number/letter then press the button.

Contributors take turns to play, in your turn press the button to determine the number of possible moves then move the playing piece to the door of the enclosure you wish to enter. Once inside, move the playing piece to the exit to take you to the next stockade. Climbing a ladder will move you up several stockades whilst falling a snake will drop you down some. Your turn continues until you exhaust your moves, fail to reach a ladder or hit a snake. Apart from some random exclusives the contents of each room remains the same for the duration of a game. The same minefield layout is also used throughout and consists of 4 strips of mines stretching between the supports with a small gap in each. In a lay room touch a key to pick it up, then make contact with the peripherals to use it. The correct key varies according to the room.

At the end of the game press the button to play again. Answer the 'same player' question by using the joystick to move the pointer to 'Yes' or 'No' then press the button. Each game is different.



## TYPING IT IN

Cassette and disk users should type in Listing 1, SAVE or OSAVE a copy, then RUN the program. The program will check each line of data and inform you of any errors.

Correct any errors and RUN the program again until all errors are eliminated. When this is done answer the essential questions accordingly to create a boot tape or binary disk file.

Cassette users should load the boot tape created by firstly removing all cartridges and then turning on the computer while holding down the START key (X), and XL owners should hold down OPTION as well. Press RETURN and the tape will load and run automatically.

Disk users should type in Listing 2 and save it on the same disk as the binary file created by Listing 1. RUN the Listing 2 program with the disk in the drive and the game will load and run automatically.





# SNAKES ALIVE!

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## ANSWERS GALORE!

**O**ne of the problems highlighted in the last issue was just forward by Andrew (they registered his copy of **ACE OF ACES**). According to Richard (translator of Williams), the solution is quite simple. While on the STATUS screen, DO NOT press the joystick fire-button as this starts the game! Instead, press the 'START' button and you will be returned to the Position/Mission screen and no more loading will be necessary! Richard goes on to help James (Giles), progress beyond the crossroads in **LOS ANGELES S.W.A.T.** At the Crossroads, walk slightly to the LEFT. When the first grenade is thrown, walk to the RIGHT and WAIT for another, then immediately walk to the LEFT and fire forwards. Carry on doing this until the bantag is brought out, then walk to the RIGHT-hand side of the road. Position your character so that his left shoulder is EXACTLY level with the LEFT-hand-edge of the paving stone (shard from the left). Carry on firing forwards to kill the 'foodie'.

Andrew C. Thompson pleaded for a map of **CHIMERA** — and he drops us one! Paul Brown (and the Atari writers, indeed) will not only a detailed map, but also the solution! Thanks Paul for that. Check out this issue's map.

**A**lthough unhappily cranking to pieces trying to solve **CRUMBLE'S CRISIS**, Dean Chastack sets his own problems to one side and comes to the aid of Mr. Thompson again in dealing with his other problem with the last screen of **QUASIMODO**. After placing the second jewel in it's case, you must go through Level 1 and 2 again before you can get to Level 3. This is accessible from where you found the second jewel. On the 3rd Level, you are walking the Castle wall, fighting off Goblins and Goblins that occasionally pop their heads out of windows — firing arrows or dropping oil. At the top

All the hints and tips this issue come from many different people so we put all the names into one of the Tipster's socks and drew out — Dean Chastack. The JERRARD's on it's way to you, Dean!

This issue we have an offer a super **STARBUCK MATCH** with telephone numbers, schedule organizers, calculators, 24 world time zones and much more (it even tells you the time). This will go to the best collection of hints, tips, maps or charts to come our way for the next issue so get thinking and writing. The copy date is pretty close for the next one so get your charts on!

Welcome to another episode of Atari game help. Adventurers will be pleased to learn that one of our mate Garry Francis has returned so all you hampshires would do well to head his words elsewhere — his pet '800 has helped all my adventure material as it is!

of the Castle wall, fire the third and final jewel. (It is NOT necessary to kill ALL the Goblins). Incidentally, Paul Brown further informs me that there aren't really any tricks to make **CRUMBLE'S CRISIS** any easier for you, Dean — you've just got to be good, and be should know!

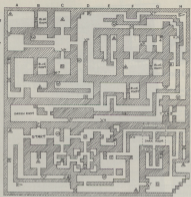
A fine tip from Paul Brown of **Maidenhead, Berks.** In **TANK COMMANDER** (a real stinky) just use your tank to move around the screen and collect the agent. Leave all the destroying to your missiles. This way there is little chance of losing. In **THRUST** on the levels with variable caves, activate your turbine beam and you can see them! You can skip rounds in **WINTER WALKY** by pressing SELECT on the title screen. The level you begin at is shown at the top of the screen. Last one is **THE EXTORTIONER** where you can press SPACE to toggle between long and short range fire. Also if you allow the monkey to play once then press RESET, the game will begin and you have music all the way through!

A fairly recent release is **TWILIGHT WORLD** which Christopher Purman of Aylesford, Kent has been playing. Are you stuck trying to go through 'the mine'? Well, every screen with lake exits has the REAL exit at the bottom so, on Screen 3 go on far as possible to the RIGHT, then right DOWN to the bottom. On Screen 4 go to the TOP line and then RIGHT until you collect a KEY. Now go DOWN to the bottom, then LEFT and open the 4th door. Hey presto!

Christopher Brown of Bristol, offers sound advice for those struggling with **B.C.'S QUEST FOR TIRES** (if anyone else ever bought it). When you come to the turtles and the fat friend — American slang for 'large round body' — wait until she has swung her club TWICE. When she brings the club-down for the SECOND time, jump ahead immediately and you will have an easy crossing over the turtles. Once you have cleared the dirt (you have to be travelling at 80 mph to clear it), the volcano eruption starts. Move to the far RIGHT of the screen and keep pushing to the RIGHT. Keep your fingers crossed (oh, and push right at the same time, Chris!) that a boulder doesn't hit you and, when you come to the turtles at the cave entrance, you will be able to jump wherever you like without drowning or being killed by the Demons — the end is quiet!

**QUACKER! ... QUACK! ... QUACKER! ... QUACKER! ...**

**BACKUP!** (Remember) Press RESET to inhibit time on level! From Michael from 8 Minutes Pleak. QW/18/84 (BT version). Type in TWILIGHT and you will get loads more time (after comparing the 'fat rat' from Stuart Blair).



### CHIMERA

#### KEY

⊗	WATER	⊗	TOASTERS
⊙	BRIDGE		
⊕	SPANNER (CANNOT PASS)		
⊖	BRIDGE - CAN PASS		
⊗	BRIDGE - HANGERS ON		
⊗	BRIDGE - TORRES		
⊗	BRIDGE - BLUE GLASS		
⊗	LOCKED DOOR		
⊗	SPECIAL OBJECT 1-		

1. BRIDGE
2. KEY
3. WAT
4. PADLOCK
5. TORRES
6. PYRAMID

Stephen Wade of the Angle Computer Club was there in Palermo, Indiana, often the following tips for devotees of **STAR RAIDERS II**. The Zylon command ships have a weak spot. Hit it in the square in their middle. In need of an urgent re-charge (in the energy system, for example) strap to the star and whilst doing so, press the SPACE bar. When you get there the ship will appear. Not a course to the nearest planet. Wait until you are fully re-charged and GET OUT! (Yes, Stephen, Pippin says you can have Gandalf's old badge - he prefers adventuring anyway!)

## HELP WANTED!!

Solutions, hints or maps for **SPELLBOUND**, **DRUID** and **FEUD** are currently much in demand - as are **CHEATS & TRICKS** for a whole host of the latest Atari games, so if you have progressed well into these games, or found a device little tick to ease gameplay, please share your success with a few struggles!

My sincere thanks to all of the readers who sent in maps and game help recently. Your efforts are appreciated and, space permitting, we will see a map special in the very near future. As always send in your hints, tips, maps, cheats and codes for help to:

**THE TIPSTER, NEW ATARI USER,  
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Let's be beating from you!

## AND THE SOLUTION

GET SPANNER (E2) - ELIMINATE FORCE FIELDS AT (B3, C4, G5 & H1) - GET NUT (C1) - TAKE TO (F5) BLUE ROOM - GET BREAD (H6) - ELIMINATE TOASTERS AT (J8 & Q4) - GET KEY (H4) - ELIMINATE DOORS AT (D1, A5 & F8) - ELIMINATE PANDORA'S BOXES AT (A7, G7, B5 & F7) - GET PADLOCK (G7) - TAKE TO (J8) - GET TORCH (A2) - TAKE TO (J2) - THEN (B6) - GET PYRAMID (J2) - ELIMINATE HEAVY GLASS (C7) - GET OBJECT (C6) - TAKE TO (B7) - GO TO (A4).

Chimera is VERY difficult to complete and you must not make any mistakes by taking a longer route than is absolutely necessary. Remember to collect bread and water when needed.

## A TIPSTER EXCLUSIVE!

Every reader sending in NEW hints, tips, cheats, maps etc. to **THE TIPSTER** will receive an **EXCLUSIVE TIPSTER** badge! There is no other way you can get one of these badges so get writing now. Share your discoveries with all your fellow Starbers.



# SPIRO

by Derek Thomson

SPIRO is one of those fascinating programs that produce beautifully symmetrical patterns on screen that you can watch for hours. Using a Graphics II screen SPIRO allows you to input your own parameters to produce patterns of circles, diamonds and ellipses in different sizes and combinations to produce semi-random drawings.

When you run the program you will be asked whether you wish to centre the drawing on the screen or enter co-ordinates for the screen position. You can then adjust for the height and width of the drawing and the shape will then be drawn. Drawing can be stopped at any time by pressing the START key.

If you have a printer and a favourable printer dump routine you can dump-out your creations by adding a printer dump routine from line 300 onwards. Provision is made in the program to access this routine by pressing the P key.

Have fun with SPIRO, a nice little program that can provide hours of enjoyment.

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93 1000 *****
94 1000 *****
95 1000 *****
96 1000 *****
97 1000 *****
98 1000 *****
99 1000 *****
1000 *****

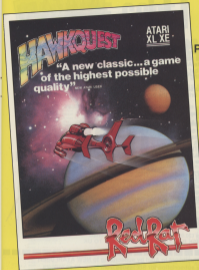
```

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01000 100
02000 1000 *****
03000 1000 *****
04000 1000 *****
05000 1000 *****
06000 1000 *****
07000 1000 *****
08000 1000 *****
09000 1000 *****
10000 1000 *****
11000 1000 *****
12000 1000 *****
13000 1000 *****
14000 1000 *****
15000 1000 *****
16000 1000 *****
17000 1000 *****
18000 1000 *****
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92000 1000 *****
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95000 1000 *****
96000 1000 *****
97000 1000 *****
98000 1000 *****
99000 1000 *****
100000 *****

```

# THE GAME "ATARI USERS MAY NEVER SEE" IS HERE!!



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60 363 255:
61 364 255:
62 365 255:
63 366 255:
64 367 255:
65 368 255:
66 369 255:
67 370 255:
68 371 255:
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94 397 255:
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98 401 255:
99 402 255:
100 403 255:

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41 410 000:
42 411 000:
43 412 000:
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70 700 255:
71 701 255:
72 702 255:
73 703 255:
74 704 255:
75 705 255:
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79 709 255:
80 710 255:
81 711 255:
82 712 255:
83 713 255:
84 714 255:
85 715 255:
86 716 255:
87 717 255:
88 718 255:
89 719 255:
90 720 255:
91 721 255:
92 722 255:
93 723 255:
94 724 255:
95 725 255:
96 726 255:
97 727 255:
98 728 255:
99 729 255:
100 730 255:

```

**Left - Listing 2**  
**Centre - Listing 3**  
**Right - Listing 5**  
**Listing 4 opposite**

# FADE OUT

If you purchase this month's issue disk then a [E] screen picture file will be found on the disk as well as the program listings for this article. Also included is a machine code program that demonstrates some of the video effects used.

### THE FADE

One of the techniques used in film making is where an image gradually brightens or gradually fades to darkness. Listing 1 - **HIDE/SHOW** - imitates this type of effect.

**Lines 240-330** contains a standard routine to set up a graphic screen, and is similar to the BASIC Graphics command. A value of 8 is used in line 260 to clear the screen and display no text window. A value of 24 shifts the text window to graphic modes that can support them. A value of 40 does not clear the screen and does not display the text window. It shifts the text window and does not clear the screen.

**Line 310** sets the graphic mode to 14. Any other value sets the appropriate graphic mode.

**Lines 330-730-840** open an I/O channel to load the picture file. For a fuller description of how to load and save files see Part 2 of the Machine Code Library series in issue 88 of New Line! (see: All the listings are designed to work with disk files but can be adapted to cassette files. Again see Part 2 for ways in which this can be done. **Lines 560-730-810** set all the colour registers to the background colour which in this example is 176 (dark green). This means that you cannot see the image being loaded.

After the picture has been loaded, lines 830 to 930 increase the colour so that the picture gradually appears. The brightest colour value is used in line 930. Most commercial picture files contain the colour values in the file - so it is possible to extract the information directly from the file. To make things simple I have set all the colours to a shade of green (values 170 to 188) - obviously lines 840 to 930-920.

be adapted to use any colours you like. The speed of the routine is controlled by lines 1010 to 1070. The speed can be altered by modifying the value loaded to the X register in line 1030.

**Lines 1100-1300** perform the opposite procedure by gradually darkening the picture. As before, the colour values can be altered and the speed changed by modifying line 1130.

### LOADING PICTURES

The BASIC PICTURE LOADER in Listing 3 is a BASIC program that loads screen files. All the BASIC versions of the video effects are added to this routine from line 900 onwards. This routine accesses the kernel's input/output port of the Operating System and is based on routines used in Part 2 of the Machine Code Library series.

**Lines 100-130-110** can be modified to change the colour registers.

100	LDI	0000	0000	0000	0000
101	LDI	0000	0000	0000	0000
102	LDI	0000	0000	0000	0000
103	LDI	0000	0000	0000	0000
104	LDI	0000	0000	0000	0000
105	LDI	0000	0000	0000	0000
106	LDI	0000	0000	0000	0000
107	LDI	0000	0000	0000	0000
108	LDI	0000	0000	0000	0000
109	LDI	0000	0000	0000	0000
110	LDI	0000	0000	0000	0000
111	LDI	0000	0000	0000	0000
112	LDI	0000	0000	0000	0000
113	LDI	0000	0000	0000	0000
114	LDI	0000	0000	0000	0000
115	LDI	0000	0000	0000	0000
116	LDI	0000	0000	0000	0000
117	LDI	0000	0000	0000	0000
118	LDI	0000	0000	0000	0000
119	LDI	0000	0000	0000	0000
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121	LDI	0000	0000	0000	0000
122	LDI	0000	0000	0000	0000
123	LDI	0000	0000	0000	0000
124	LDI	0000	0000	0000	0000
125	LDI	0000	0000	0000	0000
126	LDI	0000	0000	0000	0000
127	LDI	0000	0000	0000	0000
128	LDI	0000	0000	0000	0000
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186	LDI	0000	0000	0000	0000
187	LDI	0000	0000	0000	0000
188	LDI	0000	0000	0000	0000
189	LDI	0000	0000	0000	0000
190	LDI	0000	0000	0000	0000
191	LDI	0000	0000	0000	0000
192	LDI	0000	0000	0000	0000
193	LDI	0000	0000	0000	0000
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196	LDI	0000	0000	0000	0000
197	LDI	0000	0000	0000	0000
198	LDI	0000	0000	0000	0000
199	LDI	0000	0000	0000	0000

Listing 4

## SCREEN FADE IN BASIC

Listing 3 is a version of the screen fade routine written in BASIC. Because speed is not an important factor in the routine there is no need to call a machine code routine to perform the fade and brighten operations.

Because the routine needs to start with the colour all the same as the background colour, when using this routine with the BASIC picture loader, delete line 215. The BASIC picture loader includes a routine for loading a picture file to a screen buffer (this will be explained later). Because the

FADE-INOUT routine does not use this feature line 200 can be deleted when adding the routine to the BASIC picture loader.

## THE SQUEEZE

The effect which I have called SQUEEZE (Listing 4) gradually "spreads" the image and fills between upright and inverted. The routine uses a number of zero page addresses that are used as registers to control the routine. In a graphics 15 screen there are 180 scan

lines 40 bytes wide. The routine alters each scan line to produce the effect. Lines 1960 to 1980 are routines for adding and subtracting all bytes so that the address in RAM of each scan line can be calculated.

Listing 5 contains the SQUEEZE machine code routine that has been converted to data statements so that it can be accessed from BASIC. Because of the nature of the routine it is not recommendable to be loaded from address 1500 onwards. This routine must be added to listing 5, the BASIC picture file loader.

Apart from listing 3 all the machine code data for use in BASIC programs are loaded as string variables so that they will not









Garry's



# ADVENTURES

Garry Francis has promised to return to the pages of *New Atari* (or shortly, maybe in another guise, but in the meantime he can't resist these adventures and comes to the rescue of a couple of wayward adventurers from last issue's *Tipster* column.

## ESCAPE FROM TRAAM

In the last *Tipster* column, Michael Wood asked for some help with *Escape from Traam*. I'm not surprised! Typist Francis writes terrible adventures which are really hard to complete unless you're 'in tune' with his warped ideas and stocking pointers. Here's a few general hints before presenting the full solution.

The game starts in the cockpit of a small space cruiser (indicated by an 'V' on the map). Leave the game before leaving this room. This may sound silly, but there's a good reason for it. If you are killed or type QUIT, you do not restart at the beginning as you would expect, but are placed in an otherwise inaccessible room (indicated by an 'W' on the map). This is not a problem in itself, but the locations of objects aren't re-initialised either! Your inventory usually (but not always) stays intact and other objects stay where you left them. This may not be what you want. In fact, some objects may then be completely inaccessible. The only way to restart normally is to reboot. However, if you have saved a game at the start, you can load this to effectively restart from scratch. This is much quicker and easier than rebooting.

## HINTS ....

**LOOK** in every room and repeat this over and over again until you're satisfied that you've received all possible responses. You can also use **LOOK** to kill time.

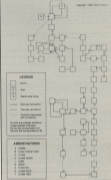
Also try commands like **CLIMB** and **LITEN** in every room.

**LOOK** at every object listed in room descriptions and the response as to **LOOK**.

**TALK** to every character you meet and repeat this over and over again until you're sure you've drawn out every possible scrap of information.

## Escape from Traam

MADE BY GARRY FRANCIS



An action will occasionally trigger something at a distant location. If you're stuck, re-explore old territory.

If something works once, try it again - perhaps at a later time in the game.

Use the alphabet in the directory to translate the Kling language by writing the Kling alphabet on one line and the English alphabet from A to Z underneath it.

Your inventory is limited to six items. Use the full object description when picking something up or putting it down. For example, **GET SILVER KEY** will work, but **GET KEY** will not.

Whenever F is a valid exit, you can also use H or S to talk to the same room. Similarly, whenever W is a valid exit, you can also use M or D. I consider this a bug due to the funny way Typist Francis's parser works, hence only the cardinal directions are shown on the map.

Avoid the Traams.

The predators buried with the creature under the mound has no use other than to get you killed. Leave it alone.

*Escape from Traam* includes sufficient clues to allow you to solve the game without cheating, but they are sometimes very hard to find. The following solution includes enough information for you to find these clues, but once they are known, the game can be solved in far fewer moves. I did it in 124 moves. Can you do better?



## ... AND THE SOLUTION

LOOK - LOOK - LOOK - LOOK - LOOK - LOOK - LOOK -  
LOOK SWP - GET NYLON ROPE - MOVE SWP - GET LASER  
- S - LOOK CLIFT - TE ROPE TO BLUSH - CLIMB - S - S -  
CLIMB - W - LOOK STREAM - GET FRODO - S - H - W - W  
- LOOK - LOOK - LOOK - FEEL OBJECT - CLIMB - LOOK  
BROUPEFRONS - ENG WITH FRODO - GET STONE CUP -  
LOOK ALTAH - ENG WITH FRODO - GET HELMET - DROP  
FRODO - W - H - S - LOOK - CLIMB - LOOK SWP - GET  
SILVER KEY - S - CLIMB - S - S - CLIMB - FILL CUP - GET  
CUP OF LIQUID - H - W - W - CLIMB - W - H - S - CLIMB  
- S - CLIMB - UNTE ROPE - GET NYLON ROPE - S - S - W  
- W - CLIMB - W - H - H - CLIMB - LOOK - POUR CUP - GET  
GOLD BALL - S - S - S - H - S - CLIMB - LOOK - UNLOCK  
TRUNK WITH KEY - DROP SILVER KEY - OPEN TRUNK -  
GET DICTIONARY - READ DICTIONARY - DROP DICTIONARY  
- GET ALPHABET - LOOK ALPHABET - DROP ALPHABET -  
H - H - TALK - TALK - DROP GOLD BALL - LOOK - CLIMB  
- TALK - TALK - TALK - TALK - TALK - TALK - TALK - TALK  
- TALK - S - PUSH STATUE - LOOK - PUSH STATUE - LOOK  
- GET OBJECT - S - LISTEN - CLIMB TREE - S - CLIMB DOWN  
- S - LISTEN - LOOK BLUSH - CLIMB - S - S - S - CLIMB -  
LOOK - LOOK BLUE DOOR - PUSH PIN - LOOK - ALL  
HUMAN - WITH LASER - LOOK - GET UNIFORM - S - S - S  
- CLIMB - LOOK - TALK - EASTAMAN - OPEN - MOVE  
CABINET - OPEN - W - LOOK SHELVES - READ BOOK -  
BREAK LOCK - READ BOOK - S - S - S - S - S - LOOK  
- DROP OBJECT - LOOK - LOOK - LOOK - LOOK BRACK -  
PUSH BLCKC - CLIMB - CRAWL - CRAWL - CLIMB - LOOK  
OBJECT - TE ROPE TO SPIKE - CLIMB - CLIMB - CLIMB -  
UNHOOK AUTO PRESSURE - LIFT DECOUPLING RING -  
PUSH THRUST BAR - LOOK INSTRUMENTS - PUSH BUTTON  
- LOOK - [THE END]

## SAVAGE ISLAND PART 2

Both Michael Wood and Andrew C. Thompson asked about the password for entry to Savage Island Part 1. Savage Island was the first (and probably the only) true two-part adventure ever published. It is absolutely essential to finish part 1 before you can play part 2. This is true for two reasons. Firstly, you need to complete part 1 to get the password for part 2. Secondly, if you don't play part 1, the "story" is incomplete and part 1 doesn't make much sense. Because of this, I really don't think it's fair to publish the password for part 2. Nevertheless, if you insist...

### IF YOU REALLY WANT TO CHEAT!

There are actually two passwords depending on whether or not you correctly complete part 1. They are 123 and 474. I'll let you work out which is which. If you haven't completed part 1 because it was too difficult, it's unlikely that you'll complete part 2, so it's really, really hard. If anyone wants hints, maps or solutions to Savage Island Parts 1 and 2, please let me know as soon as possible (via the editor, if you wish) and I'll put something together for a future issue.

**by Garry Francis**

You can write to Garry Francis at  
26, Barings Road, Earlwood,  
N.S.W. 2204,  
Australia

# DOUBLE DISK BONUS

Two great machine language  
games as the **BONUS**  
on this issue's disk

## TRACKSTAR

by Bill Halsall

Trackstar is an athletic simulation for 1 or 2 players using 1 or two joysticks and has five separate events in which you may compete. These are 100 metres, long jump, hurdles, javelin and high jump. You must obtain as many points as possible on each of these events. Game play is similar in each event with the joystick being moved between left and right to run and the button being pressed to jump or throw. In the final event, the high jump, you first set the height by moving the joystick until the requisite height is reached, then press the button to select it. You cannot subsequently reduce this height.

A new game may be started by pressing the joystick button and carrying out the on-screen instructions. There is a short pause between each event to give you a chance to get your breath back or apply first aid to your joystick!

## BLOKHEAD

by Peter Lister

BLOKHEAD is a simple to play yet challenging machine code game with some excellent smooth scrolling. The object is to simply collect a key from the pile of 50,000 on the left hand side of the screen before moving over to the right hand side to open a lock and so proceed to the next level.

Sounds easy, but there is only a certain way to reach the key and lock and we leave you to figure it out. There are 8 levels of increasing speed and difficulty which should keep most players occupied for some time.



Trackstar



Blokhead

These BONUS programs are only available on the issue 41 disk which disk subscribers will have received with their magazine. The issue disk, with all of the 4-bit programs from this issue ready to run and the TWO BONUS GAMES may be obtained separately for just £2.95. See the order form on page 46.

# COLOUR DUMP

## for the STAR LC-10 colour printer

by John Fildes

The STAR LC-10 must be the finest value colour printer around at a price matching many single colour printers, but a colour printer is not much use unless you have a printer driver to go!

This program will enable Atari 8-bit owners to load in standard G2 vector picture files and then toggle the colours to match those available from the printer status and then dump-out the whole picture in up-to-eight colours. The printer is capable of printing seven colours but the program allows the user to also specify white, being the colour of the paper. Keys 1 to 4 are used to increment the colour registers and each key controls one register with successive keypresses cycling through the colours available. Once the colours have been chosen, pressing any other key will stop the printer.

The picture loading routine comes from an article by Mike Jones in the February 1988 issue of Atari Age with several coded routines to drive the printer. The program uses a machine code routine to scan the screen, one column at a time, and to allocate the contents to one of four buffers. The line feed is switched on on the printer and the four strings representing the contents of the buffers are then printed out, together with appropriate colour selection information. The printer line feed is then switched back on and the program loops back for the next column.

The picture is printed at the maximum speed of the printer and the total time taken depends on the colour chosen. Each pass of the print head is for one colour but some of the colours available are made up of two different colours and thus some picture lines could take up to eight passes of the print head. If white is chosen as a colour then that pass is skipped. The routine prints of single directly, i.e. one dot represents one pixel on the screen. The maximum resolution for four colour pictures such as those produced by the AtariStar and Micropainter programs is 140 by 132 which gives a picture size approximately 1.6cm by 1.6cm but, for anyone who may be interested, I am hoping to produce a routine that will double the dimensions of the picture. In the meantime, your STAR LC-10 might at last come alive. Try it!



It really is in colour on the LC-10 - promise!

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100 1 000 *                               *

```



# GRAB YOUR SHURIKENS

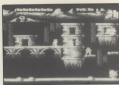
Zeppein Games look set to top the charts once more with the latest superb edition to their incredible budget range - **NINJA COMMANDO**.

The game is basically an arcade adventure, the idea being for you to manoeuvre the Ninja Commando - master of the martial arts - through a series of increasingly scoring levels by jumping and running over various platforms and obstacles. The Commando starts off without any weapons and must rely on his amazing acrobatic abilities to jump on the numerous enemies he meets. Later on, with several

successful 'kills' under his belt you eventually acquire death stars, grenades, flame throwers and machine guns.

Enemy ninjas appear randomly from openings in near by buildings but fortunately they are 'non-destructive' for the first few seconds. If the Commando gets caught he loses his weapons and must resort to the jumping technique before obtaining any more. The ninjas become more of a hindrance as you go through the levels. To begin with they move in predictable paths and are easily avoided but later become more mobile and harder to out-wit.

There are eight levels, each with a different graphical backdrop. Needless to say, the scenery is up to the standard of Zeppein's previous software with the defective shading found in *Dragonous* and *Illyan* used again to good effect. One point that

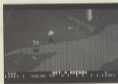


deserves a mention is the superb animation of the Ninja Commando. Although rather certainly coloured to blend in with the background scenery he is very easy to control and can perform some incredible stunts such as jump between the platforms. Even on the title page is, again excellent although sound effects elsewhere are noticeable lacking. This seems to have become a trend in Zeppein's recent games and I can't work out the reason for it.

An apparent difference between *Ninja Commando* and

previous Zeppein Games is the somewhat easier starting level of difficulty. I was able to progress quite well after a couple of attempts - which is more than I can say for other Zeppein or Dragonous CD games. The game becomes more challenging on the higher levels and this is just how it should be. Finally, the price shown below is a misprint - well, it's not Zeppein have triumphed yet again and deserve your support for continuing to show the world what 8-bit music is best - you know the one!

**Title:** NINJA COMMANDO  
**Publisher:** Zeppein Games  
**Price:** £2.99 on cassette  
**Players:** 1  
**Loading:** 15.8 minutes  
**Reviewed by:** Paul Dixon



Atari's support for the XE games console continues with another new ROM in the top-priced range. **DESERT FALCON** is a part of Blue Max celebration set in the mysterious depths of the Egyptian desert. You are the Desert Falcon, questing for the hidden treasures of long forgotten pharaohs.

The game uses the dog-eared scrolling graphics technique that was made famous by *Saga* & *Demon* and was later used in the classic *Blue Max*. The scrolling in *Desert Falcon* isn't quite as smooth as it

could be but the overall effect is quite pleasant and the graphics are enhanced by several nice touches. Animation of the Falcon, for instance, is excellent and obstacles are used to good effect - although nothing to get excited about - is beyond major criticism.

Your aim is to collect the Pharaoh's 'oil reserves' - intricate gems, silver eggs and gemming hoards. To pick them up you must swoop from the sky and land on top of them - not the easiest of manoeuvres when you're being attacked

# FLY ME TO THE PYRAMIDS

by waves of angry mummies. Yes, you guessed it, the treasures are guarded by swarms of flying - and crawling - beasts. Burrowing Uwees crawl out of the sand and 'Wulvers, Scorpion Pharaoh, Scorpas, Flying Fox (and even the pine Payer beetle graphic) attack you from the sky. Being no ordinary Desert Falcon you can establish by firing arrows or you can doodge behind the ancient structures to avoid them. At the end of each desert level a hovering sphinx which can only be destroyed by a direct hit between the eyes. Surviving the game you access to a bonus round where the objective is to collect as many treasures as possible in the limited time allowed.

By collecting microglyphs scattered in the sand you can gain special powers such as oil bombs, decoys, traps and omniscient capabilities (and

bombs to you and me!). Unfortunately, on the higher levels you can also pick up super potatoes - but that's all in a day's work for an expert Desert Falcon. Four levels of difficulty from *Nesque* to expert are included.

Feelings of nostalgia surrounded the feeling season of *Desert Falcon*. Atari seem to be churning out games on ROM that hark of the best and atmosphere of those early ROM classics - not a bad thing in itself, but unfortunately they're also made with that equally awful habit of copyright software. If you don't mind the expense, *Desert Falcon* is well worth checking out.

**Title:** DESERT FALCON  
**Publisher:** Atari Corp.  
**Price:** \$14.95 ROM  
**Players:** 1/2  
**Control:** Joystick  
**Reviewed by:** Paul Dixon

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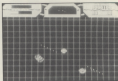
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# PLUNDERING THE UNIVERSE

**C**OSMIC PIRATE is the last release in what will hopefully be a long line of budget games from Byte Books. It is about 'em up but border on being an adventure by virtue of the lack of meaningful interactions supplied with the package. The less determined player might throw the game away in frustration!

Why is there no options menu? Why doesn't 'touch' have any effect? What are the emulators for? What's of this odd profit and credits and space tracks? Even such, after several attempts, some

of the pieces fall into place. It seems that you are a Space Pirate who makes his living flying through the Galaxy and plundering 'space funds' for their dingies. In each sector of the galaxy you must fight off a variety of aliens to earn credits. The credits may be used to buy for weapons, launch tax, toll tax into, not poll tax, and the price of missions. You'd hardly expect a Pirate to settle all his taxes but the Cosmic Pirate doesn't get a choice! The list must be paid to gain access to a map screen showing the relative positions of space funds and your own ship. A precious piece of music - in contrast to the bulk of the sonic star-where - plays while you decide which sector to move into. The general idea is to get closer and closer to a track and hence the dwelling site of loot.



The shoot 'em up is freeze scrolling and the aliens come in a variety of forms. You are encouraged to conserve ammunition as your 'accuracy' rating is adjusted every time you hit the trigger. Indeed, before you can even embark on a mission you must practice using the bottle simulator to bring your rating up to an acceptable level! Further options from the title screen allow you to select particular missions, view your current status, set out the ship and load or save previous games to tape. Graphics are a left body in

pieces but for the most part are acceptable.

I hope Byte Books will provide some decent instructions with their forthcoming software as the lack of useful information supplied with Cosmic Pirate does great damage to its playability. Persistence reveals an interesting shoot 'em up variety and no doubt some surprises, but I've yet to discover this game has been converted from the II to II+ if you know an II+ owner with Cosmic Pirate you might be able to get some more clues on how to play.

Title: **COSMIC PIRATE**

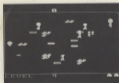
Publisher: **Byte Books**

Price: **\$1.99 cassette**

Players: **1**

Loading: **15-5 minutes**

Reviewed by **Paul Dixon**



**T**he game begins. "Once upon a time there was a fellow called Chazley. More than anything, Chazley loved to eat. So when he went to the carnival one hot summer day, he headed straight for the food fight contest..."

FOOD FIGHT is distributed by Atari as 'every school kid's dream come true' - they don't indicate the intended age group in any other way, but in my mind it's definitely aimed at the younger player. It's actually one of the simplest

games I've seen to quit same time and it brought back memories of those primitive arcade conversions of the early 1980's.

All the action takes place on a largely blank screen with an overhead viewpoint, not unlike the old Mr. Robotnik 2084. At the beginning of each level, Chazley is positioned on the right hand side of the screen. To the left of the character is a large, rectangular ice cream cone and between the two there are piles of food, dangerous monkeyholes and sev-

eral unfriendly chefs!

Chazley has three two seconds to reach the cone before it melts - cooling, of course, the chefs and monkeyholes. In defence, he can grab the leftover food and throw it at the chefs for a shot rebate. Points are awarded for chefs whipped, cones consumed and leftovers left over (goonit). Depending on the level, Chazley may have three to thirty lives in hand. Bonus lives are earned at intervals of a hundred thousand points. At this stage could be a pretty easy challenge, and to be honest, it is - but full playing hints are included on Atari's customary instruction pamphlet (available) Visual and some effects are basic although there are a few good touches - such as the absurd expression on Chazley's face when he's gobbered by a chef!

# A REAL CUSTARD

Atari's output of 8-bit games has been quite prolific recently and much of this has been high quality stuff. Really, Food Fight isn't up to the same standard. Not only this, but I'm surprised and disappointed that they've released the title as an expensive 800K cartridge. I see no justification for the cost of the game when Atari are selling excellent cassettes such as Stack Long and Bing that for considerably less. Atari may be able to get away with a three-pound price tag for the likes of Rescue on Fractal or Ballblazer but I doubt whether Food Fight will earn them any respect at all.

Title: **FOOD FIGHT**

Publisher: **Atari Corp.**

Price: **\$1.95 800K**

Players: **1/2**

Control: **JoyStick**

Reviewed by **Paul Dixon**

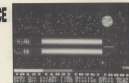
## WHEN I PAINT MY MASTERPIECE

**F**eeing creative? If so, Amethyst could have just the thing you need! Although it's been on sale for some time, PAINTBOARD, unlike many arcade games, is one of those programs that will not date.

It's a drawing program which, despite being the product of a small independent software publisher, contains a wide range of powerful features. There are no printed instructions supplied with the package but the program itself has a fairly comprehensive in-built help facility. Most functions can be carried out by a single key press. You can cre-

ate your artwork using a joystick, a four-foot (with five 1/8" modes) or even a standard 32 mouse. There are two full screen drawing areas so you can duplicate your masterpiece in memory before attempting any drastic alterations - a convenient safeguard. You could also use the second area to keep a library of commonly used shapes or symbols, and copy them across when required.

Most of the commands are familiar ones - box, circle, line, mirror, two-stage zoom are just a few of those included. You can also add text to your picture, move pieces around the screen, flip sections upside-down and even switch on the cassette drive for musical inspiration from your favourite disco top! The program makes use of DL's like Graphics Art Department so that any one 'pen' can have a different colour of each vertical screen position. 128 colours are possible, although others can be formed by mixing the existing shades. A variety of different brush sizes and speeds are provided plus an 'Airbrush' effect for that artistic 'spicy com' look!



PAINTBOARD is supplied, as all of Amethyst's software, on a 128 Kbit cassette. Side one of the tape contains the master machine code program followed by several demonstration pictures. On the reverse side there's a collection of utility routines written in Basic which can be adapted for use

in your own programs. One such routine converts files between Paintboard and conventional formats and another allows you to dump pictures in colour to an Atari 1050 printer - the results are good for those prepared to wait lengthy hours for the process to complete.

Overall, I'm impressed by the depth and quality of Paintboard. My only criticism is that it doesn't support a disk drive - perhaps a worthwhile endorsement for the future? For all those cassette-based owners, the box to be a 'best buy' for Christmas '88.

**Title:** PAINTBOARD  
**Publisher:** Amethyst Software  
**Price:** \$4.99 cassette  
**Loading:** 1.5 minutes  
**Control:**  
 Reviewed by Paul Dixon



**T**wo separate but related programs from budget software specialist Blue Ribbon designed to help you make 'football money' - FOOTBALLER is a horse racing forecaster for UK flat and National Hunt races and PREDICTOR is a Football Pools predictor covering the four English and three Scottish football divisions.

Of the two releases, FOOTBALLER is the most straightforward. It compiles, quite literally, all the questions which you are required to answer by obtaining the relevant infor-

mation from a newspaper. After selecting a racecourse and naming the participating horses you must supply details of each horse's last race - the location, prize money, distance, weight, placing and time elapsed since. The program then uses its tightly developed and accurate prediction routine\* to place the runners in descending order of their likelihood to win. Fitness and speed ratings are also given. If the fitness rating is very good or excellent and the speed rating greater than the field figure for the course

## HOW TO BEAT THE BOOKIES

then the horse concerned can be considered to have a good chance of winning. That's basically all there is to it - apart from a colourful drawing of a horse displayed after the loading sequence. Definitely the graphical highlight of the package!

As such premises in PREDICTOR, when you load up the program you are prompted to insert a cassette containing a database of past results. Obviously you won't have created this until after the initial run so a 'dummy' set of data is included after the main code to get you started. From the subsequent menu screen you can initiate the leagues, input past results into the database, view the state of cassettes, create match lists and instruct the computer to make selections. These can be directed to the screen or an Epson-compatible printer in either list or tabular form - for

direct copying to the Paces designer. The selection process uses past performance to predict future results, so at least four weeks of previous match data must be entered before any level of accuracy can be expected.

Like Let-Form, System 8 is a relatively simple program which comes out its duty in an unobtrusively unimpeccable fashion. Both packages carry the necessary warning that Blue Ribbon can't guarantee any financial gain through the use of their software but hope you will gain some amusement by experimenting. My advice is to have a go of writing your own program first!

**Title:** FOOTBALLER & PREDICTOR  
**Publisher:** Blue Ribbon  
**Price:** £2.99 each cassette  
**Loading:** 7 mins/0.5 mins  
**Control:** Keyboard  
 Reviewed by Paul Dixon

## NO MATCH FOR BORIS

**M**ASTERCHESS isn't a new release but it deserves a mention nonetheless. It's only because it's one of the few software releases I've ever seen with a completely accurate description printed on the packaging (Masterchess summarizes the game as a "two hits chess playing program") and, indeed, that's exactly what it is! According to Masterchess, the possibility of a 3-D display was investigated at the time of development, but later discarded for reasons of memory consumption. Instead, the graphics are in a more traditional overhead perspective

and, while this is anything but spectacular, it is also reasonably clear and not too distracting on the eyes. Shame about the sound though - an annoying beeping noise that's a little too loud.

There aren't any levels as such but the difficulty factor can be adjusted by specifying the allowed quanta of computer "thinking time". This can be set at almost any whole number, although realistically you have got to seek a compromise between the skill of the computer and the length of its response time. If you get tired of waiting you can interrupt the computer's thinking and force it to play its best move at that time. You can also toggle a display of the digitized pieces on and off as you wish. Standard algebraic notation is used throughout for entering moves. Although I'd would prefer a "user-friendly" joystick option, the keyboard method



doesn't take too much getting used to. All of the usual chess moves are implemented, including castling and en-passant. Set-up mode enables the simple construction of any board layout - useful for solving those "white to mate in two" type problems. Unfortunately, the program doesn't check to see whether you set-up a entirely sensible, so if you decide to resume a game with five kings on the board and no opposition, the computer simply locks up in a state of confused bliss (can be used to escape on such occasions).

The remaining options allow you to load and save game positions - a necessity in a game of this nature - and to view an instant match replay. There's not really a lot more I can say about Masterchess, except that it works and that it's well worth checking out. You wouldn't expect to find the advanced features of Colossal or Chessmaster at this price and you don't get them but you do get a highly playable, straightforward chess game. What's more, you may even be able to beat it foot

**Title:** MASTERCHES  
**Publisher:** Masterchess  
**Price:** \$1.99 on cassette  
**Players:** 1  
**Control:** Keyboard only  
**Reviewed by Paul Dixon**



**N**othing new has arrived from the Silver Bird stable recently but it presents an opportunity to look back at a previous release which might otherwise have gone unnoticed. Remember the Great American Cross Country Road Race, first reviewed in PAGE 5 issue 21? Did you know that you can now pick it up for under five pounds, thanks to Silverbird? Unlike its more aged rivals, the AMERICAN ROAD RACE is not based around a track but, as the name suggests, involves a dash across the states of

America. From the start you've a choice of four different routes, from a straight westward run from coast to coast to a more time-consuming round trip through all the major cities. A map is displayed as you can select the most appropriate route, bearing in mind the weather and road conditions and the time of day. The screen view is pretty similar to the much-purloined Pole Position, although buildings on the horizon - which change to reflect the particular location - and general scenery in the background gives Road Race

## TREKKING ACROSS THE USA

a clear edge over its predecessors. Not quite as remarkable is the definition of the many vehicles involved.

Although, as you attempt to weave past other motorists at up to 100 miles an hour, the peripherals of your motor will hardly seem important. Lettled by the Police (and be ready to take evasive action if you may be detained for reckless driving) you should also keep a watchful eye on the fuel gauge as you'll need to stop for a fill-up of frequent intervals in the 100s.

The driving controls are more sophisticated than in previous race games - you not only have steering and brakes to contend with but a five gear selection as well. Forget to watch the revs closely and you may end up "burning" your car to the nearest garage! It's also important not to let that huge mass of power get the better of you as the

contact with other vehicles is bound to cause considerable delay. There are plenty of dials on the dash to keep you occupied and moving (although of little use apart from just telling you a dull moment as you race for a 100 in the highways tabs). There are many more features to the game than I could possibly describe here, but all are adequately explained in an instruction sheet included.

American Road Race is, without doubt, one of the all-time greats of Road programs and one (well) that got to Silverbird for bringing it back to the market at an almost giveaway price. Don't hesitate - buy it!

**Title:** AMERICAN ROAD RACE  
**Publisher:** Silverbird  
**Price:** \$1.99 on cassette  
**Players:** 1  
**Control:** Joystick  
**Reviewed by Paul Dixon**





# 14. THE SCREEN EDITOR

This time I am not actually going to produce any useful subroutines, but I hope the tutorial will be useful anyway as there is little documentation around to help the beginner find quick ways of doing some often simple tasks. The screen editor of the Atari 8 bit computers is quite a powerful tool and can be used to facilitate some of these tasks. Its capabilities that users of office PCs don't have in their MS-DOS environment. "What is a screen editor?" you may ask. It is the interaction of keyboard and screen display. You are using it when you type in a basic program, for instance. I will assume you are familiar with the fundamental controls which move the cursor, insert and delete lines and characters and clear the screen as these are included in the very simple handbook that comes with the Atari computers, and going on from there will try to show you some useful short cuts.

## MULTIPLE LINES

In many programs there are quite a few lines which almost repeat each other. It seems pretty tedious to have to type these again and again and there is an easier way. Try this example.

1. Type one line as follows:  

```
10 REM *** THIS IS LINE 1
```
2. Now hit [RETURN] then move the cursor with the CUR-TRCK key and "up" arrow till it is over the 1 of "10", type 2 over the 1 then move the cursor right till it is over the 1 of "LINE 1" and overwrite this with a 2 as will.
3. Hit [RETURN] again. It appears that we have replaced the line 1 we first typed with one that reads:  

```
20 REM *** THIS IS LINE 2
```
4. Type LIST and hit [RETURN], and you will see that the original line 10 has not been deleted.
  - a. Repeat it to generate lines 30,40,50 and 60, then clear the screen (CONTROL)+(CLEAR) and LIST again to display the lines.

This process works even when the lines that are repeated are not immediately one behind the other. If you get to a line anywhere in a program listing that is close to one that has already been typed, and bring the previous cursor back onto the screen by LIST (repeated), then edit it in the same way as the example above. One word of caution, do not forget to change the line number as well as making any changes to the text within the line, otherwise you will find that you have changed the original line instead of generating a new one - it may sound stupid but it is quite easy to make this error, particularly when generating a whole lot of lines which are very similar.

## Having problems with your listings? Ian Finlayson gives some tips for easier typing and debugging

The technique of overtyping one line to generate another is particularly useful in generating screen listings. Take care in typing out the first line that is to be displayed, and then use this method to ensure that all subsequent lines are spaced the same way.

## SELECTING SPECIFIC LINES

If you wish to pick up specific parts of one program for use in another this can be done by LISTing the lines to tape or to a disk file and then ENTERing them back into the new application. This is satisfactory if all the lines you require are in one block, but is more tedious if you want to pick up several lines which are not together. The screen editor can help here as well, as long as the lines you require can all be displayed together on one screen. Follow this example:

- a. Clear the screen and then LIST the previous example (lines 10 to 60).
- b. Type NEW [RETURN] and then LIST [RETURN] to show the program lines have all been deleted from memory.
- c. Now move the cursor up to line 10 and hit [RETURN], then move the cursor to line 30, hit [RETURN], and line 50 [RETURN].
- d. Clear the screen and LIST. You will see that the lines on which we hit return have been replaced that is 10,30 and 50 while those which were merely covered over have remained deleted.

## DIRECT MODE

The editor can also be used effectively in direct mode. For example if you wish to load a file from disk and save it to another disk just type in direct mode:

```
LOAD "DISKNAME.BAT"
```

When the file is loaded, swap the disk over, move the screen cursor up and overwrite LOAD with SAVE and save the file to the new disk with the same file name.

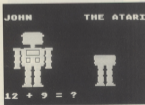
If you can't disk over you can even use this technique when in DOS. Perhaps you have typed 1 to load a binary file followed by FILENAME.BAT and you get ERROR 170 (file not found). It is likely that you have typed in the name wrong so cursor up to the



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by Ann O'Driscoll

```

01 1 000 *****
02 2 000 0          PICTURE BOAT    0
03 3 000 0          00              0
04 4 000 0          000 00000000    0
05 5 000 0          000 00000000    0
06 6 000 0 000 0000 0000 0 00000000 0
07 7 000 *****
08 8 000 *****
09 00 000 0000000 00000 0000 00000 0
00000 0000 00000000 00000000 000 000
000000000000000000000000000000000000
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02 00 00000000000000000000000000000000
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07 00 00000000000000000000000000000000
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```



# Mark Hutchinson's RANDOM NOTES

**T**his has really been a bad month for me. Yes, Marilyn's law still rules - if it can go wrong it will. First I had the news that I was booked for a residential course at the same time as the November 8-10 show, which I will now have to miss, then my Macintosh interface died and it is sorely missed, a heavy bout of flu and finally the news that some of my mail had disappeared.

I had a letter asking about some previous correspondence. The first letter I did not get so some problems has occurred with the post. The only outstanding letter (as I write this article in the middle of October) is from Mike Balderson, who would have had a reply by now if my interface was working and I could write some answers for him (something I do not do unless I can see them), so if you are still waiting for an answer to an SAJ you will have to write again. I'm afraid. I did not receive your first letter. If I get a replacement interface then I will test your program and write to you Mike, but one of your problems was answered in the last edition.

**I** read in the computer press recently that the AT&T 486 computer is well and truly dead. AT&T has sold the number 486 to IBM for an undisclosed amount. AT&T seemed to hold the copyright. For this number and IBM wanted no disputes about their own 486. For some reason known only to AT&T, the 486 was originally called "Candy" and the 586 was subsequently called "Coke". I wonder if the IT had such a name during the research stage, anyone know?

**D**oes anyone have a solution to the dreadful XMODEM byte/word connector? Sometimes my keys just will not work and I know it is the edge connector but I do not have the idea of working with this flimsy bit of plastic. I would like to see a proper edge connector and, best of all, ribbon cable system but the plastic ribbon and beyond matrix can still use. It has been really fascinating reading the last few issues of the magazine, there is at all of your homecoming away at an article having no contact with anyone else, yet when my article is printed, the comments I make are answered by other articles in the same magazine. Do I suffer from precognition? Do we have an excellent Editor?

**T**he best thing I do when the magazine arrives is to read my columns to see just how much the "Look and Master" has changed it. I take look at the CONTACT column and I am always wondering why so many IBM systems are for sale. If you state listed people would fill in the next reader survey you could maybe establish the cause of this sudden surge in 8-bit sales. Can the Contact Column be so successful? Are these people getting out of computing? Getting away from the IBM? Or are they getting away from AT&T altogether? Actually, sometimes yes, I will be having a side of a bit of hardware and software items that I never see here. They take up much needed space and it seems a shame that they just lie around the house, so you might just see my name in the CONTACT column.

Talking of taking up space, heads up those who have been caught out by the vopromer trap. Thankfully this position is not as prevalent as it once was, but if you know of a firm who practices this then drop us a line. Sometimes the they cannot get

the goods as promised so it is not their fault, but sometimes they play on this.

**O**ne of the things that I will be looking forward to is a report on the November show. There will be many people who will not attend but will wonder what it was like. F&C has a policy of telling how things really are but many readers do not believe that. Would they believe other readers? Why not give us your impressions of the show? After all, this really is a milestone for AT&T 8-bit users in the U.K.

**I** still log on to the "Games At Home" 888 paid CHARGED, but the logs are too noisy most of the time - insider jokes - take note F&C. I know a lot of people are interested in this so I will be sending the Editor a list of 888 telephone numbers sometime soon. They are for both the IT and 8-bit machines so, if you are interested, you could always send him an SAJ and get details.

**B**eing a confirmed computer user, I receive dozens of computer magazines in the course of a year, absolutely free. Most of these have a cover price but the advertising revenue usually pays so well that they can become freebies. One of these is "APPL BUSINESS" for blackintosh editions, a very well put together magazine with a cover price of £2.00. When I wonder, will we see an "AT&T BUSINESS" magazine for the serious IT user's approval?

**I** have had several letters from Gavin Moran about the AT&T users in N. Ireland. The situation can be summed up in words like - abysmal, bleak, rain-soaked etc. Not to be deterred, Gavin would like to set up a user group. So I would like to take this opportunity to mention that if anyone is interested in helping him out then please write to him. He would also like to hear from Matthew Tideman of Lee Valley Users. On the same subject, Steven White has set up a user group in Spain and would appreciate some new members. They can be contacted at the following addresses:

Gavin Moran  
398 Canterbury Way  
Strensley  
North  
M21 4JG

Steven White  
c/program  
30 Pellenas Otho  
Mallorca  
Spain

**F**inally, a hearty thank you to Sandy for the loan of Terk's talk so that I could post my word processor files over to the IT. A pity it did not work both ways - that would be superb! This will also give me the opportunity to post some programs to try out the 8-bit emulator.

I really must go now, off that talk about the Friday, 12th vms has reminded me that I really should back up my hard disk again and not take any chances. I hope that we AT&T users were inspired to speed this technology!

Write to Mark Hutchinson, at:  
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See PAGE 6 magazine issue 27 page 28 for further details of the upper program. Tape version has all the features and fun of the disc version except that the number of home addresses is limited. **AVAILABLE EXCLUSIVELY FROM PAGE 6**



# ST FILE



This issue, the serious stuff. Arner have a new database program to complement Probase, still the finest ST word processor. PRODATA includes all the standard features of a database and has the added facility of being totally compatible between the ST and PC versions. Arner claim that you can simply take the disk out of your ST and insert it in the PC. Price is £75.95 but you might just catch it at the introductory price of £55. Software Express meanwhile have an excellent point-of-sale package called CASCOT which will enable any small business to have full stock control, invoicing and customer records with a standard ST. The software can read and create barcodes and, as shown at the PC Show, it was very impressive and looks like being something any shopkeeper should consider. Price is £240 plus VAT and you can get further details from Mike Jones or Peter Fellows on 021 843 8100. FONT DESIGNER is a new top quality program that allows users to design new Postscript fonts as well as logos and symbols. The program will also convert to GDSII fonts. Maybe a little specialised but a top quality serious program. If you are interested contact Barry Parkinson of PCG Computer Software on 0209 369557. Fear Technology have a little product called TURBO 15 which incorporates a 1988th CR03 68000 CPU together with 32k of cache memory to provide significant speed improvements on all ST and M68K machines. Over 80% speed improvement is claimed on all types of software but it will set you back a hefty £299. Details from FORT Technology on 0234 764923. On the Education side a new package is due called PLAY AND READ which comes complete with a set of five reading books and a story cassette. The program has been available on the BBC for some time and has been extensively used in schools where the success rate in teaching slow to learn pupils is said to be very high. Phoenix Software have many testimonials from teachers regarding the success of the program and, in bringing it to the ST, hope to encourage parents to help their children at home. Further details can be obtained from Jason Salisbury at Phoenix Software, P.O. Box 211, Chester, CH4 3XJ. Telephone 0244 362144. Frontier Software have, meanwhile, dropped the price of its Xtra-8Meg memory upgrade kit to £299.95, a saving of £200. This new board will expand any ST to 1.5 Mb and the M6843 up to 4Mb. For the job for those who might want to run the Uniscript option on the new Fleet Street Publisher - we might have to send in an order soon! Frontier can be contacted on 0422 567180.



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# Mini Office Professional Presentation Graphics

**I**n Issue 59 I gave a cautious thumbs-up to the first two modules of the Mini Office Professional range. This month, I have been looking at the latest release - Presentation Graphics. Presentation Graphics (hereafter PG) comes in the same style of small box, containing a ring-bound manual and two disks. One of the disks, in addition to the utilities common to all the series, contains the macro-driven insurance file. The other disk contains both the program files and sample data files which are useful for familiarisation. The manual is of similar good quality to the others.

Mini Office PG is aimed at the person who wishes to present numerical data using graphs. PG allows you to load in spreadsheet data files, or create your own, and then display them using one of five types of graph. You can choose from Bar or Pie charts or lines. Line or Scatter graphs. Each of these has many options. If, for instance, you wished to create bar charts to display three figures for comparison, you could have the bars side by side, stacked on top of each other, or drawn "3 dimensionally". You can configure the colour and fill patterns with which they are drawn, axis labelling, scaling and the display of a grid. Patterns can be chosen from 160 predefined ones, which include such designs as cars, table silhou and hearts. If you do not find one to your liking, you can define your own.

## DIFFERENT TYPES

Database have done a lot of thinking about the possible types of graphs, and have covered many common requirements.



Since you have on hand the ability to create many different plots, they have thoughtfully included a table to help you decide which are best for particular purposes. A checklist of all the items you should have included is also helpful.

A basic graph will probably not convey the complete message, so often you have created your graph you move over to the Art Screen. This (under-documented) facility allows you to add text, basic graphics, and a pattern key to your graph. The key facility is especially useful when labelling Pie charts, which do not have automatic labelling. If these basic art facilities do not satisfy you, then you can do further creative work in other graphics programs since PG comes using the standard PU or PU format (according to the graphics mode) it works in both colour and monochrome. As added flexibility, PG will plot the graph restricted to a portion of the screen, so that you can plot up to four graphs to the same screen. By loading an extra blank, you can

use it for writing your message.

Once you have your finished graphs, you will want to show them to an audience. To help you with this, PG will either print your screen in one of three sizes (5.5" x 5.5", 7" high x 18" wide, or 7" high x 9" wide as the Epsons), or it allows you to build up a slide show. The slide facility is aimed at both live presentations and standing desks. The latter is supported by a timer, to specify the delay. The timer uses the mouse button to allow you to stop forward or backward through the "slide". Personally, I would like to see an additional cut-down version of this program which just did slide presentations. As it is, you must ensure that you do not go past your last slide since it will leave your audience looking at the distracting control windows.

## CONCLUSION

Mini Office Professional Presentation Graphics is not what I would consider a full presentation graphics program, since it does not give good support

for straight text slides. You can produce text but there is no auto-alignment available. Since PG uses a standard file format which other programs could create, it is not, however, a serious drawback. There are a lot of different modes in the program, allowing you to enter data, select graphs for graphing, and more, but they are well designed and easy to move between. Neither PG nor any of the other Mini Office programs have ever crashed on me, which for a first release shows good programming and careful design. As a result, Presentation Graphics is a program that is well worth buying if you have any numbers that would be made to understand as a graph - whichever style you favor.

**Review by  
Matthew Jones**

Title: **Mini Office  
Presentation Graphics**  
Publisher: **Databases Software**  
Price: **£24.95**  
Reviewer: **Matthew Jones**

# HiSoft C

**Finding C too cumbersome or difficult to learn?  
Steve Pedler has discovered a version that makes it easy**

**C** is a compiled language. To produce a program, you type it in using a text editor, the text is then converted into machine language by the compiler and, to produce a working program, this must then be linked to a pre-written library of functions by a separate program, the linker. Only when you have done all this can you actually run the program, and if it doesn't work you have to go through the same edit-compile-link cycle all over again.

This process will have put off many people who would otherwise like to have learnt C. For this reason, HiSoft's new C interpreter (from the French company Lotus) is to be welcomed. This version of C functions just like a BASIC interpreter, you type your programs and when complete just select "Run" from the drop-down menu. No compilation, no linking and if an error occurs you are simply returned to the editor.

## THE PACKAGE

HiSoft C comes on two single-sided disks, one containing the interpreter and associated files, and the other help files, source code and examples. The editor and interpreter are fully integrated and the libraries are memory resident so do not have to be loaded when your program is run. There is a thick (116 pages) spiral bound manual which has a useful section for newcomers to C. The manual is generally very good; it has been translated from the French and contains a certain amount of Gallic humour which thankfully is not too intrusive (see page 14 of the manual for a good example). It does contain a number of spelling errors and the occasional mistake but this should not cause problems.

The editor is fully GEM-based and quite good, it is not as good as Tempus (few editors are) but is better than many provided by computer publishers. Amongst its features is the ability to contain up to eight programs (modules) in memory simultaneously. These can be treated as entirely separate programs or as one large program, thus allowing you to build up

blocks of frequently used code. The editor has six case-indentation features - when entering code for "if" or "while" loops, it will automatically indent the code in these loops and provide opening and closing braces. Usually this is very helpful, but on occasions it can prove a real pain in the neck, especially where you decide to enclose some already written code in a loop. Simple syntax checking is also provided, the editor will not let you leave a line containing a string without both the opening and closing inverted commas, for example.

HiSoft C does have one or two problems. The main one is that the programs will not run in low resolution. This means that those users who do not have access to a compiler will not be able to write low resolution programs or all. The maximum line length is only 127 characters, which is rather short if you are typing in long strings, although it is easy enough to work round this problem. Finally, the editor saves programs in its own file format - not ASCII - which obviously causes problems if you subsequently wish to compile a program. To get round this, the editor can be switched into "text editor" mode which will load HiSoft C files and save them in ASCII format, but while in this mode you cannot run the program! I cannot help feeling this is unnecessarily complex.

## THE INTERPRETER

This is a pleasure to use, although just clicking on "Run" and seeing it happen is very odd at first if you can read in a compiler. The version of C implemented here is almost a full K&R C, with one or two minor differences. The main one I found is that global character strings cannot be initialised outside a function, while local strings can be initialised inside a function - both directly contrary to K&R. I suspect this is due to the very different demands of an interpreter as opposed to a compiler.

The libraries provided are extensive and include all the usual C functions plus GEM and TOS routines (the latter built directly into the interpreter rather than as modules obtained with the original K&R header file on a system with a compiler). There is also a GEM "toolbox" designed to make programs

using GEM routines the source code for this is included and may be modified or compiled. The libraries are said to be almost completely compatible with Lotus's C and this does appear to be the case. There are some very good and easy to use debug facilities provided and the interpreter traps the TOS exceptions so that crashing the machine with handle on screen should occur much less readily. If desired, compiled C and assembly language modules may also be incorporated into your programs.

The manual says that it should be straightforward to compile programs written in HiSoft C. From personal experience this is certainly true, I had no difficulty making the small changes necessary to get my Lotus compiler to accept programs



written with the interpreter. Programs can be posted in reverse direction as well, but HiSoft warn that this may be more complex.

## CONCLUSIONS

The principle advantage of this system is the short development time and interactive debugging it makes possible. I think this should considerably increase productivity and make program writing more enjoyable. It does have some disadvantages. Programs written in HiSoft C will invariably run slower than their compiled equivalents (a problem inherent in almost any interpreter) and it will not produce .PRG files accessible from the desktop - the interpreter must always be in memory if you want to run a HiSoft C program. Nevertheless, beginners to C will find it less of a culture shock than using a compiler for the first time, while more advanced programmers will appreciate the speeded-up development time and debug facilities. I can heartily recommend this program.

Title: **HiSoft C**  
 Publisher: **HiSoft**  
 Price: **£49.95**  
 Reviewer: **Steve Pedler**



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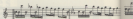
*John S Davison's  
regular guide to  
all the ways  
of making music  
on your favourite  
computer*

**W**ant to make music with your computer? If so, this new regular feature should be of interest to you. It takes over from the *MIDIer's Guide to Music Making* concluded in the last issue, and is designed to cover any aspect of making music with a computer. Although MIDI now plays a leading role in musical applications on a computer, I don't intend to concentrate exclusively on that topic. In fact, if it's music related I'll be happy to include it here - whether ST or 8-bit based!

In future issues I'd like to cover the topics YOU are interested in. Please feel free to write to the care of Page 4 Publishing (see Contents page for address) with suggestions for things you'd like to know about, or with any music related questions or problems. I can't guarantee to know the answer to everything, but I'll do my best to help where possible. If you'd like a personal reply PLEASE enclose a stamped, self-addressed envelope with your letter.

## BARGAINS GALORE!

There couldn't be a better time to get started in the wonderful world of MIDI music making. As I write this



Yamaha are busy introducing new home keyboard and synthesizer products into the shops and are offloading remaining stocks of last year's models at cheap prices. For instance, I've recently seen the PS0-880 and PS0-888 keyboards on sale for £99 and £129, over a third off their normal prices! They've been replaced by the PS0-580 and PS0-588 models, which are virtually identical to their predecessors apart from cosmetic detail and a few changes to the automatic rhythms. I've already sent their prices in the *MIDIer's Guide* so I won't repeat it all here. At these low prices they're irresistible!

Further up the range there are similar whopping reductions on models from Yamaha's PS and DS series, with savings of up to around £200 depending on the model. Again, they've been superseded, but this time by completely new models. The newcomers use a new form of synthesis technology called DMS (Dual Architecture Synthesis System), which uses a mixture of digitally sampled sound together with an advanced version of Yamaha's FM (frequency Modulation) synthesis method. Whatever it's called it produces some very nice sounds, in my own opinion.

If you want to move out of the well contained 'home keyboard' area and get something a little more professional, then models from the Y3 and DS synthesizer series could interest you. These have none of the 'fun features' of the home keyboard, i.e. no automatic rhythms and accompaniments, nor do they have built-in complication facilities. Their FM technology may be old hat by today's standards, but they're still capable of producing stunningly beautiful sounds. As an example, the Y3-180 has just been cut from £599 to £349, and its bigger brother the Y3-200 is down from £699 to £449. There are a few Casio keyboard/synthesizer models, too. Most notable is probably the discontinued CZ-2000 home keyboard, now selling for just £118 in a number of specialist music stores. I don't believe it's as good as Yamaha's PS0 models mentioned above, but some people prefer the Casio sound to Yamaha's. It's worth a look if you can find one.

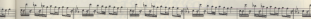
Not all music stores can copy these offers, so you might have to search around to locate them. Your best bet is to read the adverts in specialist music magazines such as *Musik Technology* or *Sound By Sound*. All the big companies advertise their special offers here, so they're a good place to start.

Oh, I'll come clean, I just couldn't resist Yamaha's offerings, so I've added a Y3-200 to my lovely PS1480 on which I've scored my MIDI opportunity for the last year or so. It's now connected to the ST along with the PS0-880, and first impressions are that I've entered a whole new ballpark! I'll tell you more about it next time.

## THOSE SHOWS!

It's currently fashionable to moan about computer shows, but one of the great things about attending them is discovering unsuspected bargains. The downside to this is that it usually results in a severe pain in the wallet! I've long been a fan of Steinberg's legendary musical application software for the ST, but the high prices have always kept me at bay. Until the last About User Show, that is! One of the stands was selling the Steinberg Pro 12 sequencer for £49.99 instead of its normal price of around £130. Oh, so it's not those reviews of the Pro-12, but real Steinberg quality for less than £50!





Unbelievable, but true!

I've been using Pro-12 for a couple of months now, and I must say it's living up to expectations, give or take the odd bug. After happily using Artisoft's Music Studio (which I still like as an inexpensive step-time sequencer) the change to real-time sequencing with Pro-12 was something of a culture shock. However, it also has step-time facilities so you can continue using this method of note input if your manual keyboard skills aren't up to playing in real-time!

While we're on the subject of shows you may be interested to hear that plans are afoot to mount a specialised show aimed at the MIDI enthusiast/Multimedia Exhibitions Ltd. have just announced that the MIDI Music Show will take place in London at the Novotel Hotel, Rotherhithe on 1-6 April 1990. It's aimed at both amateur and professional musicians involved in electronically produced and stored music. It sounds as if this will be a major event for everyone interested in MIDI, so note it in your diary now.

## LEARNING HOW

If you're REALLY serious about learning how to use computers for composing, performing, and recording music, then you may be interested in a company called 'Outworld Ltd.' It's run by Danny Bennett, a professional computer programmer and MIDI specialist, who's recently been working with UMG in preparation for their next album. Outworld are currently advertising a couple of MIDI courses designed to provide you with basic theory and practical experience of MIDI instruments and computers.

The Basic MIDI Course costs £140 for three days tuition, and is aimed at musicians and teachers recording beginners who need to acquire basic experience of using computer driven MIDI instruments. It consists of three major topics: MIDI, computers, and sequencing. Basic theory and terminology of the respective topics are dealt with, followed by practical aspects of recording, editing, and playing music using a mixer keyboard, synthesiser, and drum machine - plus an Atari ST running appropriate software, of course!

The Advanced MIDI Course costs £240 for three days tuition, and is designed for those already familiar with MIDI equipment who wish to know more about the technical details of MIDI, sequencing, sampling, and the use of computers for advanced MIDI applications. It covers details of most of the MIDI message types, including such things as MIDI Time Code and Song Position Pointers. The sequencer section covers topics such as use of MIDI files, System Exclusive Data (sysex), drum machine programming, and SMPTE synchronisation. The sampling section covers the operation of a sound sampler, including the loading of samples, making samples from samples: filters, envelopes, and loops, and management of voices, banks, and keyboard maps.

I've not been on either of these courses, but they sound quite good, it's a little pricey for the content. If you want more details contact: Danny Bennett of Outworld Ltd., 21 Argill Mansions, London W14 8QZ (phone 01-400-9014).

If funds don't run to professionally run courses, then you could always educate yourself by reading a few of the many books now on sale. These are available on all aspects of computer based music making, from basic information on MIDI through to writing your own MIDI

A. Perle's, a prolific author on electronics and computer topics for many years. He's recently started writing about computer based music, and already has several volumes to his credit.

The first is called 'Computers and Music', published by PC Publishing (ISBN 1-850774-01-4) and costs £7.95. It's aimed at the complete beginner to composing and MIDI. Its 176 pages lead you gently into the world of computer based music, covering computer basics, storage media, ports and peripherals, 'real computers' (including details of the Atari ST, amongst others), MIDI, music software, and MIDI instruments. It also has a 18 page glossary which clearly explains all the jargon you're likely to come across, plus a detailed index to help you find your way around. It's great value, especially for the musician contemplating making his first foray into the world of computers and MIDI.

The second book is 'Musical Applications of the Atari ST', published by Bernard Bohen (ISBN 0-85994-181-2) at £5.95. This one's written specifically for the ST, and assumes you already have a basic grasp of how the ST works. The first chapter does give a detailed description of the ST's internal sound chip and how it programs it, but after that the focus is heavily on MIDI. Its 90 pages cover MIDI connections, MIDI modes and messages, MIDI application programs, ST MIDI Add-Ons, and MIDI processing. Also included are plans for simple MIDI accessories you can build yourself, and sample BASIC program code for MIDI data manipulation (such as channel shifting and harmonising). This is the book to buy if you understand computers, but want to know more about MIDI.

## STOP PRESS!

I've just received a diskful of ST MIDI software designed for use with the Yamaha PS5 keyboard! This was written by David Carter of Leeds, Leeds, and was sent to me in response to the plea in the last issue for software of this type. David has written a Patch Editor, a System Exclusive Librarian, a System Exclusive program, a Guitar Tablature Sheet Printer, and a MIDI demo for Gary Hobbes' brand The Patch Editor allows you to get off for more sound generation parameters than the nine available from the PS5's front panel, opening up a whole new world of sound for the PS5 owner!

Not content with this, David has placed all the software in the public domain, so it will appear shortly as a Page 4 PDS disk. Unfortunately, there just wasn't enough time to try it all out before the copy deadline. Full details will be in the next issue.

That's it for this time. Don't forget to write in with those suggestions and queries. And if you're looking for some of those bargains - happy hunting!

## THE PAGE 4 PDS DISK

The PAGE 4 PDS DISK containing the Patch Editor, System Exclusive Librarian and other utilities mentioned together with a number of Yamaha Studio songs specially arranged for the Yamaha PS5 series is available from PAGE 4 PUBLISHING, P.O. Box 24, Hatfield, ST16 1JW price £2.95.

# INDIANA JONES & THE LAST CRUSADE

## The Graphic Adventure

**Y**ou've read the book, seen the film, no doubt played the arcade game ... and even if you haven't, here comes the Adventure Game! It is very slightly advantageous to have seen the film but certainly not necessary as, although the plot is relatively similar, many new additions have been incorporated by way of logical, and sometimes clever, puzzles and there's certainly enough here to keep the adventure fans busy for many nights.

The packaging consists of 8 1/2 inch 5.25 disk, a copy of The Great Diary (which is not exactly CLEARLY written), booklet of translator tables and a special red corner strip viewer, the latter being necessary to read certain random codes from Indy's notebook when prompted. You have just 3 chances to get it right or the game will proceed in so-called 'steve mode' (Steve is Lord Vector's disabled and vital intermission card that will be raised on the game progress). This is a common copyright protection procedure and it certainly works!

Your quest, as Indiana Jones, is to look and recover your lost Father, firstly, and locate the great lost Holy Grail before the Nazis seize it for the Father's treasure collection. Some characters will help you on your travels across Europe and some will positively impede you - one lady in particular is a real in-sleepy-dressing!

The adventure is entirely mouse-controlled - with the exception of the light scenes, where defined keys are used - and the player selects the input/action from a table of key words and actions below the graphic display window and combines them with other words or items to construct the required input. Where the opportunity to talk to other nearby characters arises, so the 'TALK' icon will be highlighted, and the 'TRAVEL' icon likewise becomes available when and where appropriate. The use of other defined keys in place of the mouse is optional but I think you'll find this option more confusing. Current inventory is displayed in contrasting colours at the bottom of the screen.

A useful tip while finding your way around each location and looking for suitable objects is to select the 'WHAT IS' icon and move the cursor over around each scene - suitable objects will thus become highlighted on the command. But, sometimes allowing you to manipulate them.

There is a fair amount of saving, though, so be prepared for a long session!

Before actually attempting to solve this adventure, TWO important aspects must be understood. Firstly, your Father's Great Diary, which you will find hidden beneath the regular post to your office, is an essential aid in understanding the majority of the puzzles encountered. You will be allowed to look at this diary at selected locations and be subsequently presented with a full-screen view of two of its pages which will yield vital graphic, numeric and point-to-click, although somewhat cryptic, hints. Secondly, a good work-out in the College Gymnasium is good training for future fights (read your game instructions to take full advantage of this training).

There are many 'rat pits' - as I like to call them - where the program gets off on its own for a while, but once you have seen them, pressing the ESCAPE key will cut them out and speed things up somewhat ... which leads us neatly into the major criticism of this software, SLOWNESS OF PLAY! Not only is the adventure spread over six disks but different sections of some scenarios are further spread over several disks. This wouldn't be that bad if you had something to watch on the screen while all this disk-swapping/loading was going on, but NO ... complete blackness just as the drive finishes loading in the next part you are prompted to insert yet another disk. Whilst checking this game out for the first time, I had all six disks spread over the back of the computer with two 'SHEET' disks in-company and, to be quite honest, I had to ask on more than one occasion if what I was doing in the adventure!

SAVE and LOAD routines are relatively



slow to carry out yet I cannot understand why, when loading in a second game, EACH TIME - those which different parts of your saved game-state has to be loaded in separately. On one occasion, whilst testing a game, I had to change disks six times 1, 4, 1, 2, 4 and finally 4! However, having expressed my personal disappointment of its implementation, there is very little else to fault this game. The puzzles are many and varied, requiring the combination of more than one object on some occasions. The animation is neat and effective though not as refined as, say, the latest Sierra games (though it's more mouse-oriented). Pleasant music is included and this fits in nicely with appropriate scenes. There is also a liberal sprinkling of humour to serve as you progress.

### STARTER'S TIPS

- 1. What out in the College Gymnasium to obtain your fitness.
- 2. As dealt with the situation. Meeting the man in your office, select the window which allows them that you will see them in short order.
- 3. Pick up the Great Diary letters and papers from your desk to find a useful package.
- 4. The bar can be opened but not closed, so bring a 'solid' position here to be 'solid'.
- 5. Use the Office window for future scenes.
- 6. Help meeting Father's Doctor, TRAVE to Henry's home.
- 7. Pull the trapped bookcase and look on the book for the key to another position.
- 8. Use the small picture in Henry's bedroom as a future 'indicator'.
- 9. Try to take the Submarine to get the small picture you need.
- 10. The chest will only open if you have 'solved' that story problem earlier!
- 11. Use the one 'SHEET' to locate.

Title: **INDIANA JONES & THE LAST CRUSADE**  
 Publisher: **E.S. Gold/Lucasfilm**  
 Price: **£29.99**  
 Reviewer: **John R. Barnaby**



# POSTMAN PAT

postman pat, postman pat and his black and white cat ... la, la, la-la, laa, la

Love him or loathe him, you can't deny that Postman Pat has been a big commercial success. Following the TV show, videos, books, and all manner of merchandise we now have the computer game! While it's aimed at the younger games players, there's a harder version included to challenge older players too. And, as is usual, the author has added three extra games in the form of Soap, Lads, and Snakes and Ladders - all with a Postman Pat flavour.

Your job is to use the joystick to control Pat's van as he makes his morning rounds delivering parcels and letters to his friends in the village of Greenhalp. He must be as productive as possible when he's been given a time limit to complete all the tasks. If he fails it's Game Over. If he succeeds the process starts again, but with a shorter time limit and more letters to deliver. Points are awarded for correct deliveries, and for successfully completing various odd jobs he gets asked to do while on his rounds. These include tasks such as rearranging Peter Fogg's sheep which are currently rampaging around his garden, and picking up a prescription from Dr. Gibbons and delivering it to Miss Hubbard.

You get a bird's-eye-view of the proceedings, each screen showing a section of road plus features of the local landscape,

such as buildings, bridges, trees, etc. Scrolling messages are displayed at the top of the screen telling Pat what to do next. You have to steer the van along the road, the screen quickly flipping to show the next section when you reach its boundary. If you stop at the house of one of the main characters, Pat jumps out of his van and you have to control him with the joystick to perform the allotted task.

First stop is always the Post Office, where Pat collects the mail from Miss Goggins. Each delivery consists of either a number of letters or a parcel. The letters may be delivered singly by stopping the van level with it and pressing the fire button, although with practice you can do it without actually stopping, which saves time! The letter flies out of the van into the letter box if your aim was good, but if you miss you have to make Pat get out and pick up the letter before you can try again.

To make life more difficult there are oil slicks on the road which play havoc with the already rather difficult van steering controls. Also, you have to contend with Miss Hubbard, who's forever wobbling along the village streets on her old push-bike. Driving over her doesn't seem to cause any physical damage either to her, her bike, or to Pat's van, but it does cost you valuable game points! To get anywhere with this game you have to know the layout of Greenhalp, so it's wise to spend some time exploring the roads and finding out where the main characters live. You really need to draw a map too, to help you recall you've mentioned everything.

The Lads, Snakes and Ladders, and Soap games have nothing to do with the main game - they're just there as filler value. The first two are straight implementations of the old favourite board games, playable



## Watch out Miss Hubbard!

by up to four people. Soap is a one player game using pictures of the principle characters from the main game. Each character is split in half at waist level, and their top and bottom halves are scrolled across the screen at different rates. When the two halves of the same character coincide, you indicate Soap by pressing the fire button.

- **SOUND** - the Postman Pat theme music quickly becomes tiresome, but can be turned off and replaced by very simple sound effects
- **GRAPHICS** - the bold, colourful, cartoonish backgrounds and animated sprites are well executed and should prove attractive to children
- **GAMEPLAY** - very young children (and most adults!) will have problems with the controls, but older kids should eventually get the hang of it
- **VERDICT** - a good budget level children's game, but younger players will need help to get the most out of it



Title: **POSTMAN PAT**  
 Publisher: **Alternative Software**  
 Price: **£9.99**  
 Reviewer: **John S. Davison**

# DEMON'S WINTER

Are you experienced enough?

**A**nother successful D&D-type game fromSSI, if you enjoyed Galadriem's *Domains of Arden of Love* and would like something with a little more meat to it, or if you are fan of the Ultima series and still waiting for *Ultima V* to finally appear on the PC, then this could be just the game for you. It is an excellent Fantasy Role Playing adventure set in a town, the same mythical world as SSI's earlier *Guard of Spring*.

You start the game by creating a party of five adventures to investigate the haunting of a small village by a horde of hobbits. You can choose any mix of Humans, Elves, Dwarves, Gnomes or Trolls; you get to 'roll dice' for their Speed, Strength, Intelligence, Endurance and Skill, then you must choose in which of the ten classes from Barbarians to Wizards, and from Thieves to Scholars you wish each of them to belong.

A large window shows you an overhead view of your characters and the surrounding terrain, other windows and menus provide extra information and allow you to drive most of the game by mouse.

The wilderness is enormous, with many different terrain types, infested with a variety of wandering monsters. Towns, Temples and Colleges are plentiful - all activity in these is freely driven. And there are dungeons, full of puzzles, traps, and lots and lots of monsters.

Naturally you only see a single character representing your whole party, but when

you are attacked you get a close up of the local terrain with all your characters and the enemy shown as individual icons. On his or her turn each of your guys can, with the right skills, use their speed points to attack the enemy, move around, cast spells, use magical items, turn undead, pray for

help, loach spell points from enemy magic users or dodge. They can also, if they have the right skills, examine the enemies to see how strong they are or who they are planning to attack. The detail is superb, with lots of different weapons (though no ranged ones), and dozens of different spells.

Battle of woe, against Giant Slugs, Ice Monsters or Pirates are a little different and add a nice touch of variety.

Victory in the fights brings the usual rewards - Experience Points (which you can use at a table to increase your character's capabilities), Gold (so you can buy off the weapons, healing potions, ships, potions, magic, etc. you need to survive), and a random selection of weapons (some of which may prove magical).

It is worth cheating a little on the Gold: always save before using them and make sure that your character gets worthwhile investments in their skills - if not, unless you try again! Intelligence is particularly important since it determines how many skills you can learn. There are over thirty different skills, including five classes of spells and three classes of weapons, exotic ones such as Fire Ball, Summon, and Berekking plus lots of standard ones like Dream Trap and Fireball.

Your quest leads you from the ruins of the village to a hobbit camp, where you discover that darker things may be afoot - it seems that a minor demon was behind that attack, but when you finally defeat him you discover that there is a more powerful demon behind him! As you unravel the plot you will find yourself questing to the far corners of the earth in order to defeat the Demons-God Maligor



and save the whole world!

There are some nice little puzzles that you need to solve with the various artifacts you will find in the dungeons, and you will need to learn how to translate runes if you wish to succeed, but generally, as long as you follow the plot and don't wander off into the scented dangers too early in the game, most of the problems are fairly straightforward. The plot does develop, the world changes, and your characters improve rapidly as the game unfolds - you get a nice feeling of satisfaction as you complete each sub-quest, only to find the next one is a lot harder! Learn how to Wind Walk and you will always be able to escape to somewhere you can buy a new ship!

● **GAMEPLAY** - Lots of depth, plenty to do, should keep your interest for a long time if you are into Fantasy Role Playing. Lots to explore, detailed fights, and plenty of sub-quests make for a good balance.

● **GRAPHICS** - Not fantastic, but more than adequate for this kind of game.

● **SOUND** - Minimal, but adequate for this kind of game.

● **VERDICT** - I thoroughly enjoyed it. As long as you can handle the extra depth and are prepared to study the manual a little you will get a lot more value for your money than a lot of the stuff on the shelves these days!



Title: **DEMON'S WINTER**  
 Publisher: **SSI**  
 Price: **£24.95**  
 Reviewer: **John Sweeney**

# Deja Vu II

(Haven't I been here before?)

**Y**ou're in big trouble, pal! Remember the time when you woke up in the bathroom of that sleazy bar with no memory and found out you'd been framed for Jerry Siegel's murder? Thought you could rest easy after clearing your name? Not a chance! Seems Jerry—who was working for Las Vegas mobster Tony Molone, left \$12,000 dollars unaccounted for upon his demise. Now Molone wants his money and has you figured as the likely, Mr.'s and arrival of his ... it ... friends to "persuade" you to come up with the dough ... or else!

*Deja Vu II* is the sequel to *Deja Vu: A Nightmare Comes True*, the first entry in Acorn Simulations' award-winning series of graphic adventures which includes *Uninvited and Shadowgate*. Once again you play second-rate detective Ace Hamilton, and once again you start off in a bathroom.

This time you've been kidnaped by Molone's thugs, brought to his headquarters in Vegas, and, foot up, tossed in a bath and given a deadline of just 7 days to hand over the missing funds. But to keep you on your toes, one of Molone's boys follows you throughout the game, keeping an eye on your actions and popping up every now and then with grim warnings to remind you how little time is left.

The interface will be familiar from all the previous Acorn adventures. On screen you have separate windows for graphics, text, exits, commands, "self" and inventory. The commands window offers eight options—Examine, Operate, Open, Close, Go, Hit, Speak and Comsume—while the Exits window shows all currently available (and some impossible) ways of leaving your present location.

Most items shown in the graphics window are really "there" and can be manipulated with the mouse by pointing, clicking, dragging and so on. Commands of various kinds can be entered and "opened", bringing up a new window that shows their contents. Suppose remember "opening" the corpse of Jerry Siegel in the original *Deja Vu*?

To get dressed in the opening scene, for example, you can select the pair of pants, drag them to your inventory window and then Operate them on yourself. Select and Open the pants to find your wallet and some important papers. Operate the cold tap on it will to run some water in the sink, and hit the mirror for the thrilling sound of shattering glass.

There are also plenty of shortcuts. Double-clicking on most objects will give you a description of them. One double-click on an unlocked door (or the corresponding square in the exit window) opens it, and a second click takes you through it.

Make sure that you take the pants, trench-coat and cigar ring from the hotel room when you leave, because it lacks behind you and you'll need the items later. Stop first to admire the artwork in the Casino lobby, which may give you an important hint on how to win the game, then head for the blackjack table and look for an old friend (you may have to pay his memory).

Here, for the first time, you get to see the major enhancement in this second *Deja Vu* installment: the cartoon have included some clever animation as found in *Uninvited and Shadowgate*. The dealer may wink at you before he lays down the cards later on, you'll watch the trains arriving, gain at passing scenery through the train window, or see birds flying across the desert.

Speaking of trains, once you've won enough money at the gambling tables you should head directly for the station and travel back to your old haunts. In fact, a better subtitle for this game might have been "A Tale Of Two Cities", since you spend almost as much time in Chicago as in Las Vegas.

Back in Chicago, you'll return to the scene of the crime (changed in subtle ways since the first *Deja Vu*) and visit a number of new locations as well. This time your kill-degrees is dead, so you'll need written messages to get where you want to go. Little by little you'll find evidence connecting



*'the authors have included some clever animation'*

the last money with someone back in Las Vegas, where you must return for the final showdown.

You won't end up any richer, but with luck you may at least escape with your life and if your pointer is on when you finish the game, you'll have something to show for all your work. You'll also find the same kind of tongue-in-cheek humor as in the original *Deja Vu*, and even some of the same characters and locations. The enhancements and more extensive use of search are major improvements, as is the fact that you die less frequently.

There are only a few really difficult puzzles, the worst coming at the end as you try to figure out how to infiltrate your enemies. As before, there is an over-abundance of red herrings, many which do not even really fit and dozens of objects that have no purpose except to clutter up your inventory.

The only drawback with this game is that some commands, "Speak" and "Comsume" for example, seemed totally unnecessary to complete the game and "Hit" is only used in a specialized sense for blackjack. The package comes with general instructions as well as more-than-usable reference cards. So, if you enjoyed the first installment of *Deja Vu* then you should not be disappointed with this one—it's like *Deja Vu* all over again!

**Title:** *Deja Vu 2 (Lost in Las Vegas)*  
**Publisher:** Acorn/Mindscape  
**Price:** \$24.99  
**Reviewer:** John E. Barnsley

# BLOOD MONEY

**B**lood Money is the latest release from Pygmalion and is the long awaited sequel to their previous classic shoot 'em up, *Meltdown*. The story behind the game is that you, a young law abiding American named Sprouble, have entered the ASP "Alan Soltzi", where you must enter one of four worlds and totally annihilate as many alien creatures as you possibly can.

The game basically consists of four worlds, Globo, Gomo, Grepek, and Bruff to do battle in. Globo is the planet of the lowest level of difficulty and will cost you 100 credits to enter. Each successive level beyond this costs 100 credits more than the previous. When you start the game you have 300 credits at your disposal and can enter either of the first two levels. To enter levels three and four you must first complete the lower... much less

challenging levels. Upon entering a "world" you're presented with a very colorful scrolling backdrop over which the animation takes place. Many weird and wonderful creatures will be encountered, both large and small, as you travel through the maze like powers and passages of each world destroying just about anything that moves. Some creatures, once destroyed, will leave behind a credit token, these can be collected and saved up to buy various pieces of equipment for your self or the weapons dumps, which are definitely spread throughout the maze.

The game is basically just a run and gun and incredibly well presented shoot 'em up. As with many Pygmalion games the presentation is stunning!



The graphics are some of the best I have ever seen and the sound and music is also of an incredible quality. Not only is it "good looking" it is also very playable, and offers a number of interesting features including an optional two player on screen facility, this allows two players to fight together against the stronger enemies of the four worlds, which can make progress much easier to achieve.

Overall, I find it difficult to fault "Blood Money". It is beautifully presented, very playable, and of a sufficient level of difficulty to be fun without being too frustrating, as seems to be the case with many recent releases.

## FACTS

Title: **BLOOD MONEY**  
Publisher: **Pygmalion**  
Price: **£19.95**  
Developer: **John Davidson jr**

## SIGHT & SOUND

Absolutely fantastic! The graphics are very colourful and the scrolling and animation is super smooth. Music and sound is of very good quality.

## GAMEPLAY

Addictive and really quite difficult without being frustrating.

## VERDICT

Probably the best release to date from Pygmalion. A truly superb game, both in presentation and playability. Highly recommended.

## FACTS

Title: **APB**  
Publisher: **Sega**  
Price: **\$19.99**  
Developer: **John Davidson jr**

## SIGHT & SOUND

The graphics are of good quality, although the scrolling is very smooth indeed, the sound is nothing special at all.

## GAMEPLAY

I couldn't get on with it at all, it was both frustrating and annoying.

## VERDICT

Not my cup of tea at all.



# APB

per and when you're traveling fast it's a joy in front of the car.

The trick is to police the loan over the offender you want to "nick" and send your steed by pressing the fire button. Once you have made your quota of arrests you must return to HQ and prepare for the next day.

As you progress from day to day if you are good enough you will be assigned missions to catch major criminals or exposed to minor offenders. These criminals include drug users and hookers who must be chased and in some cases forced off the road.

There is plenty to keep you busy throughout the game and there are various "power ups" which can be collected and attached to your car, such as

extra speed or brakes. Also on later levels a gun is fitted to the front of the car to deal with the more troublesome offenders.

My personal opinion of the game is that it is not very good, I found it frustrating to play and not terribly enjoyable. The graphics are of quite poor quality, although the scrolling and animation is very smooth. In terms of sound, the music and sound effects are generally good, although some of the sampled talking speech heard from time to time can be quite annoying if fit. As you can probably tell I'm not of all impressed by APB, I don't think it's worth the asking price of \$19.99, but you might think differently. Try before you buy.

# AAARGH!

**T**he game is subtitled "The Monsters Revenge" and the theme is a reversal of the normal role found in arcade games. As such it is a quite refreshing. It is the role of the player or players since there are two player options for this game as compared to take a monster, ravage a town, obtain the Doc's egg and keep it safe. The population of the towns do not like being trampled and eaten and thus they and several unimportant miscreant insects try to stop you. This is where all the fun comes in, the monster. Is it fat disgusting food or hollow insects. Gigs, con-art people, leeches or burn down buildings and generally create coverage.

Obviously all this work takes its toll and thus much eating is necessary to maintain the strength of your pet monster. This comes in the form of

either fat food in size deflated buildings or burrows on the roof, very noisy but much more feasible.

Of course some places dis-able refusing stations for your breath weapons and some have the eggs of super monsters that deliver a most unpleasant sting. It would seem that these eggs is no more evident in getting the egg, easily keeping it is somewhat harder since the second portion of the game includes a duel with the second monster to maintain possession of the hard won egg. All this is good clean fun.

Melbourne House have produced a game that is fun to watch and although the controls are somewhat unwieldy and on occasion precise control is most frustrating, the feel of a jolly good romp is main-

tained. The sprites are large, colorful and humorous and although the density of your creature is a grey blocky-looking effect it maintains a cartoon view of things. The loading screen is well drawn although the music could be better, on the other hand the scamped monster statements "Food!" or "Power" are excellent and sound as though they are lifted from Scooby Doo adding further to the fun.

I enjoyed playing this game immensely and although it may not a little after time playing the novelty value will ensure repeat play of regular intervals. The premise is different and such originality should be encouraged.



## FACTS

Title: **AAARGH**  
Publisher: Melbourne House  
Price: £19.99  
Reviewer: Damon Howarth

## SIGHT & SOUND

The sprites and backgrounds are well defined and the completed scenes are good. The music, while approximately basic, becomes hard to be defined.

## GAMEPLAY

A cartoonish war with occasional hazard in precise control generally good fun to play.

## VERDICT

A good fat game that is worth putting in someone's stocking.

## FACTS

Title: **GILBERT: ESCAPE FROM DRILL**  
Publisher: Argyle and Argyle  
Price: £19.99  
Reviewer: John Davidson JR

## SIGHT & SOUND

The graphics are very colorful and really much everything has subtle green and slipping from it the music is very good but the sound effects are weak.

## GAMEPLAY

I found it an odd feeling, but to create young children would find it good fun.

## VERDICT

I can't help feeling that this is yet another game where ends up being just a 'task' on the name of the main character.



# GILBERT: ESCAPE FROM DRILL

little less pleased and are apparently green (and silly) with envy.

As Gilbert has been invited back to Earth to do a new television series, to prevent this and further incursions of his already incredibly huge ego the Drillers have removed parts of Gilbert's ship, the Millennium Duffin, and have spread them around the planet. You control Gilbert as he searches for these parts (which is supposed) and have only twenty-four hours to find them.

What you must do is roam around the planet (arcade adventures style) and beat the Drillers of a number of arcade machines which are dotted around the place. These simple games have some wonderful names such

**G**ilbert, the degusting slimy and smelly alien television character has finally made it to the world's computer screens! Evidently Gilbert's local favourite alien now has the chance to spread his revolting humour to the very depths of every child's imagination. The thing is though, no matter how much some people complain, it is difficult not to find some of it very amusing.

There is no doubt that Gilbert is very definitely a cult character with the non-children of the world, and in this game he has returned to his home planet of Drill and is feeling very pleased with himself. Unfortunately, the rest of his fellow Drillers are a

as "Just Right At The Oil Control" and other equally disgusting ones. Completing an arcade game will give you a clue as to which the missing parts of the ship are.

While this may sound a great deal of fun, the game doesn't capture the overall attitude of Gilbert. On TV he has to be seen to be believed, but this game seems to do little more than cash in on the character. The "arcade games" are no more than very simple old games such as Space Invaders or Breakout. The idea had tremendous potential, but it never seems to hold any attention for long enough, and because of this I have not managed to get very far. I'd say at the time I felt I was just moving Gilbert around without purpose, aimlessly trying to give him something to do.



# INDIANA JONES

**T**o the liking and famous chords the loading screen to this spin off game comes up and the faithful reproduction of the sound heralds a game that is worthy of the license.

There is always a danger that the licensed games try to get by on the name of the film and put in scope game play and ideas but this is not one of those sort of off. A four part game if follow some of the major events in the film and does it with the panache that the Jones boys would be pleased to associate themselves with. Even the case protection routine is cleverly embedded in the depths of the game.

Lucky the games are very difficult and with prevailing deadlines I have not completed all of the action but the distance I have gone conveys me the game is well

worth continuing. The first portion of the quarter involves young Indy making to the contact with the Cree and meeting his nemesis in a platform and ladder game which involves a lot of tricky timing problems. The lighting of the level depends on torches picked up on the way and administered in a dash across the floor as in the film.

In the next level, the debut portion of Indy's game life, the case protection is revealed as the choice of doors to the south is left only in the instructions and it all depends on the day date. Successful completion of the arena is a jump to a subsequent new level. The one involves the escape on the ship and the hunt for the Gold coin complete a pick up and search game. Finally the actual hunt



for the Gold is necessary to save Mr. Jones senior but I have not reached the part yet. Each level is introduced by a still frame the film representing the part of the plot involved with that particular level.

I have enjoyed the game and it is of high quality in graphic and music tones, definitely better than previous Indy adventures and it should be enjoyed by most arcade addicts. It is a pity that the early parts are so difficult to come to terms with although were they easy the game may not have the necessary long term appeal. A good game to buy younger members of the family.

## FACTS

Title: **INDIANA JONES AND THE LAST CRUISE**  
 Publisher: **LUCASFILM GAMES**  
 Price: **\$19.99**  
 Developer: **Dorian Horvath**

## SIGHT & SOUND

The sound is a good sample of the film together with strong gun effects, lighting and some effects are also nice.

## GAMEPLAY

Difficult but addictive, the controls are well handled and enjoyable to control is good.

## VERDICT

A good game for those with strong arcade skills or who like the Indy adventures. Probably well worth a look.

## FACTS

Title: **PAPERBOY**  
 Publisher: **EA**  
 Price: **\$19.99**  
 Developer: **John Davidson Jr**

## SIGHT & SOUND

The graphics are very colorful and since the arcade machine, the sound consists of a pleasant city siren playing in the background.

## GAMEPLAY

In my opinion, I too find license, those of you who are experts at the signal will probably find it acceptable.

## VERDICT

Contains not the most modern arcade conversions, but for the signal will enjoy it.



# PAPERBOY

Each "level" of the game is one morning of the week, i.e. you start on Monday and work your way through. If you manage to complete a whole week's deliveries then you move on to the next, more difficult street. At the end of each level or street is a road pit which must be cycled through as fast as possible, leaping over ramps and throwing all the remaining newspapers at targets carried along the side of the track in order to score bonus points.

Paperboy is basically a diagonally scrolling affair with some good graphics. Unlike many arcade conversions it is actually built close to the original, both graphically and also in the way it plays. The arcade machine was difficult,

many people expected the particular arcade conversion to be released on the ST ages ago and have been waiting patiently for some time. It's finally here and it is not bad at all.

You play the part of (guess what?) a paperboy, who must scurry through a typical American suburb singing his paper from his pile to the various houses in the neighbourhood. The map sound very simple.

But to hinder our young hero's progress there are many different hazards he must avoid, such as lawnmowers, remote controlled cars, dogs and pedestrians, all making the deliveries much more difficult.

as is its home computer cousin. In some ways though I would say that this version is a bit too hard. It is very difficult to successfully complete one morning's delivery without being knocked off your title by something or other. So far I have not managed to get past Thursday on the lowest level of play. "Easy Street" and when you get can't get any further with a game due to the difficulty I find it frustrating whether or not it was worth the wait I'm not sure. I was a big fan of the arcade original and while I have brought some of its "magic" to the ST I can't help feeling that there is something missing. It is, however, a commendable conversion from an impressive arcade game and I would imagine that many people will enjoy it.

# HIGH STEEL

The instruction to High Steel seems far too short to convey what seems to be a complicated message but happily the game mode seems offer a couple of attempts and offer a few more tries if found it possible to go somewhere in it.

It is the player's job to construct levels of a building using bricks and girders by planting the girders, climbing it and laying a brick. The task is made harder by girders dropping from the invisible overhead crane and aid by the standard banana skins and unpleasant weather who can kill on contact. It is also necessary to deactivate the loading system of the overhead crane to ensure that apparently mobile buildings are a possibility.

The game can be described as a simple pick up and place. Build your own, pattern and ladder game but

that is really not a fair description. Personally I felt it to be a fast moving strategic game which also needed a swift hand on the joystick. I found the graphics quite enchanting and even though the game is available on popular 8 bits the standard of graphics is high. Some characters appear to have come from memories of old Mickey Mouse and that exemplifies much of the action. The sound effects and sight of the various falling objects together with the shuddering of the builder add to the charm of a very good game and while I do not see it ranking with the so called Mega Games, this one has a charm and feel all its own. It is probably a good thing that the screen is so helpful as it is since the instructions can

lead to confuse the user and indeed since the basic concept is grasped that only one thing at a time may be collected and that girders can only be securely planted on empty spaces the game is well explained.

Both sound effects and music are pleasant and adequate to the ear and some spot sounds are in fact essential to the enjoyment of your own games. This is another good and original game that deserves a great deal of success. I found it hard to stop playing and the addictive factor was high. A game that could end up keeping you occupied much longer than your first impressions lead you to believe.



## FACTS

Title: HIGH STEEL  
Publisher: Screen 7  
Price: £19.99  
Developer: Damian Hewarth

## SIGHT & SOUND

Sound is more than adequate while the graphics are human and not cartoonish.

## GAMEPLAY

Fun, fast and addictive. At the level set to test the load pressure and fun. Good Apple II recognition too.

## VERDICT

An original game well worth trying. Apart from the instructions, wonderful!

## FACTS

Title: SHINOBI  
Publisher: Mega Games  
Price: £19.99  
Developer: Damian Hewarth



# SHINOBI

before meeting my fate there did not seem to be any option to progress past level

four except for the probability of starting again at the beginning and waiting longer the second time through.

The screens are colorful and can be quite busy, and it seems that your rings has an inexhaustible supply of them (although these are promoted to more dangerous missiles as bonus points are awarded for saving children. Some of the more exotic parts of the game come from the use of rings magic) to help the hero escape from lethal problems and also the relative inaction of the opposition unless they are being directly confronted. The only real danger comes from the men with guns who are quite capable

off screen. The two level jumping bonus which enables the fighter to float and kill on multiple levels using with some timing and care and can prove to be a lifesaver. Shinobi is probably as good as many of its rivals and certainly better than others but on the other hand it does not generate the feel of the very best of the genre and so I found it slightly disappointing the only detail that describes the kidnapping of the children shows more promise than is actually manifested. The game is well made in its construction and as such probably reflects the original quite well. Where it falls in special effects, as in the help required, does it does it very well but the rest of the game is fairly pedestrian. Maybe a game of interest only to the enthusiast.

## SIGHT & SOUND

The sound mainly works on spot effects and is very lively. Clean, the sprites are large and adequate and fairly strange.

## GAMEPLAY

More than adequate although at times a little silly and not as quick as it could be.

## VERDICT

Not bad as far as it goes, better than many although not the best, try it first.

This is a BRCA coin-up conversion and so will be familiar to those of you who found amusement arcades. The plot is quite a simple one of saving the lost children from the mad scientist as one of the first school's most brilliant heroes. The game proceeds in the traditional manner with a good response to the joystick and some very strong spot effects. The screen scrolls slowly and some of the action can be a little jerky, although in the main the whole piece is of an acceptable standard.

It is disappointing that there seems to be so few levels as although I only managed to reach the third location.

# JAWS



**B**eing a "Jaws" fan, I was embarking on an enjoyable action strategy game as I viewed the impressive loading sequence ... in a cinema, with the familiar local lines of the Jews. Firms pounding out and the scene of a man happily digesting an unwary swimmer! However, I'm afraid that - for the - was the best part of the game.

You play the part of Brodie and the object of the game is to hang on to your job as Army's Chief of Police, by keeping as many beaches open as possible and the swimmer death toll of a minimum, whilst searching for the equipment and special weapon to deal with the shark. You must first recover the four sections of the gun and the special bullets from the noise-induced caverns below the reef.

Much of the gameplay involves the deployment of an aquatic mine in a submarine or a contraption, peeping missiles at 60 and sunny. When your special weapon is assembled, one member of your party has to be offered to destroy Jaws with the weapon. The chosen member then has a time limit of just 60 seconds or so and four special bullets to do the business.

There is a certain strategy element involving the opening and closing of several beaches, but this is very basic and makes very little difference to the player's progress. Four degrees of success during the game is presented by way of a "Majormeter", which indicates the mayor's reaction

to beach closures and deaths. Sounds simple, yet the game lacks playability and sustained interest. The invention is jolly and uninteresting with the sound effects - apart from the loading sequence - being very basic indeed. The puzzle does take a little when old Jaws enters your current playing screen, but that's about all. The Jaws concept, visuals and subsequent film, was a huge success and the computer game should at least equal the excitement generated. Sadly, this is not the case and with software of its price we have come to expect better. A great disappointment.

## FACTS

Title: **JAWS**  
Publisher: **Biosware 7**  
Price: **£19.99**  
Developer: **John B. Bernley**

## SIGHT & SOUND

Poor background graphics and history animation. Apart from the opening sequence, the sound is out of place for a 16-bit machine.

## GAMEPLAY

Shame game is initially but an excellent one thanks to the game progression.

## VERDICT

At its price, Jaws isn't too good a value.

## FACTS

Title: **RIK DANGEROUS**  
Publisher: **Firebird**  
Price: **£24.95**  
Reviewer: **John Davidson jr**

## SIGHT & SOUND

The graphics are coloured, detailed and well drawn in an amazing realistic style. Sounds are of high quality samples used to good effect.

## GAMEPLAY

One of the most enjoyable releases for the ST I have ever seen. It is totally addictive.

## VERDICT

Absolutely Brilliant



**T**he latest release from Firebird is possibly the most enjoyable game I have played in a very long time. It is not normally a candidate for labels and platform style games, but this is most definitely an exception.

The year is 1948 and you play the part of Rick, the Indiana Jones style intrepid explorer, who must move around the various tombs and temples armed with a revolver, dynamite, and his "tag stick" collecting treasure. Throughout the levels Rick will encounter a large number of traps and guardians who are out to stop him from completing his mission, which is to solve the puzzles and collect all the treas-

# RICK DANGEROUS

sure he can safely lay his hands on. Throughout the game there are many amusing little moments which add to the overall enjoyable "adventure" of the game. Rick Dangerous is a game which is genuinely fun to play, something which cannot be said about many releases over the last couple of years. What the idea behind the game is not exactly original the way in which it is delivered is truly superb. There are few missions to complete each consisting of fully scrolling screens and puzzles. Rick's reporting takes him from Aztec temples to Egyptian tombs - all of which have cunning traps and puzzles which must be overcome using the few resources at his disposal.

The graphics are really su-

per, all of the characters in the game, although very small, are very well detailed in an amusing "cartoon" type style. The sound effects are of a simple and the use of excellent effect and some, coupled with the graphics and animation, could only be described as fantastic. "Cute" check out the little Aztec war-ri-ors when you shoot them!

There isn't enough room here to say how much I enjoyed the game. It is not very often that a game comes along which I take the greatest pleasure in reviewing, but Rick Dangerous is definitely one of my all-time favourites. It is simple but incredibly playable, while remaining challenging enough to guarantee your addiction to it. If only more games were of the calibre of a release would be much more fun!

## BUFFALO BILL'S WILD WEST RODEO SHOW



**B**uffalo Bill is another entry in the age old "multi-event" sports game format. The particular incarnation, as expected from the title, is based around a "Wild West" theme. It includes six events in all, ranging from brute throwing to steer wrestling. The game comes on three disks and the different events are controlled using either the joystick, or, in some instances, the mouse.

Such a large game really needs more space than available here to do it justice so I will just briefly take you through each of the six events. The first event to load is the brute throwing. This can be controlled with the joystick, or more accurately with the mouse. The view of the proceedings is a 3D view from just behind your contestant's right arm. In the background is a large rotating disc onto which

is fed a young madden. You control a cutter to aim your throw, which can then be thrown by pressing the release/joystick button. The closer the throw is to your contestant the higher score you receive.

The next event is the bull shooting, which is divided into two separate parts. The first has you aiming your sights to aim your shotgun at targets which pop up around the desert landscape. Part two has you shooting bottles, which are blown into the air by your contestant.

The events that follow are of a very different style to the first two. Steer-riding has you sitting astride a mean bucking bronco, on which you must desperately try to remain seated. Stage Coach rescue involves chasing a stagecoach,

which has been hijacked by an Indian. You have to drive the stagecoach and its occupants by climbing onto the top of the coach and locating the Indian senses. The third event, calf roping, involves riding along on horseback trying to lass a nimble foaled calf. Finally, steer wrestling has you battling away trying to wrestle a steer to the ground.

The graphics throughout are nothing short of stunning. Each screen obviously has far more than sixteen colours and all of the pictures and giffes are drawn to an extremely high standard. In terms of sound the game has some superb-sounding special effects, but the music is quite painful in places.

### FACTS

Title: **BUFFALO BILL WILD WEST RODEO SHOW**  
Publisher: **THUNDER**  
Price: **£19.95**  
Developer: **John Bonkton plc**

### SIGHT & SOUND

The graphics are incredible. The colour display on screen is simply astounding. Music is fine, although sound effects are great.

### GAMEPLAY

A bit tedious and not very addictive.

### VERDICT

A very good graphics demo if there ever was the quality of the ST's graphics capabilities.

### FACTS

Title: **CHUCKIE EGG II**  
Publisher: **PAK and Choice**  
Price: **£19.95**  
Developer: **John Bonkton plc**

### SIGHT & SOUND

Good graphics to begin with giving way to some fairly slow and somewhat sparse but fine music in later sections of the game.

### GAMEPLAY

Caught while the game is well thought out, the joystick control will take a bit of getting used to, but once you have got it then it plays well.

### VERDICT

A game for the hardened addict. If you aren't a real challenge, this will give you one but even then excellent players might soon give up.



## CHUCKIE EGG II

negotiating a maze guided by creatures that pose a serious problem if you

**T**his is a sequel to the original Chuckie Egg game that will involve on the Atari 8-bit and various other computer formats. The "misadventures" of "Mr House Egg" has now moved into the manufacture of chocolate eggs. He has to collect all the ingredients to make the "Choco Egg" and then the components of the toy that go inside them.

Before doing these things in the factory, you have to actually get into the place first. This is a challenge in itself. You can soon work out what you use to defeat the guard dog protecting the entrance to the factory, however, getting to the object involves

skating with a joystick are not up to scratch. Once inside, you move along the platforms and up level down ladders collecting and using the various object-scattered around the reputed 100 screens.

The game, as far as appears to be of very low quality presentation, considering the ST's capabilities. However, when you see inside the factory, the simple ladders and platforms are set against more impressively drawn background pictures. The sound consists of a repetitive, annoyingly repeating, bouncy little tune, which fortunately can be turned off, only to reveal the equally irritating sound effects.

After spending several sec-

onds testing out the game, I still find more aspects concerning its playability on frustration as on the first occasion I played it. The precise control of Mr House Egg's movement around the screen is ultra-precise and extremely difficult. He has a really habit of bouncing into every obstruction around the place. Fortunately, you start off with more than the average number of lives for a game of this type. My overall opinion is that Chuckie Egg II is a visually impressive, if a bit of the few recently reviewed titles that is genuinely frustrating. It is a long time since a game has made me want to put the joystick through the screen depending on the ease of pain you are. This can be good if you enjoy a real challenge, but should be avoided if you are a laid back.

# TANKATTACK

1. **Tankattack is NOT a computer game in the normal sense. It is a computer/board game, where you and your friends play a board game with lots of little plastic tanks and ammoed cars on a colorful board. The computer acts only as game-master, making combat and "throwing dice" to decide on each other such as the weather.**

2. **There is no solo option. You cannot play against the computer - you need 2+ people to play the board game; the computer just helps run the game and provides some pretty pictures - it never actually plays the game itself.**

At this point I suspect most of you will have lost interest. I can't really blame you! Especially when you realize that the computer doesn't even keep track of the position of your pieces on the board! This means that YOU have to work out all the rules regarding movement across different types of terrain, YOU have to work out whether or not it is legal to fire on a particular enemy piece, and then YOU have to tell the computer which type of tanks are fighting and at what range! The least I would have expected in a game of this stature was that the computer would have done all these things to save you all the hassle and to enhance the movement/sound rules, so that you didn't have to worry about details like whether you are in line-of-sight of your target, and whether or not a particular tank has fired yet on this turn.



**Title:** TANKATTACK  
**Publisher:** CDS Software  
**Price:** £24.99  
**Reviewed by:** John Savary

The game itself is a fairly standard war game played on a map of about 22 x 24 hexes. There are some rivers, mountains and villages which affect your ability to move and the total width of the front nations has two Repair Depots and a fuel store in a Rebuilding Ford. There are predefined alliances

between Antiochia and Kasabla, and between Isopoc and Calidava, so even with two players there are only two sides involved - you are not allowed to attack your allies. Each player gets one or two coloured divisions to deploy, each consisting of 2 Light Armoured Cars, 2 Medium Armoured Cars, 2 Light Tanks, 1 Medium Tank, and 3 Main Battle Tanks. (You tell which tank it is which by counting the number of plastic dots on the tank!) So, if the computer doesn't do any of the tactical head work, what exactly does it do for you? It shows you some nice graphics - the icons which you use are animated - a very nice touch! It works out what the weather is like and keeps track of how many units you have left in action (or being repaired/rebuilt) and also your morale. It uses this

data to decide how many movement points you get on each turn. For each fight that you tell it about, it shows you a nice animated scene of your tank grinding across the screen and firing at the enemy, followed by an on-screen printout of the result (at which time it may allow you to send a tank for repair), and it shows a page of a newspaper at the end of each round giving some indication of the state of the war and the weather forecast, complete with meteorological charts!

Unfortunately there are a couple of problems with the implementation of all this.

Every time you enter a command to the computer, or it wishes to report on an event, it insists on playing it back to you on a simulated teletype for confirmation, waiting about eight seconds each time. The animated fighting sequences have some nice graphics and there are a few



minor variations, but basically they are similar every time that they seem get very tedious. The newspaper looks good to start with, but obviously has a fairly limited set of standard phrases to juggle with and the novelty quickly wears off.

And there are a few bugs: e.g. the newspaper sections are often garbled or appear as if a repair is complete but you had two identical tanks being repaired - doesn't identify which one is now ready, and despite the fact that there are five different classes of tank it doesn't ask you which one you are using when you attack the enemy HQ (the object of the game) - whereas it needs to know to resolve any ordinary battle!

If you want a good Tank Board Game then I suspect there can be better ones on the market than this that don't need a computer, and the implementation on the computer is so slow that you could throw your own dice and look up a Combat Resolution Table a lot faster!

- ◆ **GAMEPLAY** - Fairly standard war game - I personally did not feel enough use of the computer had been made to make it worthwhile.
- ◆ **GRAPHICS** - Excellent, but limited - no interaction.
- ◆ **SOUND** - Minimal effects.
- ◆ **TEXT** - Could have been a lot better. Probably not a bad little computer-aided war game, if that's what you're after.

# THE STOS COLUMN

A full game to type in, a useful subroutine, lots of news plus a review of a new flight simulator program written in STOS and more besides!

Peter Hickman has been busy!

This issue's column, is a real mix-mash of news, reviews and type in listings. Since the last issue so much has happened with STOS it's hard to know where to begin.

## FIRST THE NEWS

Chris Payne (marketing manager of STOS) has sent me the latest issue of the STOS User Club newsletter and what can I say except it's great. I was one of those cynics who really did not believe that Mandrake would be supporting STOS for very long so I never even bothered to send off my registration card, which was a great mistake because the newsletter is both well written and packed with useful information, to bit like this column!!! So if you want more STOS info than I can provide in these few pages send your cheque and

postal order for ten pounds (that's for six issues) off to Aaron, Fothergill who is the new editor of the newsletter (his address can be found at the end of the article next to mine). The release of AMOS (the Amiga version of STOS) has, also, been delayed until January, I have seen the specifications of the new language and without trying it too much AMOS looks pretty mindblowing.

What next? Ah yes, more news. Mandrakes are hoping to launch various new STOS products over the next few months, these have been designed to complement the existing STOS range and allow you to add some fancy bits to that neat mega game you are writing (you are writing a mega game I assume?) Seriously though the first release is the STOS Compendium which contains four of the top entries for the recent STOS competitions (including one from Aaron, Fothergill), each game has been compiled but the source code will be on side two of the disk so everybody can observe, deconstruct, eat up and generally mutilate the games to suit their own taste. The second announced release is STOS Musician, a full featured music editor similar in design to programs like the Music Studio by Activision (only much better), this editor will run as an accessory and will include a MIDI input option.

By spring '90 Mandrake will also have a version of the VHS ST Digitizer (by Storm Productions) with all accompanying software written in STOS, imagine grabbing video images and turning them into sprites for their forthcoming mega game. What last but not least is STOS 3D which (surprise surprise) is a 3D extension for STOS and includes features such as full animation and collision detection for any 3D object. Oops, I almost forgot Stephen Hill (author of the pretty ok, not too bad, better than most I've seen, STOS manual) got a book coming out it should be in the shops as you need this first... GAMB MANDRKE MANUAL, STARS ST and STOS BASIC, it will be published by Sigma Press and has a promotional price of £11.95, the question is will it be "big" indeed? As these products become available I will be doing full reviews including a VIM review for memory's sake based on how badly you need these extra's in order to write decent software. The only thing is I'm going to

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**GUARDIAN - See also the table on the opposite page**



# PROGRAM

include the ability to pull out of your wrecked phone (useful if that ever happens), extra weapons, turbo-accelerations, you can even collect a falling tin ceiling-sucker (provided) to put out any on-board fires.

There is so much that has been put into *Space Invaders Plus* it really does represent a good buy. It's no longer just for the nearly five quid either. At £11.98 (£9.98 for STOS club members) this game represents great value for money. If you want to see what can be done with STOS send those cheques and P.O.s off to Shadow Software (address at the end of the article) now, and we'll see what our customers really think of our brand of home frustrating games.

## MAESTRO PLUS

In the last issue Damon Rowboth did a review of STOS Maestros, unfortunately he did not have the Maestro cartridge so he could not do a complete review of the whole package. I recently went to the PC Show at Earl's Court in London and managed to get one of a very reasonable price to bring me the bits missing from Damon's review.

The cartridge itself is a scaled 'nearby Atom game' box and contains a very compact Atom system and is about 1.5mm deep as it does not suffer from the all too common cartridge design problems. Once plugged in the unit looks almost like part of the ST as if you are into office/industrial coordination this ones for you. The sound is input via a single standard female phone socket, but unfortunately there is no audio out socket on this version of the Maestro cartridge. As yet I have not run compatibility problems with any software that I regularly use so it gets full marks there, and just to close up one point put forward in Damon's review the cartridge does not work with any other computer software (unless you know different).

The pieces of software that Damon could not try are really just king on the table of Maestros. The disks programs lets an incoming sound go through the TVMonitor speaker but also samples it and plays it back straight afterwards. This produces a weak effect somewhat similar to hearing two identical records playing at about the same time but with a very slight delay between them. The Phases program is not quite as fancy as disks but gives a sweeping effect to all sound that is input, some really speedy sound effects can be achieved with it, unfortunately the graphical front end of Phases lets it down (here it's bad).

Now for the real sticky gilly, just how well does Maestros perform compared to another device? Well I am currently work-

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## Program 3 - An input routine

ing on some educational software (logically they're interested!) where samples provide an integral part of the communication link between computer and student. Before Maestros came along I was using a popular sampler of the printer port variety (the VISIBILITY format one) and in order to obtain an audible speech quality I had to sample at around 16KHz, the Maestros cartridge managed to come up with a quality very close to the 16KHz samples of between 5KHz and 7KHz which resulted in a typical memory saving of about 1.5% - 80%.

Although my tests were totally non-scientific and only produced over a period of

two hours I think my results are pretty conclusive. Maestros Plus is the best sampler available for STOS owners and gives excellent quality samples, unfortunately it is slightly expensive compared to the other STOS products, so my overall VTX rating is 80%... If you can afford it it's cheaper than New Atom (they'll rush out and buy it).

## A TYPE-IN GAME!

Time for the programs, in the last issue I said that a game might be appearing in these pages, well it can now proceed to present - Guardian one Programs 1 and Table 1). The program is really a four boxes game which you can play with just a few up, it involves guiding a little round ball type creature (a robot, but not a real electric sports car) the goal!

Enter the listing as follows:

3) Load the INPUT.R3C necessary from

**READERS OFFERS**  
on STOS BASIC and  
other STOS accessories  
order form on page 48



- your STOS backup disk.
- Enter LABEL 1 and save it as CLEAR-DUMMER.
- Type in PROGRAM 1 and then type LABEL GUARDIANARE and the sprites will automatically load into their correct bank.
- Reboot the program.
- Run it.

## HOW IT WORKS

**LINE 40** is a standard 'clear the screen' line that should be used in most programs.

**LINE 50** reserves a temporary screen which will be used to plot the sprites initially before transferring them to the screen.

**LINE 60** clears the screen.

**LINE 70-90** sets the variables for the initial positions of the player (X,Y), the guardian (XIN, YIN), and the first object (XOBJ, YOBJ).

**LINE 110-130** tell STOS to use sprites 1 and 2 as the electric shocks, where to move them around the screen, and finally how they should be animated.

**LINE 131-170** plots the sprites in their initial positions on screen 2 (invisible to the player), the screen is then swapped with the one that is being displayed and the sprites appear initially with no flicker.

**LINE 180** marks the internal timer.

**LINE 210-240** read the joystick and increment or decrement the variables holding the players position by +1 or -1.

**LINE 241-270** if the player moves left then move the guardian left, if the player moves right move the guardian right only the guardian moves one pixel further than the player with each move.

**LINE 271-320** if the player goes off the right of the screen move it onto the left hand side, if up then make it appear at the bottom etc.

**LINE 340-370** prints the sprites in their new positions on the (invisible) LOGIC screen 7 and then swaps it with the screen being shown.

**LINE 390** tests to see if anything has collided with the 144k border around the player and puts its value into the variable HIT.

**LINE 400** tests to see if the ball has been hit, if so the ball is moved to another position and the score is incremented.

**LINE 420** repeats the whole thing until the player hits something nasty or the timer reaches 1000.

**LINE 430** decides whether the player ran out of time or got killed and prints an appropriate message.

**LINE 440** prints the score.

The way Guardian was programmed certainly wasn't very efficient but STOS is so fast my coding does not have to be perfect. There are so many different ways to get

good fast smooth animation in STOS and that was just one example, perhaps you could provide some more?

## AND AN INPUT ROUTINE

Have you ever used a really good program written in some language or another only to find it has been let down by the way data is input, you know the sort of thing a question mark on the screen and if you press returns without typing anything it throws you out of the program with a nasty error. If you do not want that to happen to your programs then look no further, Pete is the man.

The second (and last) program for this issue is a user definable input routine, it's especially useful for educational software (check out Treasure Search). Go type in PROGRAM 2.

## HOW IT WORKS

**LINE 100** this one clears the screen (remember!)

**LINE 101-120** set up the variables needed for the routine.

**LINE 120-130** asks for your name.

**LINE 140** calls the routine. The input data is returned in the string INPUT.

**LINE 150, 160** reads out where to place the text and prints it there. It would have been easier to use CENTRE 'HELLO' '4000'.

**LINE 6000-6050** moves to where you want the text to go and clears a space for it.

**LINE 6000-6100** print the name and makes sure the key being pressed is an alphanumeric. If you wanted to extend the range of characters allowed you would have to change line 6120.

**LINE 6140** handles the delete key.

**LINE 6160** loops reading until the return key is pressed AND something has been typed.

**LINE 6180** clears the screen of the input.

**LINE 6260-6300** read the keyboard until something is pressed, the value of that key is then stored in the variables SCANPRESS and PRESSKEY.

## PROGRAMS WANTED

I still want your STOS programs for the P.D. library and would like to include in the columns, but don't forget to include an L.A.E. where you send me your disk otherwise it could be quite a while before you get them back. By the time you read this there should be quite a few new STOS public domain disks in the PAGE 5 library, including a disk with all the STOS programs from issues 19-40-41 and an educational disk with software called Treasure

Search (by me) and Multimed (by Jim Hewlett) on it. Write to Page 5 Publishing for full details.

## A CHALLENGE

Challenge time, loads up all those people who think they can write a small assembly language program that will change the value of a colour register several times a second to give the impression of loads of scrolling colours on screen (a bit like the old Atari rainbow effect on the 8000). First prize to send me such a program will receive a collection of STOS public domain programs. Oh and it must be possible to post the number 10-15 of the colour you wish to randomise to the reader.

That's about it from me this issue, and if you are wondering what happened on the PC show this is it - NOTHING! Mandarin were not there (and I don't blame them, it was a bad booking). My thanks go to Chris Pearce and Aaron Fedorberg for being all round nice choppers and getting all the stuff to me before New Year (and I'm afraid). Next time I want to start presenting shorter routines that people can include in their own programs, things like frame input routines, graphical effects, sound effects, anything reasonably small that can be used to jazz up a program, so if you have any programs like that send them to me at the address below.

**KEYSIBBE PLUS** is available for £22.95 from SHARROW SOFTWARE, 1 GOWER ROAD, WINDING GULLY, BARNSTAPLE, NORTH DEVON, PL22 8JW.

Anyone wishing to join the STOS CLUB should make me a cheque or postal order for £10 payable to Aaron Kothariell (STOS CLUB) and should send it to the above address remembering to mark the envelope STOS CLUB.

**Write to Peter Hickman of 36 WORMHOLE ESTATE, WORMHOLE ROAD, LONDON W12 0LX**

## STOS FROM PAGE 6

There will be at least four new STOS disks added to the PAGE 5 LIBRARY this issue including a disk of all the programs published so far to the STOS column and Peter Hickman's educational program Treasure Search. If you do not already receive our catalogue update please write or telephone us on 0783 210038 and ask for a copy which will give you full details of these and other disks.

# The RESOURCE FILE

where to find support for your Atari

The Resource File is a service provided by PACE to help Atari owners find out what information, help and supply. An entry in this feature does not necessarily imply any endorsement by PACE. The editors do not know who else in America is being supported and there are many who have suggested that they be added to this list. (Being cheap) and readers are advised to check for themselves to ensure that the information is still correct, this would not only satisfy you but also ensure that the information is not out of date or for some reason that you really don't want to read.

## RETAILERS

### ATARI WORLD

15 Lower Street,  
London  
W1P 0JL  
Tel: 01-254 8943

### BRIDGE TO COMPUTERS EXCHANGE

11, Abchurch Lane,  
London EC4N 3JF  
Tel: 0875 13688

### COMPY'S ADVERTISING DESIGN

14, Abchurch Lane,  
London EC4N 3JF  
Tel: 01-404 1188

### COMPUTER CENTRE

25, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### COMPUTER CENTRE

17, Madley Street,  
London W1P 0JL  
Tel: 01-254 8943

### COMPUTER CENTRE

11, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### COMPUTER CENTRE

17, Madley Street,  
London W1P 0JL  
Tel: 01-254 8943

### COMEX

11, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### CLARKE'S COMPUTER CENTRE

11, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### COMPUTER CENTRE

17, Madley Street,  
London W1P 0JL  
Tel: 01-254 8943

### COMEX

11, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### COMPUTER CENTRE

17, Madley Street,  
London W1P 0JL  
Tel: 01-254 8943

### COMPUTER CENTRE

17, Madley Street,  
London W1P 0JL  
Tel: 01-254 8943

### COMEX

11, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### COMPUTER CENTRE

17, Madley Street,  
London W1P 0JL  
Tel: 01-254 8943

### COMPUTER CENTRE

17, Madley Street,  
London W1P 0JL  
Tel: 01-254 8943

### COMEX

11, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### COMPUTER CENTRE

17, Madley Street,  
London W1P 0JL  
Tel: 01-254 8943

### COMEX

11, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### COMPUTER CENTRE

17, Madley Street,  
London W1P 0JL  
Tel: 01-254 8943

### COMEX

11, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### AMC

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### A.C.C. USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### A. C. O. (IRELAND)

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### BIRMINGHAM USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### BIRMINGHAM AND FOLK AIRS USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### BOY T. EDMUND USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### CONCRETE ATARI USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### CONCRETE

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### Falk (Falk & South West) Group

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### MEMBERSHIP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### THE GASTRO CLUB

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### LACE (LONDON STARS) COMPUTER USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### LOU'S (LONDON USER GROUP)

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### LONG VERA VALLEY ATARI USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### MACLENNAN COMPUTER USER

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### NORTHERN ITALY STARS

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### NOCHSAL STARS COMPUTER USER GROUP (N.A.A.U.)

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### OSWALD

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### ST USER CLUB

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

## USER GROUPS

### EDMUNDS USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### E.W.A.L. (GOSWELL WEST STARS USER)

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### FORBES USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### FORBES USER GROUP

15, Upper Street,  
London N1 1UP  
Tel: 01-253 5555

### FORBES USER GROUP

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