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October/November

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## TOP US SOFTWARE

Crain International, who advertise in this issue, are now importing a selection of the ICD range of 8-bit products including the Printer Converter at £29.99, the P/B Converter, US Decoder, Artisan and SPAC'85. They also have a nice little catalogue detailing other products currently being imported which now arrives mainly on the productivity side of the SL/SE with hardware from Newell Industries, such as Drawings, Printing and Converter which gives full 80 column capability plus memory upgrades and other enhancements.

On the software side Crain have a number of programs that most users will not have heard of such as Billing Puffers, a comprehensive billing program, Membership Program, to keep membership records and produce mailing labels, Reformater Designer for producing circuit diagrams. Other programs that have not been available for some time include the database programs Data Printer and another database called Super Database 1 & 2 which allows you

to create any number of master databases from the main program, all of which can be run independently. The Crain product range is relatively small but contains programs and hardware that you will not find elsewhere, give them a bit of a nudge.

## NEW INTERFACE

With printer interfaces in short supply since Printer's decision not to continue with the ICD interface, now of a new Converter interface is good news indeed. Derek Firth hopes to have available shortly an interface board requiring no soldering that can be installed in your SL or SE. Expected retail price is around £35 but give Derek a ring on 091 954 0296 for further details.

If you want to take a look at the projects that Derek is into and also pick up some printer hangers - he will have a stock of 1027 and 1028 printers available - pop along to the Alternative Micro-Store where Derek will be exhibiting along with SPAC'85. He also stocks and prints their Group, Callisto and others.

## DON'T RUIN YOUR ATARI!

We recently received a few examples of a new little device that will set you back a mere £1.00 per model save you a fortune on repair bills. Just a piece of high-density foam that cleverly designed in hard plastic moulding caps, standard color pens, silver pens or just markers on your desk with no chance of them being accidentally knocked over. The device can be for standing or stack down to your desk.

It's called THE GRIPPER and should be available at places like garages etc. but our writer's name was kindly, if you want to find a stockist give the manufacturers, Invention Ltd, a ring on 071 200-0918.



# CALLISTO COMPUTERS

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PRICE £4.99  
ICD 100

### ICD Cassette Player £29.95

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Black £29.95 White £39.95 per lot

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# Mailbag

Got a point  
to make?

Got any  
questions  
to ask?

Write to  
Mailbag  
P.O. Box 54  
Stafford  
ST 16 1DR

## PORTFOLIO CONNECTION

I have the following at home, MODEL 8042 LC10 printer, IBM interface and modem. Because I do a lot of travelling away from home I would like a pocket computer such as the Atari Portfolio. Could you help me with the following questions? Would I be able to type in settings from PAGE 8 in the Portfolio? Could I then transfer this data in any way to my computer at home, either by TARIENLE or via the interface? Could I do the other way round, i.e. send appointments, and addresses to my home computer via the Portfolio database?

Chris Holton  
Hilleshugh

We have had several enquiries along these lines recently, regarding the Portfolio and the Palm Organizer. It seems there is no reason why you cannot transfer data between the 80002 and any other computer, given the right software and connecting cables. You will, of course, need an interface on the 80002, such as the 8042 or PLE Connection. Then you need a cable to connect the interface to your other computer - this could be the first of your problems. The only ready-made cable that we know of will connect the 8042 to an ST or IBM but you can not state if this will connect to the Portfolio or Palm, so you may need to have a cable made up. You next need some communication software on either end. For the 80002, there are public domain programs available for disk 28889 contacts Kern and Andrews) and there is

a communications program on the Palm file. Once you have all this, you should be able to transfer data both ways without problems.

Typing in program settings should be possible, but you will not be able to access the Atari 'CONTROL' characters in the Portfolio as will need to substitute these characters and escape them when ported over to the 80002. Settings transferred from another machine should be in ASCII format and need to be entered into the 80, with the 80002 connected and then accessed using PAGE. Transferring data out from the 80, should also be in ASCII so you should ensure that any database you use can support this straight ASCII format.

All this should be possible but we have not tested it. The main subject of transferring data to other computers, especially portables, would make an interesting article and someone reading this may have done it. How about writing the article?

## MEMORANDUM

There is a slight error in my MEMORANDUM program published in issue 45.

The label in line 1000 must be changed to N=160 otherwise the first record of all can't be found if you type the first letter of that record in the Search mode.

Robert de Lottin  
Belgium

## 1050 REPAIRS

I shall be most grateful for your help, please. I have a 1050 disk drive which is in need of attention but so far have not located a local repairer. I can get to Bath, Bristol or Exeter if you

know of a repairer in these areas.

D. Saunders,  
Devon

Repairs for 8-bit products are rare, but need for batteries and most jobs will almost certainly have to send their computers and drive to us. There used to be a repairer in your area called Dave Mace Centre but we are not sure if they still repair 8 bits, you could give them a try on 0790 252208. The only other repair service that we know of currently is offered by David Price who has an office elsewhere in this issue.

## COMPUTERHOUSE WARNING

I am writing to complain about one of your advertisements, Computerhouse UK, 24 months ago I purchased an EPSON disk drive from them which became faulty after only 3 weeks. For six months now I have been trying to get them to honour the guarantee but they refuse to answer my letters I write on this matter. Could you please therefore consider very carefully any future advertisements they place with you or at least warn your readers about this company. I am trying desperately to get Atari to take responsibility but this seems highly unlikely as I purchased the machine from Computerhouse. It therefore looks likely that I shall have to bear the cost of any repairs needed. Be warned.

D. Baynes,  
Luton

We have not taken any advertising from Computerhouse since the end of last year and it just they have not got paid as for the last advertisement they placed. We are currently in the process of suing the company for non payment but as they have failed to respond to the summons it is less likely that the judge will have to be sent to. Computerhouse never

cover every kind of interesting advertising copy on time or paying no less (or lower) than full money than the ad companies about them over the years. Actually there will be no further advertising and readers are assured about responding to reader advertisements.

## UNFINISHED

### BUSINESS

I own a **SHR** and **XC12** tape reader and enjoy great imagination but I have a problem. I am a slow typer and it takes me ages to write programs or type them in from magazines and I wondered if there was a way of writing some of the program I am working on and saving it and being able to load an uncompleted program. In even if I shut off the computer I can reload the unfinished program and carry on from there.

**Quintinus Ashik,**  
Hemel Hempstead

There is absolutely no need to complete a program before you save it, indeed it is probably able to save several "incomplete" sections as you go along in case there should be a power failure or other problem with your computer. All you need to do is **SAVE** or **SAVE** you listing on any time, it doesn't matter what stage you are at. The program is written in memory and you can save it again before you have typed some more. If you want to shut down the computer, just **SAVE** or **SAVE** the listing and then **LOAD** or **LOAD** it again when you switch on. You can then carry on typing and the whole program will be in memory. It is simple, just save whatever you like, load in unfinished programs and carry on typing.

If you have a very long listing that you would prefer to split into sections then you can save it in a different format and combine the sections later. If you use the command **LIST**, such as **LIST "C"** or **LIST**

**"D:filename"** then the program is saved to a file that can be combined with other program names or parts of programs. In this case you would type say the first half of a program and **LIST "C"**. You could then switch off and on again and type in the second half again saving this with **LIST "D:filename"** or **ENTER "D:filename"** and then enter the second listing using the **ENTER** command. The two listings will be combined into one. The only thing you must be careful of using this method is not to use the same line number in the second listing since this will overwrite the original line numbers from the first program when combining the two listings.

## WHAT PRINTER?

I'm thinking of buying a printer to use with my **SHR**, and I am tempted to stick with **Atari** but I know that the **1029** is incompatible with most commercial software and I'm not clear whether this problem still occurs with the **SHR**. Please put me out of my misery by telling me whether I would be able to use software such as **PrintShop** with the **SHR** or whether I should forget it and search out an interface for another brand of printer.

If you help me out on this one, you'll confirm my belief that yours is the best magazine ever!

**Aileen Deakin**  
Faversham

The prime consideration when buying a printer is how much you can afford to spend. If you can afford it, we would recommend going for an interface and an Epson compatible printer every time that you are looking to spend a minimum of £180 altogether probably more. We would recommend a **Proprinter** **8001** or similar with an **RC-Printer Converter** box which you should find

will cope with most commercial software. If money is tight then your only option, short of buying second hand, is to get an **Atari** printer. The **1029** can now be picked up quite cheaply but, as you say, it does have compatibility problems with some software. It is nevertheless a good beginner's printer and should serve you well for most non-commercial applications. As far as the **SHR** goes, this should be an Epson compatible but, like every so called "compatible" it isn't fully and you may still face problems with some commercial software. It is a much better printer than the **1029** however and would be worth paying a little more for. If you can find one that is **Atari** then that is better than the **1029** as the cheap option or save up for a third party printer and interface, the choice is yours.

## SPELLING CHECKER

I have a copy of mini **Office II** and find the whole package very useful, very well set out and would recommend it to anyone who wants a low cost office package. The one problem I have however, and I suspect others have a similar problem, is my spelling. It's not bad but could be better. Is there any word processor package on the market for the **XL/386** machines with such a spelling checker built in?

**B. Spencer,**  
Faversham

**AtariWriter Plus** has a built in spelling checker and there is a separate spell checker. **PrintPro**, for the **Atariwriter Plus** cartridge but for normal text there are two based on American dictionaries and could cause you a few problems if you believe everything they tell you! The only word processor that we know of with an English dictionary is **Superwriter**, a program that we could recommend highly if you can find a copy. Unfortunately it is no longer being

published so you will have to look out for a second hand copy. It not only has a spell checker in absolutely correct form with a word processor, not necessarily to prevent bad spelling but to pick up spelling mistakes. You have to be very careful though and still proof read any documents since spell checkers are getting dumb and will allow you to do things such as miss off the first letter of many words, such as **br** or **hd** or **com** before such as in the words **br** (three), **quite** (spelled) and **quite** (right). Use with caution!

## SPRITES

Please can you help me? I recently bought a **SHR**, but unfortunately there was no bookies with it. I already know how to program in **Basic** but I don't know how to get sprites on the **XL**. Please could you print a small explanation on how to use them on and how to get multicolour sprites and also show me how to get multicolour text on screens? Also do you know of any advanced programming books on the **SHR**?

**Tim Buckland,**  
Cambridge

A small explanation of sprites, also known as player-vehicle graphics, on the **XL** is not possible, we discussed a series of articles to do some time ago but, unfortunately, these items are now out of print. The best **MSX-ATARI COMPUTER** section on explanation of using player-vehicle graphics and is one of the few comprehensive books still in print. Use with the rather expensive price. If you want a cheaper book, try **MSX PROGRAMMING FROM THE ATARI SIDEWAYS**, a superb book but aimed more at the beginner. Neither of these books cover multi-colour text, which is strictly not possible on the **Atari** although it can be done with some very clever hand advanced programming. Check an advanced programming book. Very, but all of the ones we know of are now out of print.

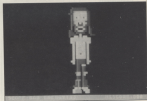
# RADICAL

## BRIEF OUTLINE ON RUPERT - DUG UP FROM A SCHOOL REPORT

..... 'Rupert is a social outcast in all aspects of his character. He is unlikely to progress to the threshold of acceptability unless he is given dramatic help'

### GAME OUTLINE

The idea is to give Rupert his prescribed dose of medicine (its effect is to change Rupert's behaviour pattern to that of a more respectable person). The task has been made easier by the fact that Rupert's mouth is constantly gaped open. Sounds easy - give Rupert his medicine and that's it - the only problem is that Rupert DIMENSELY DISLIKES taking his medicine.



**Don't blame  
Rupert, blame  
Gavin Davidson  
who wrote the game**

**WILL Rupert Remain  
Risky Radical or WILL he  
Realise that your Ruthless  
ways of Remediying him is  
Really in his best interests ....  
and WILL there be enough  
medicine for Rupert!**

# RUPERT









# TALKING TO THE DRIVE

## The Secrets of SIO

### THEORY AND OPERATION

Most people have a gross misapprehension about the way the Atari computer communicates with its peripherals. Set up an IOCB, call the Control Input/Output (CIO) utility, the job's done and all because of the constant I/O system on any 8-bit home computer. Unhappily, if that was your notion, you're wrong!

CIO acts as a middleman, true communication is established by the Serial Input/Output (SIO) routines. SIO actually transmits and receives data to all devices on the serial bus, and is responsible for checksums, local calculations, etc.

SIO has a well-defined protocol that is associated with things like Command and Data Frames, Acknowledgment, Repeat, acknowledgment, and Command and Data Errors. If these bits of jargon sound you within their first use, for SIO, in some cases, it is easy to use as CIO, and the average user of 99.9% of all cases need never know about them. Unless you have an EPROM burner and want to create trouble by partially re-writing the operating system.

Probably the single most common use of SIO is for disk access, usually in the form of sectors, so that means a good place to start. SIO, SIO CIO, requires data to work. In a similar fashion to CIO, SIO takes its data from a Device Control Block, which resides at \$0000 - \$0003 (700-777 decimal). Here we can see some one first major difference; there is only one IOCB as opposed to eight IOCBs, yet they share a similar structure.

Take a look at the three tables, which contain a list of addresses, labels and details of commands associated with the DCB. Anyone who uses a non-standard disk drive, such as the Indec DT, or in some cases an upgraded one, is filled with a US Doublet. Happy enthusiasts, one may be interested to know that if you use the values of TR and TR in DECIMAL, it is possible to read/write from/to the drive configuration block. There will be a small modified and program about this later.

To read SIO, not all of the IOCB has to be set but it is, in some cases it may prevent errors occurring. As a rule though, here is what should be done to read/write a sector. First give a value of 49 into DINDEX, so tell SIO what kind of device we will be accessing. Then the drive number into DUNIT. The command value should then be placed into DCOMMAND and DINDEX should be set to 04 for a read or 02 for a write. The 49-bit bytes of the address of the data buffer are then put into DSTART/DSTART, SIO, DUNIT and DUNIT should be set. If the disk density is single, then POINT 700 with 128 and 777 with 0. If double density is needed then POINT 700 with 0 and 777 with 1. DINDEX 0 does give any device specific information, in an example this would be the 10's value of the sector number and all that remains is to call SIO at \$4458.

Well if all the bits from the above has been absorbed, type in Listing 2. This is a rather simple, but well commented, read a sector and display the contents routine. With a bit of imagin-

*Phil Cardwell explores the disk drive interface and provides information and programs that could form the basis of a sector editor*

tion, and if you follow the DEC statements carefully you could convert this routine to form the basis for a non-standard disk sector editor.

### DISK DRIVE CONFIGURATION

In 1978, Atari displayed a prototype double density disk drive at several computer shows, the 815. A company at one the shows, Pertron Data Corporation, had seen the prototypes and decided a better drive could be built, which would also sell for less. Pertron without the Price tags.

Pertron manufactured single and double sided drives in both single and double density, and as they wanted to keep compatibility with the 815 and 815 drives, they created the 'Configuration Block'. By doing this, Pertron created a standard by which all other Atari-compatible drive manufacturers adhered to. All that is but one, Atari. For reasons unknown, the 815 was dropped, before it even hit the market. Then in 1984, along with the new XL range of computers came the 1050 with enhanced density, which is somewhere between single and double density, and failed to conform to the Pertron configuration block format. Typical Atari policy of non-standardization.

The 810 or 1050 drives, to the best of my knowledge, do not have a configuration block, or anything resembling it, unless it is integral to the software i.e. DOS 2.5.

A configuration block is a set of 12 bytes within the memory of the drive's controlling microprocessor. To read or write the config block, we use the 'R' and 'W' commands. These clearly resemble the normal SIO read/write commands, except data length is always 12 bytes and no sector number is needed. Table 4 shows the meaning of each byte in the block.

To avoid confusion, the first thing to explain about the block is the double byte values. They are in high byte/low byte order, the opposite of the normal DOS practice, because that's how the Pertron drive microprocessor operates. Not all these values have meaning to all manufacturer's drives, hence will only allow 2 or 3 values to be changed.

continued on page 18

# SIO - Disk Drive Configuration

```

00 00 000 *****
01 00 000 * Disk Drive Configuration *
02 00 000 *          *
03 00 000 *          *
04 00 000 *          *
05 00 000 *          *
06 00 000 *          *
07 00 000 *          *
08 00 000 *          *
09 00 000 *****
10 00 000 *****
11 00 000 *****
12 00 000 *****
13 00 000 *****
14 00 000 *****
15 00 000 *****
16 00 000 *****
17 00 000 *****
18 00 000 *****
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20 00 000 *****
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00 000 *****
01 000 *****
02 000 *****
03 000 *****
04 000 *****
05 000 *****
06 000 *****
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09 000 *****
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**TABLE 1**  
**DCB LAYOUT**

Location	Label	Description
Hex. Dec.		
300 190	DRIVEC	The type of device to access. See Table 2 for device ID's.
304 190	DRIVEI	Disk driver number (1 - 4).
302 178	DRIVEPAR	The operation command. In most cases the values here will have an STANDBY equivalent. Refer to Table 3.
303 171	DRIVED	Double size: (1) Before calling MD, it is used to indicate the direction of data. A value of 1 receives data, 0 sends data. (2) After the MD operation, carries the Status code.
304 171	DRIVEA	Low 16 byte address of data buffer to read from/write to.
306 170	DRIVEB	Low 16 bytes of channel value. MD waits this many seconds before giving up.
308 176	DRIVEC	Number of bytes to transfer. (256=Single density, 512=Double density).
304 176	DRIVED	Device specific information is stored here, such as the disk sector number to access.

Note: xx = a two byte address

**TABLE 2**

Device	Type	Identification	Values
Disk drives	D1-D4	40-43	010-030
Printer	P	64	000
RS-150 Ports	R1-R4	00-03	000-003

**TABLE 3**  
**SIO COMMANDS**

Command	Value	STANDBY
Download	11	open
Format	11	1
Put (%-verify)	00	0
Read spin	01	0
Read	02	0
Status	03	0
Read Address	04	1
Flatten SW	05	1
Verify Sector	06	1
Write (Verify)	07	0

Note: See text about additional disk commands.

# SIO CONFIGURATION TABLES

**TABLE 4**  
**DISK DRIVE CONFIGURATION BLOCK**

Label	No. of Bytes	Description
+0	1	Number of Tracks
+1	1	Step Rate
+2-3	2	Sectors per Track
+4	1	Number of Heads/Heads
+5	1	Density
+6-7	2	Bytes per Sector
+8	1	Drive Present
+9	1	Serial Rate Control
+10-11	2	Wordiness

**TABLE 5**

## US Doubler Sample Configuration Block

Offset Value	Description	
+0	Number of Tracks	00 *
+1	Step Rate	1 *
+2	Sectors/Track HI	0 *
+3	Sectors/Track Lo	0020
+4	Number of Heads	0 *
+5	Density	04
+6	Bytes/Sector HI	10
+7	Bytes/Sector Lo	0120
+8	Drive Present	11 *
+9	Serial Rate Control	0 *
+10	Word/Reserved HI	01 *
+11	Word/Reserved Lo	0 *

Note: An asterisk by the value indicates the byte is reserved.





**W**elcome to another Tipster column in which we have a number of answers for the cries of help from the last issue, an encouraging response from all of you for which the Tipster gives his thanks. Also there is the promised map for *Blinky's Scary School* together with a complete walk through. This issue sees a transitional Tipster column with the Tipster's role being taken over by guests who'll find some round us should have a full time Tipster back again so make sure you start him off well with a good helping of hints, tips, maps and solutions in response to this issue.

See you next time, meantime here we go ...

## BLINKY'S SCARY SCHOOL

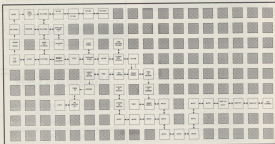
## AIRSTRIKE II

We are starting off with these comprehensive play tips from Adrian Graham of Ca. Wicklow, Ireland who says that the secret is to learn to fly your craft skillfully. To shoot rockets leave a bit of space behind you to reverse and leave the rockets out. If the bombs falling from the ceiling are bullet-proof then pause the game till they move to a different position, then fly round them.

If the doors in the girders are too difficult to shoot, pause the game. Bombing fuel and mine tracks is tricky sometimes. Be careful on harder levels because then the mine tracks fight back. Going through tunnels requires skill as your fighter will disintegrate at the slightest bump. They don't make them like they used to allowing mouths of caves can be hidden by pausing the game. You stop mining but the cave mouth does not stop.

Shooting defenders must be shot dead centre. Their bullets can be shot too. The odd things like two squares held by a rubber band can be removed by getting yourself in a safe place and pausing. They keep going past you.

From Paul Adams, of Birmingham comes this complete guide to *Blinky's Scary School* - a full run through of the game with a map. He warned this is the whole solution and it can spoil the game so only go as far as you need. Thanks to Paul for the most professionally submitted map and solution The Tipster has ever seen!



# A CORNUCOPIA OF TIPS

from Lee Colclough, just down the road in Tamworth.  
There has to be something here for everyone!

## WARRIORS OF RAS

Create a new character in the Quatin and play him till he's around 10th level then transfer him over to Ras and use this character to play. It will be much easier.

## HEAD OVER HEELS

To get past the robot wearing all black run up to the first wall and wait. When the robots are really close, run right and when he changes direction, run forward. You'll get past him without trouble.

## ASTERIODS

When there are only 1 or 2 small asteroids left, thrust up to the top right-hand corner and wait. When a larger one comes, shoot it either direct or using the "wraparound" effect. Doing this a few times will bump up your score a lot.

## MISSILE COMMAND

Press CONTROL-C and you will start on level 5. Also, pressing CONTROL-D a few times occasionally gives a surprise.

## CENTIPEDE

Remove stationary and keep shooting. This will build a "tunnel" into which the centipedes will fall.

## DEFENDER

On screen 4 onwards the Fods will be in the same place at the start of the screen. Move in close and shoot bombs. You get points for the pods and the swarms inside them. To destroy swarms, get in behind them and follow them closely. They won't turn round and they won't fire back. If a boiler is after you and you only have 1 or 2 others left, go after them and grope the boiler. You don't have to shoot him. If you have 1 humanoid left and are close to levels 5, 10 etc., then let it lander pick him up, shoot the lander, catch the man but don't put him down. The lander get quite frantic about this and can be kicked off easily.

## TWILIGHT WORLD

The solution to the first part of "Moo or Trap" is: **DEF** blue key - **R** - **D** - get green key - **L** - get blue key - **B** - **B** - **D** - get blue key - **U** - left all the way - get green key - **U** - **B** - **B** - **D** - get blue key - **U** - get blue key - **B** - get green key - **D** - **D** - **D** - get blue key - **U** - **B** - **D** - get blue key - **U** - **B** - **D** - get blue key - **U** - **B** - **L** - get green key - **D** - **D** - **D** - get blue key - **B** - get blue key - **U** - **L** - get green key - **D** - **B** - **D** — the rest is easy!

The solution to screen H. Grid of Iron is: Get orange key and go left, open orange door, get green key, go up, get orange key, go left and open orange door, go left to finish.

These are the only major problems in Twilight World, the rest is relatively easy.

Well done, Lee, what a lot of help for everyone!

## TURN THE PAGE FOR POTHOLE PETE



### HAWKQUEST

Simon Williams has also just finished the cassette version of Hawkquest and provides this cheat for those of you who can't get through to the end and desperately want to see the end game screen.

Load up the "End Screen and Animation tape" and type **ABUL7073229A** which is the code made up from all five levels. (**ABUL7073229A**)

## AND THE WINNER IS ...

It was a hard decision this time with a few people pulling in with a lot of help but the prize of the FIVE STAR 1988 CARTRIDGE goes to Philip Murphy for Pothole Pete and a lot of other stuff.

This time round a really weird prize - A SET OF AIR DROPS. What? Great, you think, a couple of dream wheels that you just sit watching with to create a myriad of dream worlds, a bit hard to explain but great fun to play with the buttons are already run down! If you want a real prize, get these bits and tips in soon!

LEE NELSON will have 1 day his video from the last Tiger because we don't his address when the old Tiger slipped up. Get in touch Lee and we'll send these videos.

START - STEPS - SCROLLING ALONG 1 - FLOUR POWER (TAKE) - SCROLLING ALONG 1 - PILLARS - FLUSHED WITH SUCCESS (TAKE) - IN A JAM - CREEPY CRAWLIES - PHEN DE COULGHE (TAKE) - CREEPY CRAWLIES - RED HERRING - FROG - FLUSHED WITH SUCCESS - WINDOWS - LEMON AID - DES GREATEST HITS - TOILET - SCROLLING ALONG 1 - STEPS - CAULDRON 1 (DEPOSIT FLOUR AND COLOGNE) - STEPS - SCROLLING ALONG 1 - PILLARS - FLUSHED WITH SUCCESS - IN A JAM - CREEPY CRAWLIES - RED HERRING (TAKE) - FROG - FLUSHED WITH SUCCESS - WINDOWS - LEMON AID (TAKE) - DES GREATEST HITS - TOILET - SCROLLING ALONG 1 - STEPS - CAULDRON 1 (DEPOSIT RED HERRING AND LEMON AID) - SLURRY WILL NOW FLOAT UP TO THE NEXT LEVEL - CAULDRON 1 - PLATFORM - HINDS THAT DO DISHES - PLATFORM - SCROLLING ALONG 2 - PLATFORM - HANDS THAT DO DISHES - PLATFORM - STAPS - EYE OF NEWT (TAKE) - HERMAN HAGGS - BALLOONS - WASPS - TIMES SCORE BY (TAKE) - PLATFORM - SKYLINE - BY GUM - SKYLINE - AIR TODAY (TAKE) - SKYLINE - BY GUM - SKYLINE - PLATFORM - PLATFORM - SCROLLING ALONG 2 - CAULDRON 2 (DEPOSIT EYE OF NEWT, SCORES, AIR TODAY) - SCROLLING ALONG 2 - PLATFORM - PLATFORM - SKYLINE - BY GUM (TAKE) - SKYLINE - PLATFORM - PLATFORM - SCROLLING ALONG 2 - CAULDRON 2 (DEPOSIT BY GUM, GO TO HAVE YOU SEEN THE LIGHT (TAKE) - FLUSHED WITH SUCCESS - IN A JAM - PHEN DE COULGHE - FLUSHED WITH SUCCESS - CREEPY CRAWLIE - WATER - CREEPY - NOW ALARMING (TAKE) - GO TO BEDROOM - JUMP ON THE PLATFORM ABOVE THE BED AND THE ALARM CLOCK IS ACTIVATED. GAME COMPLETED.



# POTHOLE PETE

An almost complete game guide comes from Philip Murphy, Co. Corp. Instead for this game, Philip has been playing this for quite a while.

**Level 1:** Stand beside footstool. Jump over footstool as spider begins his run to the right and then jump again as he returns. Climb down the ladder. Jump over the footstool and collect the dynamite. Quickly run off the platform and fall onto the ladder. Jump over ladders. When scorpion begins its run to the right, jump over the footstool and jump again over the scorpion. Watch the poisonous ivy. Get as close to the wall as possible and drop the dynamite. Don't move. When the wall explodes walk through ... you are now on level 2.

**Level 2:** Walk off the first two platforms. When bats are flying to the right, fall onto the bottom platform and jump the bat. Jump across and get the dynamite and then walk off the platform and wall. When the lower bat comes, jump over it and get on jumping until you get back up where you started. When the bat flies to the right walk beside the footstool and jump the bat and the footstool at the same time. Drop the dynamite beside the wall and RUN through to level 3.

**Level 3:** Climb down the ladder and watch the bat. Walk to edge of platform and jump slightly behind the bat as he flies in the same direction. Collect the dynamite and jump back across and climb up the ladder. Run down the platform avoiding the bats (in some cases the top bat get stuck on the ivy). Climb down the ladder. Jump over footstool and drop dynamite. When the wall explodes walk through to level 4.

**Level 4:** When bats fly to the left, keep your finger on fire and you will keep jumping. Jump across to small platform and then across again and stand beside the footstool. When the bat flies to the right collect the dynamite, wait for the bat to pass, then jump across to small platform and jump and then run across the top platform and drop the dynamite beside the wall. When the wall explodes walk through to level 5.

That should keep you busy for while ... someone else can take over from there!

## MILK RACE

Stay in 1st gear all the time so this keeps you at a good speed and also saves you energy. Never ride right at the edge of the screen as you will usually crash, stay near the middle if possible.

## SCREAMING WINGS

If you want to get on a few levels, then start the game as normal and when the large plane comes on, don't shoot it but dodge it and keep dodging it. The screen will keep scrolling to the end of that level. You can keep doing this through all levels. I reached level 61 and then got bored.

Thanks to Dean Chastain for these two tips

Here's some more from Philip Murphy (see the Pothole Pete section)

**DRACONUS:** Go to a room which has a Morph slab with a rat running across it. Leave the rat to drain your energy, and as he is almost about to reach you to drain your last drop of energy, pull down on the joystick so that you will turn into a frogman. When you return back into Program your energy level will be flat but you will still be able to kill everything without being killed yourself. You can now walk through all the masters - except the Terror Head!

**ZORRO:** This might help with Eric Foley's problem. Don't collect the bags of money just in case because if you get killed in the jail you will be thrown back down into the graveyard. Forget about the shortcut with the barrels. Go up through the ladder beside the lions and carry on the game the way Stephen Gilbert explained in issue 43.

**POLE POSITION:** If you are having trouble with finishing the 8 laps because of the corners in the road coming too fast put a book or weight on the spare bar and everything will slow down. This tip also works on many other games!

In return Philip needs **HELP** on **ROCKFORD** where he is completely stuck on the 9th screen (the first of the roadway screens). Apparently they leave you 5 coins short. What's the answer?

## HELP WANTED

Paul Cole of Borenger, Ashford has finished **ALTEREGE REALITY - THE BENGANS**, but is extremely frustrated by the fact that he still does not know the Gargoyle's name. Can anyone help him?

David Clewley wants getting out of misery with some help on playing **E.T. FROM HOME** and **BATTLEZONE**. And of course there are lots more folks wanting help on all sorts of games, so if there is something you have discovered that hasn't yet appeared in the Tipster column send it in to help others out.

Send your hints, tips, bugs and solutions to

**THE TIPSTER  
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## A TIPSTER EXCLUSIVE!

Every reader reading is a NEW line. tip, about as long will receive THE TIPSTER's unique badge, whether the contribution is used or not. The only qualification is that the tip must not have been used before in this column. Shipping pages out of old Atari fan magazines doesn't count either! Please advise how it might be used - depends what the Tipster had to do when he comes to type up the column.





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# Fiction

# THE TIMESAVER?

People generally buy a micro-computer for one of two reasons: entertainment and a hobby or to use it making routine tasks easier. There is a third reason, because everybody else has one, but people who buy one because of this generally are the ones who bought a microwave and still use it just to heat water for their instant coffee eight months later. Some technological wizard in this class even advances us far as to use the clock to time the cookies they are baking in the conventional oven, but they are few and far between.

The computer's ability to make laborious tasks so much simpler and speedier is one of its major accomplishments. If you have a large collection of virtually anything, a computer will become indispensable when you try to do manual keeping, whereas in discovering what an AI will do to simplify these files and even give them additional means of retrieval.

Writers who tend to use a typewriter wonder how anything ever got created given all the limitations they now realize it has compared to a computer. Business would come to a virtual standstill today if deprived of them.

It is hard to believe that we are just at the beginning of the more marvelous things the home computer will provide people with in the coming years. As a matter of fact, if technology pertaining to computers continues to accelerate at a greater pace every day as it has been doing for the past few years, even science fiction writers will be unable to predict what these electronic brain machines will be capable of 50 years from now.

## IT'S SUPPOSED TO DO EVERYTHING

Given all this, why does the computer I have provided with a home set still all but my expectations? I didn't buy an Atari to enable the "Trental" family to purchase more things to eat the crates that declare "The boys with the most toys win." I bought the miserable thing to make my life easier. I think I bought, not it up according to the instructions in the manuals and only then discovered I might as well devote half my remaining

## a story by Gordon F. Hooper

life span to learning how to have it to make my life easier and increase my leisure hours. Except that all my leisure hours in the foreseeable future would be spent trying to master a collection of software and integrated circuits that doesn't have an ink of common sense.

Finally I realized this machine wasn't like a vacuum cleaner where you could read the instructions, experiment for ten minutes and then suck up all the dirt within range of the collection cord. My dirty imaginations and wishes-excepted, of course. No, this malignant monster I had brought home of my own free will was going to demand my working hours plus whatever time remained in a 24 hour period. Whenever I think that I'm not required to lose every insignificant detail of the computer, I might be able to fit some sleeping time into the day. The problem is that the miserable machine anticipates me and I want to learn everything I can about it. Believe me, you have to be a masochist to want to know that FORGE still burns off LCO notes.

## ERROR? WHAT DOES THAT MEAN?

Today I was using a word processing program to write this article. I typed it up and got an error 048. Hmmm. Never saw that one before. A quick check of my manual reveals "Serial Frame Error—107" of 585107 to the FORGE chip is set. This means that communication from the device to the computer is garbled. This is a very rare error and it is fatal. "Fatal"? What the hell does that mean? Whenever it means, the word "fatal" brings to mind that somewhere along the line this is going to cost me money: I was going to spend on something besides, like food. The manual then goes on to say before I get enough courage to read further, "It is

more than once, have your device or computer checked". It occurred four times, because I didn't believe it the first three times. Now I do. "You can also remove the peripherals one at a time to isolate the problem". Great idea. Maybe I'll trace it to the hard drive that costed me of \$600.00 plus tax and extended warranty yesterday.

But God takes pity on me. The file of Corbie isn't so important, indeed leads me to discover that one of my cables is broken and straightening it out solves the problem. The bad I can't straighten out my distorted mind as easily. Then I wouldn't have to be apologizing to friends all the time. The only problem left now is I'm so drunk up that one and a bottle of vodka are going to have a beautiful meeting, so there will be no more writing today. See what I mean? It'll still lead my typewriter, this article would be in the mail and I could have started typing something that would pay real money. See fictional letters of telegraphers speeches.

## HOW DO YOU STOP THE THING?

A friend of mine who works in a machine shop once a computerized lathe to fabricate air nozzles for use in the navy. It runs machine software a little more accurately and at a faster speed than he used to be able to do manually. No problem here, you say? Corchie like it made an improvement? Maybe so, except he had to take a six-month training course to learn how to operate a computer and how to program it. Now he gets to work with a program to maintain the nozzles in the required dimensions, loads the lathe with the tools required, watches the machine to make sure there are no snafus and then goes to the garbage can to pick out the completed machine so he can deliver them. Nobody ever figure out how to stop the computer from dumping finished product along with the waste or to finish the job. I got the feeling if he had spent all that time just working on a lathe making nozzles, the navy would have them coming out of their jet-ping by now.

# DISK BONUS

## OLDE GOLD

A graphic arcade adventure  
in machine code by Bill Halsall

### WHAT IF THEY TAKE OVER?

The next major advancement in computer is likely to be artificial intelligence. Now that's a truly frightening thought, because when you consider how fast these things progress, we'll probably have AI in home computers in the fairly near future. Our computers can already do the Chinese government operations that explained it was only slightly contaminated with opium. Today they only look up, or crash, or simply wait our most important files to the manufacturers in the land of Oz. Can you imagine what a computer with AI will do with the programs you've hooked on for an month? You know it will use its capability to ensure that the novel you're been typing for the last year couldn't be reviewed by the latest version of the *Cray Supercomputer*.

Try to think, without breaking into tears, what it will do with all that information you'd rather the IRS was a little fuzzy on. You can bet your last byte of RAM it will figure a way to get to you through your modem in the Feds. You won't know anything about it until the long-distance bill arrives, personally delivered by the gop with a pair of cattle who's going to escort you to your new home for the next 100 years, less time off for good behavior. Try to remember before you learn that while it may have artificial intelligence, you as a human have the real thing, plus the benefit to share a mind of dynamic up to serial port? What makes that even scarier is the mind saving sense of irony that allows you to enjoy doing it.

### GOT A MATCH?

If I'm not out there, as in most business environments, the things you do to save time actually do save it, except they open up so many new possibilities that you end up with less time than you started with. But then, of course, you can always light the dynamite!



Slip back in time to days of old when knights were bold and ladies had to be won. In this graphic adventure trilogy your quest is to prove yourself by returning the gold to the manacles then claiming your bride.

Your task will not be easy. Nasty dragons and other beasts will bar your way. The good news is you can reincarnate yourself. The bad news is so can the buddies!

Are you up to it? Can you unravel the puzzles? Can you recover the treasure? What is the secret of the yellow door? Do you really want to get married anyway?

All this and more will be revealed by plugging in a joystick and booting up Side 2 of the issue disk! Flying instructions and cryptic clues are provided on screen. Bon voyage!

This excellent adventure is the BONUS on the issue 40 disk. Disk subscribers will receive their disk with this issue but other readers may purchase the issue disk separately for £2.95. Use the order form on page 54 or write to PAGE 5, P.O. Box 54, Stafford, ST16 1TB. Telephone orders by credit card accepted on 0788 213928

# ALTERNATIVE INPUT

**D**id you type in **SHOOT AND COUNT** from issue 47? Well I did and it turned out to be a very nice program. My children also enjoyed it, but were arguing a lot, accusing each other of taking too much time to enter their words. This is caused by the program allowing the players the possibility to take as much time as they want to enter words. It means you can keep your opponent waiting for hours, while you can do as much thinking as you like.

The cause of the problem is the **INPUT** statement in **Shoot Basic** which causes the program to stop until input from the keyboard is received. I decided to think about creating an alternative method for the **INPUT** statement, which should be able to build in a certain time limit in **Shoot and Count** and similar programs. Although I tried to create such a routine before, I never succeeded. All my attempts failed, always finding that it was too absolutely impossible using **INPUT** or **GET**. These statements are just not suitable for the aim I had, because they cause the computer to wait for an expression to be entered (**INPUT**) or a key to be pressed (**GET**). During this period the computer cannot execute other routines in **Shoot**, for example running a countdown while the players enter words.

There are some Basic programs using a countdown routine, like **COMPUTER COUNTDOWN** in **ATARI USER No. 8** (December 1988) but none of these programs satisfied me, because they are easy to cheat while playing and in fact they do not use the countdown routine while the player enters a word.

After a lot of thinking I finally found a rather simple solution, which anyone can understand and build into their own Basic programs.

## THE SOLUTION - ADDRESS 764!

This address holds a number which is the code of the last key pressed. If no key is pressed, the code is 255. This can be easily used in a Basic program - as long as no key is pressed, it is possible to have your program execute a certain task but as soon as a key is pressed, which can be noticed with **PEEK(764)**, this task can be interrupted for a short while.

As far as this goes, it is no news for most Basic programmers although there is a problem to solve if you want to use 764 for detecting specific keys. The code in location 764 is not the **ATASCII** code, nor the **INTERNAL** code of the key pressed; it is the keyboard code, which is used by the keyboard-handler in the internal part of your Atari. Before we go any further check out the table of keyboard codes shown.

If you want to check the codes for a pressed key are easy to find if you type the following line to the direct mode of Basic

```
FOR X=0 TO 1000:PRINT PEEK(764):NEXT X
```

After you press **RETURN** you will see the keyboard code appear on your screen each time you hit a key.

You will notice two remarkable things - some codes don't exist (e.g. 3, 4 etc.) and there is no way to connect these codes into **ATASCII** or **INTERNAL** codes.

**John van der Spoel**  
explains how to get  
keyboard input  
without stopping  
your program

## SOLVING THE PROBLEM

The second of the above problems is the major one. How to solve that? How can a Basic programmer make use of these codes? There had to be a way and after some thought I found out there was one!

I got the idea to **POKE** the **INTERNAL** codes of each key in a free part of memory. Location 1036 and following (that is page 4) is suitable for this although other locations can be used if the area of memory is protected or the routine could be adapted to place the codes in an array or string. The codes have to be stored in exactly the same order as the 64 codes of the keyboard code table, so address 1036 holds 64 (that is the letter L), address 1037 holds 43 (that is the letter J), and so on. The code of the last letter (underscore 95) is placed in address 1099.

If now you use **PEEK(764)**, take the contents of this address and add 1036 to this, you will find the number of the address where the **INTERNAL** code of the last key pressed is stored! For example, if you press the letter P, the number 10 is stored in address 764. Add 1036 to 10 and this (1046) is the address where you find the **INTERNAL** code for the letter P - 48!

## HOW TO USE THIS IN A PROGRAM?

Take a look at Listing 1 - the demo program. A **FOR-NEXT** loop is checked if a key is pressed by **PEEKING** location 764. This loop is nested in a countdown loop, so while the countdown runs, the program checks whether a key is pressed or not. If so, the program jumps to a sub-routine in line 200, which looks at which key was pressed. After this the **INTERNAL** code of this key is **POKED** directly in the screen-memory, so it is immediately visible on the screen. Once done the program returns to the countdown routine.

All this happens so quickly each time a key is pressed, that you will hardly notice the countdown has stopped for a fraction of a second. The demo program also contains sound routines and a routine to keep badly keys, such as numbers 50.

The countdown values in **INTERNAL** codes are just as well directly **POKED** into the screen memory (that is address 40960 to 40999 in Graphics 0 (this happens in lines 60 and 68).

```

01 1 000 *****
02 2 000 *****
03 3 000 *****
04 4 000 *****
05 5 000 *****
06 6 000 *****
07 7 000 *****
08 8 000 *****
09 9 000 *****
10 10 000 *****
11 11 000 *****
12 12 000 *****
13 13 000 *****
14 14 000 *****
15 15 000 *****
16 16 000 *****
17 17 000 *****
18 18 000 *****
19 19 000 *****
20 20 000 *****
21 21 000 *****
22 22 000 *****
23 23 000 *****
24 24 000 *****
25 25 000 *****
26 26 000 *****
27 27 000 *****
28 28 000 *****
29 29 000 *****
30 30 000 *****
31 31 000 *****
32 32 000 *****
33 33 000 *****
34 34 000 *****
35 35 000 *****
36 36 000 *****
37 37 000 *****
38 38 000 *****
39 39 000 *****
40 40 000 *****
41 41 000 *****
42 42 000 *****
43 43 000 *****
44 44 000 *****
45 45 000 *****
46 46 000 *****
47 47 000 *****
48 48 000 *****
49 49 000 *****
50 50 000 *****
51 51 000 *****
52 52 000 *****
53 53 000 *****
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61 61 000 *****
62 62 000 *****
63 63 000 *****
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65 65 000 *****
66 66 000 *****
67 67 000 *****
68 68 000 *****
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90 90 000 *****
91 91 000 *****
92 92 000 *****
93 93 000 *****
94 94 000 *****
95 95 000 *****
96 96 000 *****
97 97 000 *****
98 98 000 *****
99 99 000 *****
100 100 000 *****

```

```

01 1 000 *****
02 2 000 *****
03 3 000 *****
04 4 000 *****
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06 6 000 *****
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09 9 000 *****
10 10 000 *****
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70 70 000 *****
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72 72 000 *****
73 73 000 *****
74 74 000 *****
75 75 000 *****
76 76 000 *****
77 77 000 *****
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89 89 000 *****
90 90 000 *****
91 91 000 *****
92 92 000 *****
93 93 000 *****
94 94 000 *****
95 95 000 *****
96 96 000 *****
97 97 000 *****
98 98 000 *****
99 99 000 *****
100 100 000 *****

```

## ADDING THIS ROUTINE TO GUESS AND COUNT

With this routine built in, Guess and Count is much more challenging. Take a look at Listing 2 for the changes to be made.

You will realize it is not possible to use the backspace key. This will force you to avoid mistakes, which increases the joy of the game.

I also changed line 630, which now will give you the correct word if you did not succeed to guess it within 8 turns.

I hope other readers will be pleased with this information and will be able to incorporate the routine into their own programs and make more challenging games available for us all.

John van der Spoort

## KEYBOARD CODES IN LOCATION 754

0 = L	16 = Y	32 = SPACE	48 =
1 = J	17 =	33 =	49 = 0
2 = ;	18 = Ç	34 = N	50 = 7
3 =	19 =	35 =	51 =
4 =	20 =	36 = M	52 = 8
5 = K	21 = 0	37 = J	53 = <
6 =	22 = X	38 = INV	54 =
7 = *	23 = Z	39 = R	55 = F
8 = 0	24 = 4	40 =	56 = H
9 =	25 =	41 = E	57 = D
10 = P	26 = 3	42 = Y	58 =
11 = U	27 = 5	43 = TAB	59 = CAPS
12 = RET	28 = ESC	44 = T	60 = G
13 = I	29 = 2	45 = W	61 = S
14 = -	30 = 1	46 = 0	62 = A
15 = =	31 = 1	47 = 9	63 =
		48 = 8	64 =



01 0 0000 .....  
 02 0 0000 .....  
 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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# TUTORIAL SUBROUTINES

## LINE COUNT

### A UTILITY FOR CHECKING YOUR PROGRAMS

I had temporarily run out of ideas for the tabulated subroutine article, and had decided to more or less make the issue and tell you a story instead. The story was to be designed, like the tabulated articles, to teach something as well as to be enjoyable in its own right, but then I received an interesting letter from the P. Adams of Illinois containing a short, but quite complex subprogram. I apologized to him for holding him like a hot potato, but to retain this article.

The articles for the October/November magazine are written in July and it is hot summer weather which tends to reduce one's speed on the computer, in fact it reduces my whole thinking process to a logically slow pace so I am, particularly grateful to the Adams for supplying the idea.

### BASIC LINE STRUCTURE

To understand what is going on in the subprogram itself it is necessary to know a little about the structure of a tabulated line of Basic. Once a line of Basic has been typed into the computer it is stored in the computer's memory in "individual" form, that means that the line numbers, Basic commands and so on are all changed into individual bytes in memory. The structure of all lines is the same:

**Byte 1** and **2** are the line number in low byte, high byte format - `lines:word+byte 1+2*16`  
**Byte 3** is the offset from the memory location of byte 1 to the memory location of the start of the next line of Basic.  
**Byte 4** is the offset from the memory location of byte 1 to the start of the next Basic statement. If there are several statements on a line the next Basic statement starts after the first value. If there is only one statement on the line the next Basic statement starts on the next line and this offset value is the same as the line offset value.  
**After these four bytes the program takes care - there is a token for each Basic command and several tokens with special purposes that I will not go into here. If you wish to find out more there is a good description in the book Do It Right. It is**

enough for this subprogram to know that the first byte after each token that is the first byte of each Basic statement) is like byte 4 and contains the offset value between the start of the current line and the start of the next Basic statement.

### AN OVERVIEW OF THE SUBROUTINE

What does the subprogram do? It counts all the line numbers in a Basic program and all the Basic statements on each line, and prints on the screen as it goes the sequential number, the Basic line number and the number of Basic statements on the line. When the screen is full it pauses until a key is pressed. When used as a programmer's tool this is a more convenient way of looking at your program line numbers than using the full LIST command.

### THE DETAILS

**Line 20000** - I have started at line number 20000 so as to be above most programs without clashing with the line numbering of the Typo check-out program which you use to check that all the lines you type in are correct. This line initializes the variable LINE to zero. LINE will be used to count the number of lines in the program being checked.

**Line 20010** finds the address in memory of the start of the Basic statement table (BTB). This address is stored in low byte, high byte format in memory locations 120 and 121.

**Line 20020** is the start of the outer loop of the subprogram. It increments LINE by one on each pass through the loop, thus counting the number of lines in the program. The outer loop handles the part of the program which deals sequentially with lines of the program being analysed, while the inner loop deals with the individual Basic statements within each line.

**Line 20030** - The first action is to find the line number, SUM, from the first two bytes of the line. We do not want to include the lines of this subprogram itself, so if the line number is 20000 the first line of the subprogram the loop is called by going to 20040. Thus all line numbers above 20000 will be ignored.

**Line 20040** - First OFF is set equal to three, ready to start the inner loop. This is the offset from the start of the line to the first Basic statement in the line. The counter for the number of statements in the line, STMS is set to zero.

**Line 20050** is the first line of the inner loop. STMS is incremented by one for each pass through the loop to count the number of statements in the line.

**Line 20060** - PEEKBYTE is the address of the start of the Basic statement (BTB) from the start of the offset, STMS.

**Line 20070** - Index into PEEKBYTE to find the offset to the start of the next Basic statement and changes OFF to this new value for use during the next pass through the inner loop.





# INFOCOM

**I**n 1983, while I was recuperating from an operation, a friend lent me his trust and a game called *Zork II* by Infocom. He wanted me to try and map the maze for him!

I loaded it up and was greeted by these immortal words:

"West of House.

You are standing in an open field west of a white house, with a boarded front door. There is a small wellies here."

I soon found the obvious tunnel, the battery-powered brass lantern and the trap door, killed the troll, and entered the Maze.

"This is part of a maze of lovely little passages, all alike."

I later learned that Crowther and Woods had designed the first maze in the original *Adventure* in 1976: "You are in a maze of lovely little passages, all alike" was the original version - they have a lot to answer for!

**I**nforma's maze was slightly more difficult as the *Thief* wanderers started picking up some of the items you use to walk the rooms! This sort of innovation was to be Infocom's hallmark and the price.

I eventually finished *Zork I* and was delighted to discover from the old bulletin board that the game that there was a *Zork II*. I was hooked. I have now completed 33 of Infocom's adventures! Surely they are far too good to be just called Text Adventures and really, since I have done the last three which are making me my shirt, that will be the *INFOCOM* for, alas, Infocom no longer exists!

**I**n 1988 Activision (now HasbroGardner) bought Infocom, but never managed to make any profit out of it, despite introducing graphics (*Dark Zone*, *Magog*, *Arthur*) and mouse driven adventures (*Accursed*), and putting the Infocom logo on RPGs written by other software

## R.I.P. 1980 - 1990



houses (*Phantasm* and *Quarterfall*). In 1989 HasbroGardner moved Infocom from Massachusetts to California, taking with them only a token staff. None of the original founders saw any of the subsequent big-name writers work with them. That was effectively the end of Infocom as we know and loved it.

New HasbroGardner have bravely written off Infocom for a paltry \$9 million! HasbroGardner still own the name so it will appear on future products such as the treatment *Clayton's Edge*, but even the logo has been changed - the real Infocom is gone forever!

**I** think Steve Lerner, the really weird one - who brought us games like *The Hitchhiker's Guide to the Galaxy*, *The Leather Goddesses of Frodo*, and the last *Labyrinth* *Condemned of Frodo* and the unforgettable robot, *Flood*, in *Planetfall* and *Star Trek*, knew it was the end when he wrote *Zork III*. It is a little disappointing in places when he throws in lots of traditional puzzles as though he just wants to separate them all to be late the end, and it comes full circle - remaking everything off nicely by ending with the creation of that White House which started it all off.

"What went wrong?" I don't know - *Zork I* is reputed to have sold a million copies and has been re-released as the world's best-selling entertainment software product EVER. This was a few years ago - these days a new Nintendo Mario Bros can sell 2 million cartridges; Infocom have always been limited in the absolute best to the world of text adventures; in the mid-eighties they were producing an average of five new games a year, including the amazing *Hitchhiker's Guide to the Galaxy*.

Didn't we buy enough of them? Was there too much competition from new comers like *Magister Scribble*? Had they done everything that was worth doing in that style of game? I don't suppose we will ever know!

**S**til, it was good while it lasted, and I suspect most of you have either come to look forward to them. I have as you probably haven't played them all yet! But, don't wait too long, stocks won't last forever and they may never be reprinted now.



## THE COMPLETE INFOCOM DISKOGRAPHY

Title	Code	Year	Level	SL	ST	Author
<b>FANTASY</b>						
White Mage	20	80	I	Y	Y	SM
Zork I	21	80	S	Y	Y	MS+DL
Zork II	22	81	A	Y	Y	MS+DL
Zork III	23	82	A	Y	Y	MS+DL
Exochord	24	82	S	Y	Y	MS+DL
Sorcerer	25	84	A	Y	Y	SM
Spellbreaker	26	85	S	Y	Y	DL
Trinity	27	86	S	N	Y	SM
Beyond Zork	28	87	N	Y	Y	SM
ZorkBers	29	88	N	N	SM	

### SCIENCE FICTION

Bluerose	51	82	E	Y	Y	DL
Suspended	52	82	E	Y	Y	MSB
Paperball	53	82	S	Y	Y	SM
R R G to the Galaxy	54	84	S	Y	Y	MS+DL
A Mind Forever Voyaging	55	85	A	N	Y	SM
Robotical	56	87	Y	Y	SM	

### TALES OF ADVENTURE

Infidel	41	82	A	Y	Y	MSB
SeaStalker	51	84	I	Y	Y	MS+DL
Cyberbits	43	84	S	Y	Y	MSB+JF
Hollywood Hijinx	44	85	S	Y	Y	HQA
Slogan	45	85	N	N	DL+JC	

### MYSTERY

Deadline	61	82	E	Y	Y	MS
Witness	62	82	S	Y	Y	MS
Suspect	63	84	A	Y	Y	DL
Ballyhoo	64	85	S	Y	Y	JC
Woozoid	65	85	I	Y	Y	MS+DL

### COMEDY

Leather Goddesses	71	85	S	Y	Y	SM
Bureaucracy	72	87	N	Y	DL+JF	
Head & Tail*	73	87	N	Y	JC	

### OTHER

Lurking Horror	85	87	Y	Y	DL
Plumbered Hearts	86	87	N	Y	AB
Border Zone	81	88	N	N	MS
Starlock	88	88	N	N	MS
Journey	75	88	N	N	MS
Quarterstaff	89	88	N	N	MS+JF
Arthur	11	88	N	N	MS

\* Pull title Head & Tail couldn't make Head or Tail of it

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- 1 - Introductory
- 2 - Standard
- 3 - Advanced
- 4 - Expert

### AUTHORS

- AB - Amy Briggs
- AB - Bob Bates
- MS - Brian Moriarty
- DA - Douglas Adams
- DL - Dave Labbing
- FR - R. E. S. (Richard) Morgan
- HQA - Hollywood
- DA - Dave Anderson
- JC - James Clavel
- JL - Jim Lawrence
- JF - Jeff D. Hall
- JW - Jerry Weigler
- SL - Sam Lippin
- MS - Marc Blank
- MSB - Michael S. Berlyn
- SG - Stu Galley
- SM - Steve Merwin
- SS - Scott Schreier

I always always excelled at their packaging - early games came in the most exciting boxes - Deadline was just like a police file, Suspended was continuous as it contained a full size manual of a face staring out at you like eyes followed you around the shop until you broke down and bought it, and Starcross came in a flying saucer shaped box. Really these are all now repackaged to the standard book size, but the contents are still as good as ever, with maps, newspapers, character histories, post-venture advice, assignments, awards & wall posts, to name but a few!

A full list of Infocom's adventures is given in the box. If you own any of those, packaged at bargain prices: The Zork Trilogy, The Exochord Trilogy, The SF Classics, and the Classic Mystery Library - get them if you can!

There were four Infocom books published by Puffin in 1983, in the Redline Quest/Fighting Fantasy style:

- Zork 1: The Powers of Hell
- Zork 2: The Malfeasance Quest
- Zork 3: The Concessions of Doom
- Zork 4: The Companions of Quixote

all by Steve Merwin, but I doubt if they are still available.

Infocom also published (and tested) the two BallBreaker games by Wisconsin Associates (WCA), a graphics strategy game called FOOTBALLTASY (DL) and a relational database system called Current-stone (neither of which appear to have been very successful, plus a range of Infocom's - computerized comic books produced in conjunction with Tom Spivey (see Productions I have ZorkGames, Lane Mackintosh and Clamma Farrow for the IBM - they never came out on any Atari).

And of course the instructions - for another £10 you can buy maps and maps to help you solve the most tortuous problems! But so easy to get on this side of the Atlantic was the Infocom magazine New Zork Times (later Status Line) - free with any game, try the

continued on page 30



*Meet*  
**PAGE 6, BUG, ATARI User Groups**  
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# THE LISTING FORMATTER

I wrote the original list formatter over 5 years ago. It was written to take a BASIC program typed in from a magazine or one of my own, and produce a formatted listing of it - a listing which would be easy to understand. The ultimate aim was to obtain enough information about a program to be able to modify it.

I recently had cause to use the program again and it was of this time that I decided to tidy the program up, restructure it to be easily modified at a later date and speed it up. The original was very slow!

The program performs a number of tasks:

- It right justifies each line number and makes sure that only line numbers are in the first 5 columns.
- All multi-statement lines are broken up so that each statement occupies a single line.
- The statements which follow the THEN in a IF-THEN structure are placed on subsequent lines, indented by 5 columns. If the THEN is only followed by a number then GOTO is assumed before the number.
- The contents of a FOR-NEXT loop are also indented by 5 columns for clarity.
- All operators are padded out with a single space before and after them.
- All control characters, in string constants, are replaced by a default character. CHR\$(13) (printed as "\") by Turbo-Basic printers and all control characters are converted to their normal form.

The last two actions are optional. Changing the variable IND to the line IND to FALSE will prevent operator padding from being performed. Changing UNDER in line IND to FALSE will prevent the replacement of control characters in the output as it is sent to an Atari printer. This should be set to FALSE. The number of columns by which each line is indented is determined by the variable INDENT. INDENT is defined in line IND and can be changed to any value from 0 (for no indenting) to a value less than the maximum width of the output lines.

Note: the formatter produces a slightly confusing output with the following type of input:

```
1000 FOR A=1 TO 100:IF A&=32& B=40+Q NEXT
A:GOTO 2000
```

The formatter will produce:

```
1000 FOR A = 1 TO 100
  IF A = 32 THEN
    B = 40 + Q
  NEXT A
GOTO 2000
```

but how else could you format such a terrible program structure?

## ENTERING THE PROGRAM

When typing the program in all REMs can be omitted to reduce the size of the program. The program is only written to handle standard BASIC, but it could be extended to handle Turbo-BASIC. The only major problem would be with handling the

**P. Abbot's utility will help you understand and analyse program listings**

IF-ELSE-NEXT structure, which would have to be treated in the same manner as a loop. This would be different from the way the formatter currently handles IF-THEN structures. If the formatter is to be run on an Atari 400 or 800 then the address 1235 in line 780 should be changed to 90.

## THE PROGRAM'S USE

The formatter can run on any Atari 8 bit computer (4000-10000) with Atari BASIC. If you wish to get a hard copy of the formatted program you will need a printer, either an Atari or a non-Atari printer will do.

To format a program first load the program you wish to format into the computer, then LIST it out to either a disk file or a cassette.

e.g. LIST "D:PROGRAM" or LIST "C"

If you are using Turbo-BASIC to test the program, first switch off Turbo-BASIC's automatic line indentations, by typing "L".

Once a listing of the program has been generated, then the formatter should be loaded and run. The first prompt is for the file name/device to which the program is to be formatted has been saved. The response should be of the form:

D:PROGRAM

If no device is specified then "D" is presumed:

At the second prompt the destination should be entered in a similar manner:

F:MODEM (P) or P0  
= D2:PROGRAM

If you are loading a listing from cassette then you can't save the formatted listing back to cassette. This is because the formatter does not handle either its input or its output.

The formatted output device will be the printer. To get a permanent copy of the formatted program, for this reason, the third prompt, "line length", has a default of 80. If you wish to accept this default then simply press RETURN, but any value would be entered by the normal manner.

The speed of the program's operation is partially determined by the I/O device being used, cassettes are slower than disks. I have used the formatter to format a listing of itself fairly recently in just over 5 minutes (just over 2 minutes with Turbo-BASIC). This is taking the input from a disk and the output going to the screen. The declaration of variables is performed in a sub-routine at the end of the program, the reason for this is speed. Originally the declaration code was at the beginning of the program but after moving it into a sub-routine at the end of the program, I noticed a halving in the execution time.



# SOUND RECORDING

**John S Davison explains how to record top quality sound directly from your XL/XE or ST**

**A**s you may be aware, I recently recorded an audio cassette for Page 6 called World of Computer Music Making. The rest of producing this in a professional studio was problematic, so like many other music enthusiasts I set up a small recording studio at home and did the whole job there. This meant I had to get involved in all aspects of recording music generated by my Atari 8 bit and ST machines, both from their internal sound chips and via MIDI. Coincidentally, a number of readers have recently contacted me expressing an interest in this topic, so it now seems appropriate to write an article or two about the lessons I learned. Perhaps it can save you some hassle if you want to record your own music on tape for posterity, or perhaps just to make it more convenient to listen to.

Although the Music Making tape to MIDI oriented it also includes sections on using the XL/XE and ST's internal sound chip. I soon discovered it's not as easy as you'd think to produce decent quality recordings of chip sound. You can't just stick a microphone in front of the TV monitor's heads-prize and press the record button. The results are dreadful, owing to the dire quality of the audio system in most TVs and monitors. Also, the microphone will pick up all sorts of background sounds to further degrade recording quality. The best results you need to input the chip sound directly into the recorder's line inputs, completely bypassing the TV's internal audio system.

But, how do you get at the audio signal? Well, the XL/XE machines have a 180 degree 8-pin DIN socket to allow the connection of a proper stereo monitor. One of its pins carries the required audio signal, and you can use it even if you don't have a video monitor. It can be fed directly into a cassette recorder's line input or even to the Aux (auxiliary) input on a hi-fi amplifier. To tap this signal you need to make up a suitable cable to connect that monitor socket to the appropriate amplifier or cassette inputs. I used this method to record my 1300E's sound chip playing 'Touch'n Stress Rag' on the Music Making cassette, and I must admit it produced highly acceptable results.

The sound output from the monitor socket comes from a single pin and is therefore only single channel (monophonic) sound. Most people want to record onto a stereo cassette recorder of some description and this usually requires two channel input. You can provide it by using a twin cable to split the computer's sound output into two and then feed each part into its own input channel on the recorder. You're unlikely to find such a cable ready-made in the shops, but you can build your own for about £5.

## MAKE YOUR OWN CABLE

I'm always in favour of making life easier, so instead of building the cable from scratch you can modify a standard cable, as this saves some of the soldering work. So go to your local electronics components store and buy a 180 degree 8-pin DIN plug and a hi-fi connector cable that has two phono plugs on one end

and two bare wires at the other. If you can't obtain such a cable, get one with two phono plugs at each end instead - possibly the most common hi-fi cable around! Your local Tandy store is probably the best bet for buying these, and should be able to help if you're unsure what you need.

Most hi-fi equipment uses RCA phono plugs for its inputs and outputs, so I'm assuming that's what your cassette recorder and amplifier have. It is easy something different than you'll have to modify these instructions to take your particular requirements into account.

Having obtained the parts, you now have to solder up the appropriate connections. This needs care, as DIN plugs aren't the easiest things to work with. I know many of you have never attempted anything like this before, so here's a step-by-step guide to how it's done.

**SAFETY NOTE** - don't attempt making this cable yourself unless you know how to safely use a soldering iron. If in doubt get someone with the right level of skill to do the job for you.

**STEP 1.** Disconnect the DIN plug. It usually consists of four parts: two metal half body shells in circular moulds holding the five pins, and a plastic cover which pushes onto the back of the plug, holding everything together.

**STEP 2.** You'll make the soldering job easier if you clamp the circular transistor pencil in a vice, so it's held with the back end of the pins facing upwards towards you, oriented as shown in Figure 1.

**STEP 3.** If you have a cable with two phono plugs at each end then cut the plugs off one end and discard them so you can attach the DIN plug in their place. Cut the cable close to the plugs so you're left with two short 'tails' of wire.

**STEP 4.** You should find the centre is of the shielded covering, so each of the two wire 'tails' consists of an outer five multi-strand wire sheathing and an inner signal conductor. Slice off four multi-strand wires. Carefully strip away half an inch of the outer plastic sheathing off the end of each wire and to expose the underlying sheathing wire. Pull all the strands from both wires to one side and twist them tightly together to make a single shielding wire for soldering. This should expose the two central signal conductors in their plastic sheathing.



**STEP 5.** Then very carefully strip about a quarter inch section of the sheathing off each of the external signal conductors to expose the multi-strand wires inside. Twist the strands of each signal wire tightly together to make a single signal wire for soldering.

**STEP 6.** Tin the ends of the raw wires by immersing each for a few seconds in molten solder on the tip of the soldering iron.

**STEP 7.** Thread the DIN plug's plastic cover into the cable before you start soldering the plugs!

**STEP 8.** Now for the difficult bit, soldering the wires onto the pins in the back of the circular insulation. First solder the shielding wire to pin 2. The outside pins of the plug then solder the signal conductors to pins 3, 4, and 5, as far left in Figure 1. Ideally, you should insert the tip of the wire into the end of the pin and then solder about three centimeters. Whenever I try this the wire always seems too thick to fit into the pin, so I usually end up soldering it to the outside of the pin instead! This is OK as long as it's HERMETICALLY attached to the pin. Also, don't use too much solder, or you'll end up with a solder "bridge" between two pins, shorting them out.

**STEP 9.** Remove the circular insulation from the wire, and press the two metal half shells back into place around it. One half shell usually has a cable clamp, so place the cable in this and bend the clamp's ends over to grip it. Finally, push the plastic cover firmly over the metal half shells to lock everything in place. The cable is now ready for use.

To use the cable, insert the DIN plug into the SL/SE's monitor socket, and the two phono plugs into the left and right channel line inputs of your cassette recorder. If you're using a stereo recorder just use one of the plugs. Now hook up a program that plays music on the computer and you should now find you can record it.

You can also plug the cable into the Aux input on your hi-fi amplifier, and hear that 3-bit sound as you've never heard it before! If there's no Aux input on your amplifier you could try other high level inputs, such as CD or Tuner. I suggest you turn the volume control to maximum and switch off the amplifier before plugging and unplugging the cables through, just to be on the safe side. If your cassette recorder is also connected to the amplifier you should now be able to make recordings from the computer as from any other source.

## RECORDING THE ST'S SOUND CHIP

SEE owners are lucky, as their machines already have audio output sockets for direct connection to amplifiers and recorders. Older ST users should be able to employ exactly the same principle used with the SL/SE to record the ST's sound chip. The only snag is, the ST uses a special 18-pin DIN plug

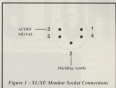


Figure 1 - SL/SE Monitor Socket Connections

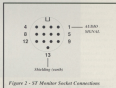


Figure 2 - ST Monitor Socket Connections

Note - the diagrams are from the external socket view. I.e. the same view you get when soldering the wires into the back of the plug

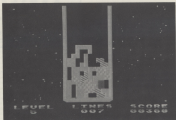
for its monitor connection, and these are much harder to find than the SL/SE's 5-pin variety. However, I've recently seen them advertised by Switchcraft of Darlington (phone 0325-402454) for £2.50, so call them if you want one. Switchcraft also sell a ready-made lead with the ST monitor plug on one end and two phono plugs on the other for just £8.95. I haven't tried one, but it sounds like a great idea if you can't face the hassle of making your own.

If you do want to make your own, refer to Figure 2 for the pin connections on the ST's monitor plug. Then follow the steps described for making the SL/SE plug, but use the ST plug's pin connections instead. I actually used a different method when recording the ST sound chip for the Music Making contest, as I was unable to obtain an ST monitor plug at the time. I connected the ST to a Philips portable colour TV via the usual 18-pin cable connection. The Philips has an earphone socket, so I made up a cable to connect this directly to the recorder input. You have to be careful with the TV's volume setting though, as it also controls the level of the earphone signal. The sound quality probably wasn't as good as a direct connection to the monitor socket, but was still far better than recording with the microphone and loudspeaker method.

I actually used a different method when recording the ST sound chip for the Music Making contest, as I was unable to obtain an ST monitor plug at the time. I connected the ST to a Philips portable colour TV via the usual 18-pin cable connection. The Philips has an earphone socket, so I made up a cable to connect this directly to the recorder input. You have to be careful with the TV's volume setting though, as it also controls the level of the earphone signal. The sound quality probably wasn't as good as a direct connection to the monitor socket, but was still far better than recording with the microphone and loudspeaker method.

That's all for now. Next time I'll be looking at some low cost recording equipment you can use with your Atari, and how SEE can be employed to control and record its use.

# HOT BLOCKS



## Paul Lay's version of an ST classic

*Hot Blocks* is a version of one of the most successful games released on the ST, a simple yet utterly addictive game in which you direct different shaped blocks falling from the top of the screen so that they form completed lines at the bottom with no gaps. Every time a complete line is made, it is removed and all the other uncompleted lines are moved down. The game is over when the screen is full up with uncompleted lines.

Falling blocks can be moved left and right by moving the joystick accordingly. They can also be rotated round by pressing the fire trigger. It is possible to drop the block immediately by pulling the joystick down.

Points are scored for every block which is used. The game advances onto harder (faster!) levels when the appropriate number of completed lines are formed.

### TRYING IT IN

1. Type in the listing using **TYPE 3** to check your work
2. **SAVE** or **OSAVE** a copy before you run the program
3. **RUN** the program which will check your typing as it proceeds. If any lines are incorrect correct them and run the program again
4. Prepare a blank tape or disk and indicate which version you require
5. The program will create a boot tape or **AUTORUN** disk (ensure that your disk has **DCB** written to it)
6. **Reboot** and play!

### CONTROLS

- Blocks are controlled by a joystick in port 1  
Press **SMART** or trigger to begin at level 1  
Keys 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, begin at the specified level  
0 key toggles sound on or off  
Spacebar pauses/resumes game  
ESC aborts a game





# SPACE RIDER JET PACK CO.

**G** and wow! Not just a new game but a new release from a new company in the Atari home-codded Hi-Tec line! They make (training doesn't help) now have a number of games lined up for your Atari. **SPACE RIDER JET PACK CO.** is at present the only original game in the batch - the others are re-packaged titles from First Star - but hopefully there will be more to follow in the near future.

In this game you assume the role of Chief test pilot for the

Space Rider Jet Pack Company who have just finished work on an experimental jet pack known as the "S.R. 1000". The company have sent you on an expedition paid trip to the (2nd) planet in hostile environment with unusual gravity and alien inhabitants to test out their new creation. Considerably, the planet is a source of valuable minerals used by the S.R. research laboratories so in full two birds with one jet pack you have been positively asked to test out without a substantial quantity! Naturally, the alien aren't exactly friendly with the prospect of you stealing their minerals so you can be sure there will plenty of nasties awaiting your arrival. Your job is to guide the test pilot through the dangerous caverns, collecting minerals

and avoiding the many traps and adversaries. Your character is large in proportion to the size of the playfield, so the obstacles can be quite difficult to negotiate. You can shoot at aliens, but they retaliate by bombing in on your position at astonishing speed. The cavern complex is huge and mapping may be the only way you will ever find the minor spots of a limited minerals. The screens 'flip' rather than scroll but the graphics are nicely done and there is a good variety of animated aliens, features

and traps. Unfortunately, the sound is of the familiar low standard associated with such Atari software. But this is a minor gripe in a game which has many considerable features.

It takes a heavy company nowadays to launch its title in the 8-bit market but Hi-Tec have done it admirably. Congratulations to them and the credit to P.A.L. developments, the originators of this, and many other recent Atari games. What are you waiting for? Study out and buy it!

Title: **SPACE RIDER JET PACK CO.**  
 Publisher: **Hi-Tec Software**  
 Price: **£2.99 cassette**  
 Players: **1**  
 Loading: **15"80"**  
 Reviewed by **Paul Dixon**



**F**orget the pools, never mind the races - Byte Back offers you a chance to break the bank and win a million in the easy way, with a guideline guide on their new **ROULETTE SIMULATOR**.

You start the game with the grand sum of \$5000, generously donated by the casino although you might be tempted to spend this on a car, a holiday or 300 years subscription in New Atari Lane, unfortunately the rules stipulate that you have got to use it for

use it on the roulette wheel. The computer displays the table of numbers and the piles of chips and waits for you to place a bet. There are ten different ways to gamble with associated odds. In this is a single number bet and naturally has the highest odds at 35-1. Ein-Carry gives you four numbers in a square of 4-4 while the more cautious gamblers can place their chips for a single column of numbers - Colour at a reasonably probable 2-1. The various combinations are all explained

on the cassette tray.

You can place up to a maximum thirty-two bets before settling back to watch the graphical delight of the roulette wheel spinning - definitely the most interesting part of this game. The accompanying sound though, a sort of muted scratching noise, leaves a great deal to be desired! Up to four players can compete, or the computer will stand in for a one-player game. Only one pocket is used, so the players must either designate a 'win-trailer' or pass it around for each go. The process of dragging the chips in to the required numbers is quite frustrating in the pocket position frequently 'slaps' the chip you are moving or refuses to place it in the position you intended. The controls are unresponsive and inconsistent and annoyingly, you are required

to manually clear the table between every go - even though you have no other option than to do so! If you run out of money there is no indication or warning and the computer simply continues to play by itself. This doesn't exactly encourage perseverance!

Apart from the rather nicely animated spinning roulette wheel, I'm afraid I can't find anything positive to say about Roulette Simulator at all! It's dull, fastating and, in places, downright comical - don't think you can do much better than this. A disappointing effort.

Title: **ROULETTE SIMULATOR**  
 Publisher: **Byte Back**  
 Price: **£2.99 cassette**  
 Players: **1-4**  
 Loading: **15"80"**  
 Reviewed by **Paul Dixon**

## ROULETTE SIMULATOR

# A-ZONE

**R**eceiving another retail-priced game from B. Bore presents me with an opportunity of apologizing to the BAZE programmers (before they say I'm) for evaluating their titanic work with the name of a certain well-known wandering wanderer in a previous article. Here is the slip-up, guys!

As if in retaliation, my entire copy of their latest achievement, A-ZONE, arrived with not any packaging or instructions - I cannot, therefore, give you the official plot of this one, although judging by BAZE's previous efforts it is almost

certain to involve alien, monsters and the world's destination - and similarly pleasant topics! The game itself appears to be a fairly standard multi-screen platform game in which your job is to maneuver a character through various passages collecting mysterious boxes and avoiding obstacles with deadly "laser" barriers. The hand-activated character can optionally invade alien "cities" to face up to the challenge although they are relatively pleasant when compared with the biggest hardware, which is without any shadow of doubt the QUINCY JAMES award! Even Escapist gave review in issue 48 is given a solid run for its money!

A further complication is implemented in the traditional fashion by an ever-decreasing energy supply, although it's not so much of a problem as it

initially seems. The supply is replenished by accumulating points, and these are gained by, among other things, tearing long trails one screen to another - in some devices slapping across the board-lines can often get you out of a tricky situation. There is also an optional "time-out mode" so that if you lose a life, you begin play with the same one at the point you had previously reached. The graphics are reasonably clear and colorful and the joystick response is surprisingly good - but I have some reservations about it

concerning the important subject of loading appeal.

There's not a great deal more I can say about A-Zone - it's a very simple game that is not outstanding in any respect but it is quite playable and may well appeal to those who were brought up on Cosmos of Kluksin (the translators that isn't) and the like. It is worth up your street, don't rush down to your local software store as A-Zone is only available directly from B. Bore, the Huddersley-based computer clubber whose advertisement you should find in this issue.

**Title:** A-ZONE  
**Publisher:** B. Bore Software  
**Price:** \$4.95 cassette/  
\$4.95 disk  
**Players:** 1  
**Reviewed by:** Paul Black



**Y**ou've seen the film, read the comic, seen the outfit and admired the chest hair - but have you played the game? No, it's not a feat as a plane - it's Superman! Hevaya's SUPERMAN from First Star, re-packaged at a bargain price by Orion.

It's one from the planet Krypton with incredible powers and abilities. He's even had a change in the original battle between good and evil - but that's a sporting bit, more powerful than a boxer and able to leap skyscrapers in a single bound. Super-

man's quest is to rid the planet of such enemy Kryptonians, who pose a range of terror and destruction! That's dealt with the rather plain (but hope associated with this game, so let's move onto the relatively straightforward objective which is to round-up the citizens of Metropolis. Darkford seeks to impede the people whilst, of course, Superman's job is to save them. The player who eventually captures the most citizens or whose opponent runs out of energy, is the victor. In a single player game,

# SUPERMAN

you can choose to command either character.

Metropolis is divided into six screens representing the streets, avenues and boulevards of the city. The player must collect a pre-determined number of objects in a grid to transfer to an adjacent screen - the intention is to guide the citizens closer to the respective headquarters where they add to the overall score. There's a further complication provided by "combat zones" providing certain locations in which the initiating player must win a duel but he with less appeared in advance into the required screen. Both Superman and Darkford have special powers to inhibit each other's progress. Superman can activate a heat beam whilst Darkford has an "Omega Ray" with similar properties. Defectors positioned at street intersections direct these chargeless missiles

and are also useful for channelling citizens in the desired direction.

I have to admit that Superman has never been one of my favorite First Star games - despite the pleasant graphics and novel theme, I don't rate it highly in terms of playability. As a one player game it tends to become rather boring, but two player mode with two reasonably matched opponents is generally more exciting - so if you really have watched the film, spotted the outfit and will have an opportunity to see how computerized and grab a copy of Superman!

**Title:** SUPERMAN  
**Publisher:** First Star Software  
**Price:** \$2.95 cassette  
**Players:** 1/2  
**Loading:** 9/10  
**Reviewed by:** Paul Black

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Adventure	1.99	
Adventure 2	1.99	
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## ADVENTURE STRATEGIES

	Game	Price
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Adventure 2	1.99	
Adventure 3	1.99	
Adventure 4	1.99	
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Adventure 97	1.99	
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Adventure 99	1.99	
Adventure 100	1.99	

## CLASSIC CASSETTES

	Game	Price
Adventure	1.99	
Adventure 2	1.99	
Adventure 3	1.99	
Adventure 4	1.99	
Adventure 5	1.99	
Adventure 6	1.99	
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Adventure 99	1.99	
Adventure 100	1.99	

## UTILITIES

	Game	Price
Adventure	1.99	
Adventure 2	1.99	
Adventure 3	1.99	
Adventure 4	1.99	
Adventure 5	1.99	
Adventure 6	1.99	
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Adventure 99	1.99	
Adventure 100	1.99	

## BUDGET CASSETTES

	Game	Price
Adventure	1.99	
Adventure 2	1.99	
Adventure 3	1.99	
Adventure 4	1.99	
Adventure 5	1.99	
Adventure 6	1.99	
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Adventure 25	1.99	
Adventure 26	1.99	
Adventure 27	1.99	
Adventure 28	1.9	

# ATARI ACES

**A** "arcade games" collection from J. & G. Gold featuring three titles from Sega - the company infamous for producing technologically more sophisticated than even sophisticated arcade machines - and a fourth offering from DataEast. The latter, a multi-screen arcade adventure starring Johnatan McVolley's legendary masked character ZORRO is fast surmounting the highlight of this compilation.

Zorro's quest is to rescue a beautiful woman who has been kidnapped by the evil Jorgant Garcia. The previous journey leads through a vari-

ety of locations and items, most of them numerous objects for easy gaming access to the desired destination. The combination of pleasant graphics, reasonable sound and some ingenious puzzles result in a challenging and addictive adventure. However, disk drive owners would be able to work out the disk version of Zorro which incorporates a number of extra surprises.

Sega's *UP 'N DOWN* is possibly one of the strangest arcade games ever - the aim is to control your "Tiga Thing" through a swirling, zig-zagging runway while collecting a series of flags from the roadside. Opposing pink up trucks and "wedge cars" seem to materialize from thin air and head straight towards you, intent on fatal collisions. You can jump to avoid them but the consequence of a mis-timed landing can prove equally unpleasant! *SPY HUNTER* is



another car game in which you endeavor to maneuver a motor-charged spy mobile at high speed whilst pursued by enemy agents who may fall fast on your destruction. The game is played from an overhead viewpoint to the melodic tunes of Deane Edlitz and the action unfolds over a constantly swelling landscape with linked junctions, by roads and enemy helicopters adding to the excitement.

On a completely different note, *TRIPPER* places you in command of a limited helicopter in his quest to sling water

at liquidated targets and retrieve empty glasses before they slide off the counter. You can distract the customers by pulling up the "showering girls" but the money earned isn't kept occupied for long! *Tripper* is an addictive game although, like Zorro, it loses out to the disk original which offers several additional screens.

*ATARI ACES* is well worth the asking price the Zorro alone and you also get three playable arcade games of yesteryear into the bargain. If you haven't seen these titles before, it's time to snap them up!

Title: **ATARI ACES**  
 Publisher: **J & G Gold**  
 Price: **£4.95 cassette**  
 Players: **1/2**  
 Loading: **15-45' (disk)**  
 Reviewed by **Paul Dixon**



**A** *ARCTIC ANTICS* is the third game in First Star's *Spy vs Spy* series featuring the two daily secret agents - one dressed in black, the other in white - from the American comic *MAD*. The original full priced game and its first sequel have been out sale for some time but, courtesy of *MSX* Inc, you can now obtain the complete trilogy in budget packaging. In *Arctic Antics*, your spy's mission is to locate and launch an inter-galactic rocket

before a blizzard hits the Arctic island where the necessary components are hidden. You need three objects - an Entry Punch Card, Guidance Device and Uranium Fuel Capsule - to launch the missile but first you must find the launch facilities so you can transport several items in one go. There are a number of natural hazards such as blizzards, deep snow and thin ice but the biggest irritation is your opponent, a silver computerized ice hunter, whose ob-

## SPY VS SPY III ARCTIC ANTICS

jective is the water in your!

Only one of you can win the game, so it may be necessary to lay traps or even engage in a one-to-one swordfight!

The graphics are almost identical in style to the original *Spy vs Spy* games. The screen is split into two windows giving each player a side on, and 3-D view of the action. The scenery scrolls as you move from one location to another and you can also move to the 'top' of the screen to other levels of the island. If you enter the same area as your opponent, one window is temporarily blocked out so that both players have the same screen view. At the beginning of the game you can select a variety of islands as well as the difficulty level - a map is available to help you navigate the com-

plexer layouts.

If you're a fan of the previous *Spy vs Spy* titles you will be overjoyed with *Arctic Antics*, since it has all the charm, challenge, fun and addictiveness of its predecessors. If you haven't experienced any of them, I can highly recommend the complete trilogy. One minor drawback is that *Arctic Antics* is a long, long, leader with lots of reworking and waiting involved. Although the game itself is well worth the basic, important disk drive owners would be well advised to search for the disk original!

Title: **SPY VS SPY III**  
 Publisher: **MSX Software**  
 Price: **£2.99 cassette**  
 Players: **1/2**  
 Loading: **20-40'**  
 Reviewed by **Paul Dixon**



# DREADNOUGHT

**R**ed Hat has once again brought the most profitable 8-bit software houses and brought a string of top-notch games onto the market. The Back are now following the majority of this range at budget prices, spelling excellent news for game-starved Markins who now have a chance to pick up some excellent quality software without paying the now customary high price for it. In the case of DREADNOUGHT, I'm not sure that Red Hat ever got around to an official release, so its appearance on the Byte Back label is especially welcome.

The **DREADNOUGHT**  
 Publisher: **Byte Book**  
 Price: **\$2.99 cassette**  
 Pages: **1**  
 Loading: **2700" speed**  
 Reviewed by **Paul Rice**

The story would have you believe that an underwater city is being attacked by aliens. Only you have access to civilization's most powerful weapon - the Dreadnought and you, only you can use it to ensure the survival of your endangered planet. Well, believe it or not, this is actually the build-up to a submarine adaptation of Defender, the classic Atari arcade hit which spawned the fabulous Dazzlers - one of the best Atari shoot 'em ups ever! For those not familiar with this popular format, the idea is basically to cover around a horizontally scrolling playfield blasting waves of attacking craft as they head towards you. You have to be quick to avoid them as any contact with the adversary is instant fatality. Typical delights include well-armed players, a typically edged backdrop and a superb



status panel below the main playing area. The highlight of the graphics is the stunning result of a hit by an alien craft or missile - the Dreadnought explodes into a colourful, glittering fountain of fragments. The sound adds a further sparkle to the presentation with plenty of atmospheric noises and a liberal selection of effects. In fact, the only criticism I could level at Dreadnought doesn't concern the game itself but rather the method of production. The incredible loading wait of over

twenty minutes is entirely due to the program format having long taken several pages, a frustrating and unnecessary burden on the user.

The Back have thus far produced a mixed bag of goodies and not-so-goodies for the Atari, but in adopting a substantial portion of Red Hat's output from the past few years they have acquired an astonishing range of high quality software which is assured a positive reception from all concerned. Dreadnought is one of the best.



**F**or some reason I'd forgotten EXPLODING WALL to be a Karate simulation (perhaps I was thinking of 'Way of the Exploding Fist' on the Commodore), and was therefore a bit disappointed when it turned out to be a clone of the ager's Arkonoid! There's nothing wrong with Arkonoid of course, but with its several entrants in budget format and Atari's Software's similarly styled Crack-Up threatening close competition, there's not exactly a games shortage for

fans of the original arcade hit Breakout! Breakout, or Exploding Wall for that matter, is the game in which you have to knock down rows of bricks by hitting a ball across the screen so that a ray moving ball is prevented from escaping. If the ball destroys a brick, you've won a point, but if the ball travels past your bat then you're lost a life - it's really as simple as that! Arkonoid was the game that introduced a host of distractions to bring up the action, and they're all here in

## EXPLODING WALL

Exploding Wall - alien's foot around each screen and can deflect the ball when you least expect it, and bonus-represents fast intensely towards you. The latter can provide you with laser fire, missiles, speed control and extra lives or - worst - the ball is split into several pieces. This can be useful, but you mustn't forget the ultimate aim to keep that ball in play!

Exploding Wall differs slightly from its predecessors in that the playfield stretches over two screens, scrolling horizontally as you guide the ball from side to side. The graphics aren't as good as the Arkonoid variety, but are beyond criticism generally and include some impressively animated Fuji symbols on the introductory screen! Unfortunately, the colors and backdrops are identical throughout all vari-

ety levels - some variations here would have added a predictable touch to the presentation. The sound is adequate, though only just!

I find it difficult to get very excited about Exploding Wall - it's lip no means a bad game (albeit not a Karate clone but it offers nothing really new over Crack-Up and falls well short in matching Arkonoid on style. Not to worry, however - I know Byte Book have re-released the bulk of Red Hat's software range at budget prices, including Super Run and Screaming Wings. If you don't have these goodies already, I'd advise you to make amends!

The **EXPLODING WALL**  
 Publisher: **Byte Book**  
 Price: **\$2.99 cassette**  
 Pages: **1**  
 Loading: **1200"**  
 Reviewed by **Paul Rice**

# ARNIE

*Ann O Driscoll presents  
a quiz program for  
children of all ages*

ARNIE is a simple quiz/educational type program suitable for children of all ages since you create your own word lists according to the ability of your child. The program includes an easy to use question maker.

The aim of the game is to get the title often, Arnie, from the top of the screen to his spaceship, the ARN 1, at the bottom. To do this you must move him through a number of doors, each of which is unlocked when two questions are answered correctly. When you reach a door try and move through it and the first of the questions will appear. The answers are given as multiple choice answers and it is simply necessary to press the number key for the answer required. If both questions are answered correctly, Arnie can continue to the next door until finally he makes it out to his ship.

## MAKING UP QUESTIONS

The disk for this issue contains two ready made question files, EUROCAF, a quiz on the capitals of European countries and WORDS, a sort of spelling test using homophones - the ones that sound alike such as they're/there/their. You can however easily set up your own question files each containing 20 questions and answers by using the Question Maker included in the program. The screens prompts should make this option easy to use even for beginners.

Questions may be typed in any format but if all of your questions start in the same way, i.e.g. Give the chemical symbol for ... What is the capital of ... etc.1, you should select the First Entry option and then the opening phrase only has to be typed in once instead of 20 times.

That's about it - the program is simple to use and should provide a nice challenge to all ages, depending on how difficult you make the questions. You can use it for first reading, spelling tests, foreign languages, in fact any type of learning. All you have to do is provide the questions and answers.

The program will work with computers as well as disk and will run on any Atari 5.25 machine.



ARNIE: 40000 HEADS TO SOUTH BE TO SPACE  
1: 4000  
2: 2000

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03 4 000 *      *
04 5 000 *      *
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# THE ACCESSORY SHOP

## ISSUE 46

Welcome once again to the Accessory Shop where you can find lots of bargain programs to keep your XL or NE happy. This issue we have some excellent graphic adventures from Scott Adams - again programs that have not been on sale for many years and that will most probably be exciting discoveries for many new owners. We also have continuing supplies of most of the Atari ROMS and disks introduced last issue - your chance to get some serious program or have fun at a fraction of the original price.

### Let's Get Adventurous

**NEW  
SOFTWARE!**

## PIRATE ADVENTURE



"It's the sea and a bottle of rum...". You'll meet up with the pirate and his dally bird along with many strange sights as you attempt to go from your London Bar in Treason Island. Can you rescue Long John Silver's lost treasure? Happy sailing matey.

Scott Adams Graphic Adventure #2 brings you a superb English level adventure complete with graphics and ideal for all ages.

**DISK ONLY**

Original price £19.95  
**OUR PRICE £7.95**

## VOODOO CASTLE



The Curse of Monte Cristo engrosses in a castle in his many walls, awaiting an able guide from you to rescue the curse that binds him to see life. Is he done for the Count for good, or can you help? Gather your noble's fleet, antique stores and magic, Good Sir or Madam, and prepare to step through the portal of Voodoo-castle!

Scott Adams Graphic Adventure #4 is a Moderate level adventure complete with graphics and ideal for those who have had some experience.

**DISK ONLY**

Original price £19.95  
**OUR PRICE £7.95**

## THE COUNT



What's the best time you make in an antique store laid in a dark, double castle? If your answer is "never" you've come to the right place! This marvelous Castle of ... Graphic Adventure will carry you into the swirling world of a castle well-known Frenchman meet, bringing his secret face to much fun!

Scott Adams Graphic Adventure #3 is a Moderate level adventure complete with graphics and ideal for those who have had a little experience.

**DISK ONLY**

Original price £19.95  
**OUR PRICE £7.95**

## STRANGE ODYSSEY



In the galaxy's rim, there are rewards plenty to be harvested from a long and alien civilization. Prolonged lives, riches ... advanced technology for beyond human use ... All this and more awaits the brave galactic adventurer. But will you be able to rescue the wealth and return home? Prepare yourself for a Strange Odyssey!

Scott Adams Graphic Adventure #6 is a Moderate level adventure complete with graphics and ideal for those who have had a little experience.

**DISK ONLY**

Original price £19.95  
**OUR PRICE £7.95**

**POSSIBLY THE LAST TIME THESE FAMOUS ADVENTURES WILL BE OFFERED FOR SALE!**

# Let's Have Fun!

Atari have had some real classic arcade games and originals either written themselves or specially commissioned. Some of these titles have not been available for some time and all are top quality programs to bring you fun and excitement with your Atari.

## ALL ROM CARTRIDGES WILL PLAY ON ANY XL/XE SYSTEM INCLUDING THE XE GAMES SYSTEM



### PLANETARIUM

Ever wonder what their world is like for looking back at the heavens. Over 1200 stars, 28 constellations, the solar system and more than 300 deep sky objects are depicted in this program that allows you to view the universe. You can make stellar and planetary maps, study eclipses, learn about meteors and comets, monitor and search against meteors and comets and determine navigational positions from celestial observations. It will learn a great deal and you'll have fun while doing it. Includes an excellent manual and guide.

**DISK ONLY**  
requires 1800 drive

Normally £16.95.  
**OUR PRICE £6.95**

### POLE POSITION

The ultra-realistic graphics and sounds of the Grand Prix capsule take your driving experience to this computer version of the classic arcade hit. Complete a lap in qualifying time, then take on the F1 pit recovery and competing drivers in a high speed race. One of the all time classics.

Normally £12.95.  
**OUR PRICE £6.95**



**ROM CARTRIDGE**



### GALAXIAN

Another arcade masterpiece that retains all of the attractiveness of the original and still stands as one of the all time classics. Blast the galaxians as they advance in formation and pull off to attack. With one or two players and 10 skill levels you'll be entertained for a long time. Includes an easy option for beginners.

**ROM CARTRIDGE**

Normally £12.95.  
**OUR PRICE £6.95**

### PACMAN

Surely one of the best known games? Guide your happy little Pacman through the maze gobbling up dots and fruits while avoiding the ghosts. Gain a bonus PacMan every 10,000 points as you rack up the score. Simple, colorful, addictive and compelling. A classic game.

Normally £12.95.  
**OUR PRICE £6.95**



**ROM CARTRIDGE**



### U.S. FOOTBALL

American football is now a big game in the country and you can now play at home. Outmaneuver the defense, pass with amazing accuracy, run with speed and agility, make tackles, select offensive and defensive plays and more. You can take on the computer in a practice game or challenge a friend to a dramatic video-taped game of your own in a packed stadium. All the skills of the pros - without all the bumps and bruises.

**ROM CARTRIDGE**

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**OUR PRICE £6.95**

### JOUST

Use your helmet and hold your lance and clash ahead an enemy in this unusual arcade game! Do battle with the evil Round Riders in deep space. Paralyse to the right of you, aim eggs to the left, you must learn to fly so that you won't die so easy for those home. All the arcade thrills for one of two players.

Normally £12.95.  
**OUR PRICE £6.95**



**ROM CARTRIDGE**





## RESCUE ON FRACTALUS

Add old friends who can save the best games ever for the Atari and a great generation of them will see Rescue on Fractalus. This game from Lucasfilm is one standard in computer games combining a space flight simulator with a power sensitive "laser" war strategy. 100 stars are in your life through the intricate to land on the planet and rescue stranded pilots. It's tough and so you get better if you succeed, but what a thrill to succeed. See for yourself why many consider this to be the best game of all time.

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CARTRIDGE

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## BALLBLAZER

Another from Lucasfilm, this top quality title never quite takes place in a game area of the house. You are strapped into a football blazer, craft like vehicle that skates over the surface of the planet at 50 miles per second. The sport is simple, just release your Blazer's through your opponent's goal - fast it takes a great deal of skill and timing. Ballblazer features two player simultaneous play with four person competitive for both players. One of the finest two player games ever.



ROM  
CARTRIDGE

Normally £14.95  
OUR PRICE £6.95



## BATTLEZONE

Another cracking arcade conversion that set new standards. You command a tank on the battlefield under attack from enemies tanks and flying saucers. You can maneuver through fast changes in the terrain, attack from all directions to tank over tanks, turn and blast on the enemy's approach at speed. A smart job will use the enemy's tanks and saucers against him. They attack, but if they fire first, you'll have to accommodate them. It takes a lot of skill. One player, the still best.

ROM  
CARTRIDGE

Normally £14.95  
OUR PRICE £6.95

## STAR RAIDERS 2

The original Star Raiders is updated with better graphics and sound to give all action space drama to which you must think about enemy craft using ever changing weapons and tactics. Your job is to enter each sector which contains the enemy, do not receive points in another part of the galaxy. It will take skill to determine what is worth to wage in, are you effort to shoot a sector or will you have to follow a defined plan and capture them? Watch every year's worth in good condition and properly looked at all times. It great follow up to an all time classic.



ROM  
CARTRIDGE

Normally £14.95  
OUR PRICE £6.95



## LODE RUNNER

Another classic, perhaps the best of all platform games. You are a highly trained character who must leap to enemy territory. Your mission is to fill in all 70 of the mine's subterranean levels to recover every last piece of gold. You are equipped with a laser that gives you 70 level more than that you need, timing, speed and agility. Lode Runner includes a unique entry that allows you to create your own levels so that the game can go on forever. One of the best.

ROM  
CARTRIDGE

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OUR PRICE £6.95

## MIDNIGHT MAGIC

Football on your Atari can become totally addictive as dramatically as nobody in the game. The Ball Commander title will handle. You can play in the five with World's Greatest Magic at the start of the planet take on your career. There are jiggers, hoppers, drop targets and you can visit "Magic" the machine. Watch your don't run in all of the action, magical skills of real words perfect for up to four players.



ROM  
CARTRIDGE

Normal price £14.95  
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## ONE ON ONE

The handball with one of America's top players in this great sports simulation which features realistic offensive and defensive moves, unique features, fast action, a shot clock, more realistic replay and a stunning soundtrack! Like the game of handball itself, One on One rewards you for playing with your head as well as your hands. Master the game's tactics, sharpen your timing and test your reflexes. Jump! Move! Score!

ROM  
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Fight Night brings you all the skills of the boxing ring as you face five of the most brutal fighters ever. Use their unique tactics, you must win with reflexes and wit. The Boxing Experience has five players and your opponent is created your own perfect fighter, selecting statistics, to reflect real style. It's a real and they bring the ring to get you perfect boxer against the computer or another opponent. For one or two players.



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# Let's Get Serious!



## VISICALC

The world famous VisiCalc spreadsheet available for your Atari. VisiCalc will take care of all of your spreadsheet requirements with all the arithmetical functions you could want on a spreadsheet that is 60 columns wide by 254 rows deep. All major spreadsheet functions are supported and the program even allows split viewing windows.

VisiCalc must be one of the finest products ever produced for the Atari and comes complete with superb tutorial and quick reference guide. Believe it or not the original price for this package was £159.95!

**DISK ONLY**

*Original Price £159.95*  
**OUR PRICE £11.95**

*This is one of the most professionally produced packages we have ever seen for the Atari*



## TIMWISE

Why not use your Atari as an electronic diary? Timewise allows you to keep track of all your appointments and important dates on a daily, monthly or yearly basis. Now you can dispense with your diary and let your Atari do the work. If you have a printer Timewise allows you to print out the information in a variety of ways.

**DISK ONLY**

*Original selling price £22.99*  
**OUR PRICE £7.95**

*A very practical program that will make your Atari even more useful*

## PROOFREADER



Users of AtariWriter will be delighted with this, the long lost spelling checker for the Atariwriter package! Proofreader may be loaded alongside AtariWriter to give you instant access to a dictionary of 36,000 words. If that is not enough you can add your own words as you go. Errors are highlighted on screen for correction, missed words can be saved and you can look up spellings. Proofreader is the missing link for AtariWriter.

**DISK ONLY - OUR PRICE £5.95**

## TOUCH TYPING



Everyone who uses a computer needs to brush up on their typing and now you can learn to type like a professional typist with this complete tutorial. Touch Typing presents a self-paced method of learning by letting you practice typing letters, sentences and paragraphs. The computer determines words per minute, number of errors and your weak points. Random sentences are generated to drill you in those areas. Contains two cassettes and instruction manual.

**CASSETTE ONLY**

*Previously £19.95*  
**OUR PRICE £4.95**

# Let's Be Creative!

Learn to program, it will make your Atari come alive. Even if you are only able to write short programs you will experience the joy of creation and once you start, you may well want to go on to become an accomplished programmer. If you already know Basic, maybe now's the time to learn machine code.

## MACRO ASSEMBLER



The Macro Assembler will allow you to create your own machine language games and applications five times faster than with the Assembler Editor cartridge and it can assemble as many as 5000 symbol definitions with no limit on program size. You can duplicate code, optionally assemble code and modulate your programs. You can define symbols and macros in a library file and access them allowing you to create modules that can be used then and then again. The Program-Test Editor included has all of the features of a word processor enabling you to write your programs much more conveniently. Unlocks the power of your Atari with Assembly Language programs. Includes two reference manuals and a quick reference card.

DISK ONLY

Normal price is £19.95.  
**OUR PRICE £7.95**

## BASIC CARTRIDGE

Why would you want a Basic Cartridge when Basic is already built in to your machine? Well some programs, especially some early public domain programs won't run on the XL/XE but they will if you plug in the old version of Basic. Much more convenient than having to boot in the old Basic from disk and, at this price, worth having just as a backup. We will not be buying more stocks of this item so now is the time to buy.

ROM CARTRIDGE

**OUR PRICE £3.95**

## EASY PROGRAMMING FOR YOUR ATARI MICRO



This book went out of print 3 years ago and we have been searching for a replacement ever since. We are absolutely delighted to have found many stocks of one of the best beginner's books ever published. Over the past couple of years whenever someone has phoned for a beginners book on programming we have advised them to try and find a second hand copy of this book - now you can buy it once again, brand new! By the end of this book you'll be writing your own programs, including those with full graphics and sound.

**OUR PRICE £5.95**

## ATARI BASIC

A well teaching guide to programming in Basic that includes dozens of programs and routines. If you want to learn Atari Basic properly, stop by stopping at their just playing about with programs. This tutorial approach is the way to do it. You'll pick up a full understanding of things as Basic and Data, more statements, For-Do loops, multi-ported variables, Gosub, string variables and so on. The approach is non-mathematical but if you work through the book you will not only be able to write programs, you'll understand exactly what you are doing and that is fundamental to putting your own ideas into a program. The book that the editor used to learn Atari Basic! Originally priced at £14.95.



**OUR PRICE £5.95**

## INSIDE ATARI BASIC

If you fancy dabbling with programming but are not sure of your capabilities try this excellent reference book at a bargain price. The book takes you through every stage of programming at an introductory level showing you just enough to get going. If you've got hooked then you can always go on to the advanced books. Ideal for beginners or the complete novice. Over 100 pages.

**OUR PRICE £2.50**

## 400/800 FIELD SERVICE MANUAL

Your best chance to obtain the 400/800 manual and at a special price. We have now picked up a great stock of this excellent service guide that is relevant to the XL/XE. Contains complete information on disassembly, service facilities and more. A valuable resource for all technicians. Last four

**OUR PRICE £9.95**

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	BATTLEZONE	£ 6.95	
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	THE COUNT	£ 7.95	
	STRANGE ODYSSEY	£ 7.95	
	<b>Total</b>		

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	<b>Total</b>		

## PUBLIC DOMAIN ETC.

Quantity	Title	Price	Total
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	ISSUE 46 DISK	£ 3.95	
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	TURBO BASIC	£ 3.95	
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## PAGE 6 SOFTWARE

All on disk unless shown

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	TAHITALK	£19.95	
	MINI OFFICE II	£14.95	
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	SPELL ME - Disk	£ 6.95	
	<b>Total</b>		

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# ST

# FILE



Those of you with young children might like to know that *Adventure* should have a couple of Thomson The Tank games set by now plus an educational program. The games are Thomson The Tank 1 and Thomson The Tank 2. The discs are both retail at £5.99. The educational program is Thomson The Tank 1 for with words which will cost at the price, £19.99. Multimedia have released *SPACE 3000* which is a space flight simulation combined with role playing adventure selling at £29.99 as well as having packed up the license for the Thomson money kit in *TALENTS*. The game will feature high speed action and suspense from the car looking of the driver, looking backwards as well as having cameras on both floor and rear bumpers - all this plus the usual features of the computer driving simulation. I take out one the *CAPTAIN* from *Adventure*, set in the future you try to escape from captivity when a computer malfunction erases you from computer animation. Comics magazine continue their big name licenses with *THE SPY* £19.99, all of the usual stuff in an action packed game for

**£19.99**. *S.T. 3000* should be now have a couple of interesting games and *SOLO*, *SP-108* *ATROX*, written by an ex-Popsoft developer promises to look good if running like with 20 megabytes of graphics and 60 screens of plots and traps with the best containing over 1000 frames of animation. *SPRINKLES* £19.99 is a follow on from Future Wars, a more traditional action adventure which has you as a G.I. soldier in Iraq in the form of a tank. *Lighter* is a game which disappeared over South America. Another from U.S. Gold is *S.T. 3000* £29.99, a very typical game which looks a small national space keeping force in the Middle East trying to save the world from destruction, and this was controlled before Thomson license decided to play a few games of its own. *Memorable* another form of tank, better regarded than the former, *body in SPACE* in which you must destroy nasty mutants attacking your body cells. Others coming up from U.S. Gold are *ROCKBLASTER*, a space shoot 'em up set in the outer fringes of the solar system, *INTERMID*, a round the world powered simulator and *MANICOM* a chess game set on Earth. *Traps and traps* from U.S. Gold have some flesh and the big licenses, after quite a time releasing their last computer on budget labels, with *SPRINKLES* 2 which is underlined for outdoor release. From Electronic Arts, or more precisely the *Buffing*, you also thought up *Popsoft*, comes *WARRIORS* of a more complex nature. The player is with a world in which each individual has a theme, an occupation and a level of intelligence. There are kingdoms, kingdoms, farmers, ranchers, cattle and sheep of going about their daily business as the seasons progress. As the leader of a kingdom to the you have to explore 200 territories and the loyalty of the citizens. You are spending local religion, provide food and more in order to keep the world survive and prosper. Sounds good! Another from Electronic Arts is *THE IMMORTAL*, an action adventure in which you play a wizard searching for his long lost brother. *Knights*, *Brigs*, *ships* and *hugs* were part of it. The last three mentioned games are £19.99 each. *U.S. Gold* license products released on the ST. The package is not cheap and has received two reviews of the things so it will be interesting to see how it will be received on the ST. There were originally

several other packages it used on the ST but has, apart from *Knights*, seems to have cancelled. *U.S. Gold* are just looking in the world, maybe this time for a new license? Finally, in *Adventure*, a new concept in *Adventure*. *Demigods & Dragons* is a set with *DEMIGODS* £19.99 developed to more closely match the tabletop version of *U&W* with a career game and role playing rules on a computer. *Demigods* is a computer role playing game for action, combat, and a fantasy world for action, combat, *DEMIGODS* name comes and all associated necessary to represent your players. The scenario has your character's relationship to the demigods who are facing the *Demigods* names. Your task is to protect and feed the village while keeping the demigods from attacking. It is interesting to see how different the new concept is.



**DELUXE PAINT** - setting new standards on the ST?

Another shot of Electronic Arts **DELUXE PAINT** showing one of the famous Amiga images



**THE IMMORTAL** - action adventure with lots of nasties out to destroy you

**SPACE ROGUE** role playing, space flight simulation



# CLIP ART COLLECTIONS

Enhance your DTP or word processing with these superb collections of Clip Art that may be used in any program that accepts **EMULAS** format pictures. All images are in the **PNG** compressed format to get more on the disks but there are conversion utilities included with each set. All images have been tested with **Pilot News Publisher** and should be compatible with any DTP program or program such as **Lotus Word Plus**.

## CLIP ART COLLECTION 1

### Clip art images for your ST

This four disk collection contains hundreds of images for use in Desk Top Publishing or word processing programs that accept graphics. You can enhance any publication whether a full blown magazine, a business annual club pamphlet or even your own personal stationery. The images are in a compressed format so the disks to enable as many as possible to be included but there are full instructions.

On how to convert the images to **EMULAS** format which is a standard recognised by most programs. If your program requires **EMULAS** format pictures, these can usually be converted from **EMULAS** with utilities supplied with the program concerned. This collection contains holiday and Christmas art, alphabets, people, cartoons, sports, logos, valentines, fun graphics, whimsy and much, much more to enhance your creations.



FOUR disk collection - just £10!

## CLIP ART COLLECTION 2

### Hundreds more images for your DTP programs

Following the success of the first Clip Art Collection we have put together a further collection of all new clip art with many diverse subjects. We have tried to balance the collection out with some large clips and several small ones. For instance two screens have about 60 items on each! We are sure that you will find many useful items on three or four disks. These of the disks have general items including people, animals, computers,

business related graphics, cartoons such as **Disney** and **Garfield**, hands, eyes, classic art and much more while the fourth disk is mainly fonts and borders. There are also a number of trademarks from the libraries which are now out of copyright. Your artwork can be enhanced by including graphics or large fancy capitals or headlines which are not normally available in most DTP programs and by using some of the excellent borders and screens on these disks.



CLIP ART 2 is £10 for FOUR disks.



## CLIP ART COLLECTION 3

### Double the images!

Thank you!



At last another Clip Art Collection with all new pictures including many created from commercially available copyright free art. There is a huge assortment ranging from people to buildings, cartoon style drawings to hand drawn objects and more. This collection is in **Tiny** format to get more on the disk and comes with conversion utilities to convert the images to **EMULAS** or directly to **EMULAS**.

Happy New Year  
Happy New Year

David Griffiths

FOUR DOUBLE SIDED DISKS for £10



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AT LAST

# DAMOCLES

**W**ell, Damocles has finally arrived! I must admit I'd given up all hope of it appearing, as it's been "coming soon" for about four years now. It's subtitled *Mercury II*, and surprise, surprise, it's a follow-up from author Paul Winkler's massively popular original *Mercury* game. In fact, if you successfully completed *Mercury* you can even use the real game save file (if you can find it after all this time!) to import your final inventory into *Damocles*. This also seems to have implications only hinted at in the *Damocles* instructions manual!

Anyone who's played *Mercury* will immediately feel at home with *Damocles*, as its overall presentation and gameplay are very similar. The main differences are in the scenario, the scale of the game, and the graphics, so let's take a closer look at these.

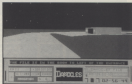
Action takes place in the Gamma system of outer planets and their ringed moons, orbiting a star called Delta. Unfortunately one of the planets, Eris, is threatened with destruction by the comet Damocles, which in its direct collision course with it. The president of Eris offers you the job of preventing the catastrophe and you, of course, accept with alacrity. One small snag though - you get slightly delayed en route to Eris (for about four years - down that would hand isn't), so now you have only a few hours to prevent Damocles pulverizing the doomed planet.

*Mercury* involved only one city on one planet, but in *Damocles* you can travel almost anywhere in the Gamma system, assuming you've obtained a suitable spacecraft. You can even land on Damocles itself! But beware! Space travel is at near light speeds, meaning rapid passage of time as you fly. Based on travel, finding an alternative method of interplanetary transport is therefore a high priority task. Once on a planet you can travel on foot, by car, by aircraft, or even by space vehicle - assuming you've located a vehicle and found its matching key, of course.

Most of the planetary settlements have complex road systems on which residential buildings are located. I found it essential to map these, as many of the buildings look similar and disorientations soon sets in. You explore the buildings on foot, but some need the appropriate key before you can enter. Most buildings are multi rooms, multi story edifices, with access to other floors via a lift. The objects and objects you need are usually hidden somewhere in these buildings, but only a few locations actually contain anything helpful. Hint - possession of an A to Z Computer can save you a LOT of time.

As expected, progress is achieved by finding useful objects, following meaningful clues, and avoiding wacky traps - cunningly laid by the author (beware Estate Agents and Solicitors, amongst others!). You may also need to do some trading to obtain essential items, and could even get involved in combat if your actions provoke an attack. It's possible to reach one solution to the game by following a fairly straightforward trail of clues, but this uses only about 20% of the game's capabilities. It's a good way of getting experienced, but more advanced players will want to discover the more challenging alternative solutions.

The most obvious difference between *Damocles* and *Mercury* is in the



graphics. *Damocles* uses spectacular colour filled, three dimensional graphics compared with *Mercury*'s simpler wire-frame approach. And the speed is breathtaking! Screen refresh rates must be approaching 20 frames per second in places, making the game's first person view of the action truly marvellous. Also notable is the game's opening sequence, in which you fly from deep space into the Gamma system and down onto the surface of Eris to land at a spaceport, and I loved the way the planets and moons rise and set and was and wane according to their orbital positions, and how Damocles changes as it moves in its orbit around Delta.

Sound is fairly unimpressive, limited mainly to general sound effects and the burblings of Erison, your friendly communications computer. However, if you need music you can obtain a ghetto blaster at a store on the planet Logos. This plays a recycled version of the music from *DuckDuck*, an earlier Paul Winkler game! You thank.

The thing that surprised me most about *Damocles* is that it's contained on just one disk, and what's more, once loaded it's totally memory resident - even on a 500K! Paul Winkler has obviously saved every trick in the book to cut down storage requirements, eliminating those hair-raising waits while the graphics load. The result? Unbelievably quick!

I can't remember when I last had so much fun reviewing a game. For me *Damocles* has everything - top notch presentation, excitement, depth, lots of humour, subtleties... I could go on forever! I won't though. It's just got straight back to playing it instead. Stay it - you'll love it!



Title: **DAMOCLES**  
 Publisher: **Nowagen**  
 Price: **\$24.99**  
 Reviewer: **John D. Boyce**

# PD Paul Rixon's WORLD

## THE NATURE OF PUBLIC DOMAIN AND MORE ABOUT WORD PROCESSING

**J**ust what is PD? The answer to this simple question isn't an obvious one you might think. Public Domain is the term more descriptive work which has no copyright attached, so that you're free to copy, distribute, use and generally do anything else you like with it. Strangely enough, the majority of software in the 'Public Domain' does not fall into this category! Confused? You will be! If the author of a program retains the copyright of his or her own work, but allows it to be distributed freely amongst other users, it is technically known as **Shareware**. There are encouraged to make copies and give them to their friends and are not obliged to pay the author for the privilege, although donations are obviously well received.

### SHAREWARE

A common form of software distribution (especially in the States) is **Shareware**, which originated when Programmers began to receive money from satisfied users and realized they could obtain more certain remuneration for their efforts by formally requesting a tiny donation fee. The author retains full copyright of a Shareware program, but encourages its distribution. The small registration charge not only ensures that users can legally keep the software but

also usually enables them to receive the next upgrade and, often, improved documentation. Shareware hasn't been particularly successful in Britain as the fee is essentially an 'honorary payment' which has proved all too easy to ignore. For this reason, another form of PD has grown in popularity. Known as **License-ware** and pioneered by Dudgeon UK, the concept insists that programs are sold exclusively by licensed distributors (such as PAGE) who are required to forward royalties to the author of every License-ware disk they sell. In this way, programmers are assured of a modest (but not worthwhile) income and users



1st WORD - one of the most popular freeware titles

enjoy a quality-improved but inexpensive source of software. It's good news for everyone!

### WORD PROCESSING

Last issue I examined ST Writer, Atari's popular freeware word processor, and got so carried away that there wasn't room to cover the other disks I had lined up for discussion! The subject of word processing is therefore revisited in this month's column. The slight digression down was prompted by reading a letter in a recent edition of the ST Club's newsletter (an interesting read - details from The ST Club, 40 Honey Street, Nottingham on a related subject, listed very recently. Atari have been handling IBM's 1st Word with every new ST computer and the question was posed - is it PD? Some Shareware fans have advertised it as

such, but GSI have reportedly attempted to withdraw it from their distribution. Apparently, the official situation is that GSI hold copyright but Atari have the distribution rights and the program is therefore not in the Public Domain.

Although its exact status isn't precisely defined GSI are obviously quite happy that the widespread ownership of 1st Word has prompted many owners to upgrade to the commercial 'Plus' version. Atari Corporation, as ever lacking in communicative skills, have declined to comment, although the ST Club reports that Atari's contract with GSI is due to expire in the forthcoming year. Whatever the future holds for IBM's status you bet, it's certainly true that 1st Word is the national champion in word processing for many ST users.

While 1st Word is a robust and generally reliable program, it is - like any piece of software - not without its drawbacks. Printing is, of course, an essential part of any word processor and 1st Word is supplied with ready-made drivers for Epson, Quasi and Brother printers, but if you own a different make or model putting together the necessary control codes can be - at least - a bit of a pain. To make life much easier, you'd better to obtain a copy of **PRINTER**

**DRIVERS** from the PAGE's library. This is a disk containing no less than 24 ready-made 1st Word drivers for various printers including Panasonic, Oki and Star. It includes three user configuration files for ST Writer (read all about it in issue 42) plus fonts and drivers for the graphics package Degas. If your printer is one of those listed, this disk could be an invaluable time saver. Check the library catalog or the new **FREE & CHEAP! LOG BOOK** for a full list of contents.

Few people can claim never to make spelling or more commonly, typing mistakes and in all magazine contributors will testify, spelling these transposed letters in a page full of text, during the early hours of the evening is virtually an impossibility! In any application where professional presentation is important, a spelling checker is almost essential. Unfortunately, 1st Word shares a common deficiency with ST Writer in that it



doesn't offer a spell-checking facility. The solution is to look for one; however, you'll find one on **WORD PROCESSING 2**.

## SPELL CHECKING

Amongst a jumble of goodies on this disk, there is a program called Spell, whose function is to compare any text file with a list of correctly spelled words. When Spell finds a word it doesn't recognize, it asks you whether you would like to change the word, add it to the dictionary or simply ignore it. Initially the dictionary holds a relatively minute collection of words and the checker questions almost every phrase in the document. As you examine more files, the correct words are added to the dictionary and, in theory, you could eventually build up a disk containing your complete written vocabulary! Elsewhere on **WORD PROCESSING 2** there is a useful program for obtaining statistics of the words, characters and lines in your document (plus a print spooler and a utility to set-up your printer correctly if you don't have the Control Panel installed. There's a whole lot more too!

## COMPATIBILITY

If you use a computer at work or college and need to bring your documents home, or if you're just upgraded to a new word processor, the problem you face is one of file compatibility. ST file formats include Perfect, WordPerfect, RT Writer, Int' Word and others whilst on PC machines there are dozens more, including different versions of the same packages such as Wordstar 4.0 and 5.00. Some of the commercial word processors are supplied with conversion utilities to import documents from their main competitors but obviously, these can't include them all. If you don't want to use the format of your text through a straight transfer to ASCII, the best place to turn is the Public Domain. If you need to convert your documents to Int' Word,

**LABERRMAN EPSON EMULATOR** is the disk you need, it's where you'll find Int' Converter, a program which can translate ASCII, RT Writer or Wordstar text into Int' Word format. Incidentally, the main subject of this disk is a super utility which enables the Atari 5200/4 laser printer to emulate a standard Epson printer. It includes several font files and drivers for Int' Word and Wordpad. The most flexible conversion program I've come across is File Translator, on the **UTILITIES 3** Disk. File Translator can convert to and from ASCII, Wordstar and Int' Word formats via a user-friendly interface. It can operate as a stand-alone program or a disk accessory and, coupled with the conversion, this should enable you to switch easily between most of the popular formats. If your word processor isn't sup-



ported by these programs, **Agas** could be your best answer. It's not the proprietary cleaning substance but one of the **ACCESSORIES & UTILITIES** which, in the author's words, "checks and cleans all non-printable characters and linefeeds from its spaces". Agas just leaves the text plus carriage returns and line feeds as you should, or, at least, be able to make some sense of a non-standard document.

## DISK MAGS AND THE STE

It would be nice to dedicate a whole article to STE discs but, as yet, there are few and far between. Maybe soon... If you own a **STEASTE**, there is at least one measure of compensation - I have discovered that **RT NEWS: THE FINAL COMPENDIUM** (supplied on TWO double-sided disks) will work without a hitch! (NOTE: A lot of programs that will run on the **STEASTE** may not run on the **STEASTE** even though they require less than 500K memory. *Ed.*)

This very last issue of **RT NEWS** is as fun and readable as ever with reviews, tips, solutions, stories and some intriguing revelations in a 're-print' of the very first edition. Meanwhile, the Last Days have produced a disk magazine of their own. It's called **MAGNET 1.0** and contains some VERY interesting details of hidden demo screens as well as news, reviews,

There are very few public domain spelling checkers about - SPELL is one of the best that give you to create your own dictionary as you go



TRANSLATE - perfect if you use different word processors

chat and stories, not to mention some excellent demoed 'Well worth a look.

## SEASONAL GAMES?

Christmas is nearing 'Well, not quite perhaps but next issue it will be just around the corner so, in a seasonally recreational mood, I intend to examine some of the many games now offered in the Public Domain. (I'd like have recently released some cracking games so we may well take a look at those or perhaps some of the earlier public domain games that have now become classics. Whatever we take a look at you can be sure that it will be excellent value for money!) In the meantime, any correspondence sent to me at the address shown below would be most welcome. Feel free to give me yet to be decided and suggestions will be gratefully received!

## HOW TO GET THEM

All of the disks referred to in this article are available from the Public Domain Library. Each has a unique reference number which you should use when ordering or enquiring about the software. Please contact PDBL if you don't have a copy of their Directory. Also confirm and check the system requirements for each disk. PDBL has a CHARGED CARD containing a full list of all names and numbers it available from the library, priced at £1. The disks mentioned in this article are:

0101 - PRINTER OUTPUT  
0102 - MY OWN CONTROL PANEL  
0103 - ACCESSORIES & UTILITIES  
0110 - SPELLING

0111 - LABERRMAN EPSON EMULATOR  
THE LAST DAYS' MAGNET 1.0  
RT NEWS: THE FINAL COMPENDIUM

Please for standard disks are £2.00 each or £3.00 each for two or more  
Write to: PDBL, PO Box 16, Baffins, W1P 0JH  
Telephone: 0753 215622 or Fax 0753 648811 with credit card details





models which used with a suitably equipped MIDI keyboard. I used MIDIMan extensively in recording the music on Page 6's World of Computer Music. Making audio cassette CDs needed in the last issue. If you want to hear what MIDIMan can do before buying it, why don't you get the cassette first and have a listen. I think you'll be pleasantly surprised by what you hear.

## NEW YAMAHA PSS KEYBOARDS

In July this year I heard the results, first, and astounding complexity of the British Music Fair at Olympia - specifically to track down Yamaha's brand new PSS-keyboards. The rumours I'd heard were true, as amongst a mass of new products Yamaha were showing a completely updated PSS range. The two MIDI equipped models of interest in that range are now called the PSS-560 and PSS-760. Unlike the last model update this is not just a cosmetic change. These instruments are totally different from their PSS-480/580 and 760/780 predecessors.

The most important aspect of the new models as far as the Atari user is concerned is their MIDI implementation, but nobody - not even the staff on the Yamaha stand - could tell me anything about it! So, the details below are based purely on the limited information available and a couple of hours I spent playing around with the instruments.

Both instruments have three vital MIDI IN and OUT ports and additionally the 760 also has a THRU port. They have an incredible 28 note polyphonic capability and are multitracked (three channels). It looks as if all 16 MIDI channels are supported as before, giving you plenty of scope for exercising that much flexibility.

It's a fair bet that the MIDI System Exclusive aspect will be totally different as the method of sound synthesis has changed completely. The new instruments use Yamaha's Advanced Wave Memory technology, instead of old style Frequency Modulation. AMW uses digitally sampled sounds, which dramatically produces much more realistic results when playing plucks, arpeggiated chords, and other instative sounds. Unfortunately, this means that existing versions of Atari based PSS-vic patch editors such as PatchEd and PARED no longer work. Also, Yamaha seem to have done away with the "synthesizer" section on the instrument's front panel, so there's no provision for customising the sounds in the way possible on previous models. However, the 760 does have "vector synthesis", more of which shortly.

Both instruments have 128 preset AWM sounds, divided into 60 major categories, including Keyboard styles, guitars, organs, reeds, Chorus, strings, Mallet's (jazzophone, maracas, riel, brass, Woodwind, Chorus Basses, choir, vocal), Drums, Synth (assorted electronic non-instrative sounds), and Free-choices (drums and various sound effects). This last group can be played directly from the keyboard, or additionally on the 760, from eight assignable percussion pads - so you can build your own customised drums.

Some of these AWM sounds are amazingly good, and professionals in particular seem better than on the earlier models. However, several sounds were disappointingly weak, and some have a higher level of background hiss than I would have liked. Not having said that, overall sound quality is probably no worse than on other instruments at this price level, and is perfectly adequate for home and amateur use. Also, the instruments would undoubtedly sound much better played through a decent amplifier and speaker system, rather than the tatty headphones provided on the Yamaha stand.

## VECTOR SYNTHESIS

Although the AWM sounds don't appear to be editable, the 760 has gained a truly "vector synthesis" joystick controller like that on Yamaha's new 4700 57-80 synth, which partly explains this loss. It allows you to assign any four of these AWM sounds to the four primary directions of the joystick (forward, back, left, right) then mix them together in any proportion by moving the joystick appropriately. You can move the joystick while you're playing the instrument to dynamically alter the sound produced - making it a powerful performance control as well as a means of producing customised layered sounds. One small snag is that the instrument's polyphonic capability is significantly reduced when playing in vector synthesis mode, as each key pressed triggers up to four different layers of sound.

The built-in sequencer has been reduced to only two tracks on the 560, while the 760's has been increased to eight. Unlike the other models, each track seems to have a polyphonic capability. The 760 has a dedicated "vector synthesis" track, primarily for recording the movements of that joystick. Another is dedicated to recording percussion pad sounds, and a third is used as an accompaniment. Yes, these instruments retain the famous "style play" suite accompanying features of the previous models, but there are now only 80 styles instead of 180 - but each has two variations. I couldn't establish what for these styles are not incorporated via MIDI - it's a pity if they're not.

I've always thought Yamaha's MIDI equipped PSS instruments are the best possible low cost starting point for anyone interested in computer based music making. Assessing the MIDI implementation of these new models is up to scratch and I have no reason to believe otherwise, then they'll continue to make excellent partners for your Atari ST or 8-bit machine using MIDIMan, of course! If you're thinking of joining the MIDI revolution, make sure you check them out.

## SNIPPETS

... **With the imminent arrival** of the new Yamaha PSS models, dealers are asking prices of the PSS-560 and 760, in some cases to under \$1000. At those prices they're irresistible, so grab one while you can!

... **More end of range bargains** - I hear the music for Steinberg's decision to slash the price of their Pro-24 and 24-bit sequencers for the ST is because they're being overrun from the east. Replacements are the really more expensive Cubase and Cubase products. If you want these top-flight programs at a bargain price you'd better move swiftly before they're gone forever.

... **CLM are said to be producing** a cut-down version of their superb Creative sequencer for the ST, as well as less than \$200. Presumably, this is to compete with Cubase, Steinberg's new cut-down version of Cubase.

... **In the last issue** there was a news item which barely referred to a new version of Advanced Music System for the 8-bit machines. This could be a pretty partner for MIDIMan, so I'll try to get more details for next time.

■ **The World of Computer Music Making tape is still available from PAGE 6 price \$3.95. See the adverts elsewhere in this issue or write to PAGE 6, P.O. Box 54, Stafford, ST16 1DR**

# FLOOD

**T**he idea behind Flood is very simple. Within each level the hero 'Quilly', a green blob with arms, legs, and a pair of goggles, must explore the caverns and collect all of the seeds which he can collect there. Once he has collected it all, he can then use a teleporter to proceed to the next level. In addition to the 30 normal levels, Quilly must also navigate his way through a further 6 levels, which have been built by the devilish Yang Delevener. They may feel giving a total of 32 levels.

There are two types of teleporter within the game, which outwardly look exactly the same. These are the 'red' level teleporters and the 'in level teleporters'. The former move Quilly on to the next level and the latter moves him around within the environment of the level he is on.

Basically the game is of the platform and action variety and is therefore a descendant of the ancient steel and steel formula of moving your character around collecting objects in order to reach a higher level. Flood is by no means an original concept although it does have some little extras. Firstly, as you play the remaining of the game's title becomes increasingly apparent, as you realize that the levels are slowly filling up with water! Secondly, scattered throughout the various levels are a number of items of 'hardware', including flamethrowers, grenades, ioncannons, and dynamite! Due to the unfriendly disposition of the devils of the caverns towards Quilly, a good tactic appears to be to grab the closest available piece of hardware

looking kit and use it to blast anything that moved.

The presentation of Flood is of a very high quality. The graphics are of a superb standard, being suitably dull and shiny looking for the heavy depths of the caverns. The sprites are very smoothly animated and excellent in detail, and as an added bonus Quilly himself seems very lively on the 'water' mode. The sound is also very good indeed, as far as I can tell the open effects are all sampled and of a very high quality and quite appropriately used.

Overall I was very impressed with Flood. It's amusing, fun and compelling to the gameplay, very enjoyable.



## FACTS

Title: FLOOD  
Publisher: Electronic Arts/  
Bullfrog  
Price: \$24.95  
Developer: John Davison jr

## SIGHT & SOUND

The graphics are sound and both very well done and are suitably amusing for the style of game.

## GAMEPLAY

Surprisingly addictive considering it's performance variety of a platform and action game.

## VERDICT

A fun, cute, amusing and addictive game which should be the order games player too much.

## FACTS

Title: ROTOX  
Publisher: U.S. Gold  
Price: \$19.99  
Developer: John Davison jr

## SIGHT & SOUND

The graphics are not very pretty and the sound is basic.

## GAMEPLAY

Disappointing...

## VERDICT

The hype for this game must have died a little. They should have spent the money on making it playable!



# ROTOX

never justified. In a word, Rotox could be summed up as 'BORING'.

There is nothing revolutionary about the game at all. You merely control your 'robot' as he walks around the 'basic' environment shooting things. The view of the game is solely from above, as you move the great machine around. The packaging grandly boasts of a 'revolution', where Rotomax enables you to move around a 'background and landscape of polygons'. It then goes on to say that you can 'watch in amazement as the background scene, scrolls, and rotates through 360 degrees around you, giving an incredibly lifelike feel to the game.' There are a number of things I could say in reaction to that statement, however, most of them aren't printable

**R**otox - the man was a trapeze injured in combat. Rotox - the cyborg has been transformed by 21st century science into a devastating cybernetic fighting machine. Rotox - the game is the proving ground.

Specialty constructed landscapes in deepest space provide a nightmare environment of deadly machines and hostile lifeforms. Monsters are fast, ferocious and you will build yourself into a lethal fighting machine. Fast and you need will conquer the galaxy forever.

The amount of hype which has surrounded this game made me curious as to how many gamers the hype is by no

The basic idea of the game has you walking around the landscape clearing the sectors of hostile aliens and collecting items of weaponry for your artillery. In places the game has its inspiring moments, but these are few and far between. In theory this should be a very interesting game as the idea is not at all bad, however the actual execution of the theme outlined above is quite dreadful. There is certainly nothing 'revolutionary', as games like this can be found on most computers.

The graphics are unimpressive. The animation is jerky and the sprites are drawn in a very simple manner. The sound effects are uninspiring. It took many hours of playing to make me finally accept that, sadly, this game is quite amazingly and unattractively boring.

# KICK OFF 2



**K**ick Off 2 with World Cup '90 as a focus is the sequel to that increasingly successful soccer game of last year. Firstly it is necessary to point out that the world cup game is only really a background to this approach and runs in fact by jugged around to stay relevant for subsequent years.

With that stated out let's see just what has changed since the last Kick Off. Well in the first place it is now possible to design the league strips, and do away with the odd one color strip of last season. There is a far better league creation mode for up to 4 players a game and there are options to introduce your friends with the endless goals competition, yes you can save your scores to disk to study later. The system seemed to hold up the game and hit tremendously complex but worked.

The game also contains options to be a player manager in your own team and even the chance

to select your 11 man squad and select substitutes as needed. As a soccer simulation it seems to be reaching a peak but really it remains most tricky to beat the computer even when the most favorable levels of skill are chosen, although this does encourage the necessary practice and ensures the game a long attention span. One boon to game players such as myself is the option to slow a game down to about 50% normally to watch the development of plays, but fortunately to make the game more playable.

It is quite impressive to note that such teams hit it's own personality when played by the computer. Realisms are

fast and speed while Germans build up from behind with solid defenses.

This is a game which is a mostly success in its pursuit, although I still feel that the control mode can be a little bit awkward. Finding a teammate to pass to can be tricky and it takes a lot of time to discover just where the goals are relative to any particular player. I was pleased to see that the referees had been kept and there is even a facility to select your own favourite ref.

I enjoyed this game although it found the constant freezing by the computer very depressing. A very good soccer game, better than its predecessor.

## FACTS

Title: **KICK OFF 2**  
 Publisher: **Amiga**  
 Price: **£29.99**  
 Developer: **Samson Hardware**

## SIGHT & SOUND

The really exciting sounds but smooth scrolling games keep the player's attention fixed on the field which is necessary.

## GAMEPLAY

Fast enough, realistic and exciting. Possibly too many joystick movements but that can be adapted to.

## VERDICT

Probably the best football simulation for the 16 bit moment if you liked 1 then 2 is better real worth buying.

## FACTS

Title: **GRIMBLOOD**  
 Publisher: **Blasterbeam**  
 Price: **\$4.95**  
 Developer: **John Sweeney**

## SIGHT & SOUND

Lots of good stuff, some the graphics after 2 match it

## GAMEPLAY

One great feature - 2D/3D display

## VERDICT

Not recommended - even at the budget price!



# GRIMBLOOD

**T**he introduction, "Mystery and adventure with the wonders of Castle Grimblood, and never takes the day..."

Sounds promising! Load it up and it looks and sounds promising! Play it and you will probably be disappointed.

The first problem I had was that I couldn't get it to load on my 1040 STE. So, I tried on my very old 520 ST with its 1080 Extended Track disk drive. That wouldn't load either. I treated the old 520 to one its original 800K 5.25 disk - finally it worked!

New graphics, nice music, nice voice synthesis, looks as though it should be good! One of the 20 characters that

of nice little pictures is going around the 100 rooms (later graphics of all

Castle and all its windows) killing the rest of the guys with various of the 14-odd tape characters as you proceed. You can use the mouse to move around the castle, check for objects in rooms, look for secret passages, and interrogate people. "Grimblood is controlled entirely from the mouse". By pressing keys F1-F10, you add options of the power - huh?

As you can probably guess, Grimblood is basically a form of Clonk. However, the graphics were rather good even as the character is allowed to be questioned like "Where were you at the time of the murder?", and on my very subtle to having touched the most re-

cent murder weapons and you can nearly find the person you want to interrogate anyway since there are far too many locations - 82 rooms plus corridors and secret passages.

I got bored with the music fairly quickly and turned that off. I also got fed up with the speech synthesis (especially as it is somewhat incomprehensible - "Slighter sounds like My Death) and turned it off, hoping that that would speed up the game (unfortunately it doesn't) - and you need it anyway as it is the only way to find out where a door leads! And the graphics get very tedious after a while as well - it breaks on opening 20 "words showing a clear steady opening every three seconds creates a noise!"

I was a couple of times, but only through luck, and after the third time the game hung

# ANARCHY

Long, long ago and far, far away in the time of the early 90s but there was an arcade game called Defender. In this game there was a revolutionary new concept of two-way horizontal scrolling and a pioneering technique to act as a radar system. The basic idea was to sweep a variety of unpleasant spacecrafts kidnapping your space laws.

Now Polygrams have followed to the mixer of Classic Invaders and produced Anarchy. The reason for the title escapes me as it has as much uncharitable content as Young Guns (Rick's parody). The game is though well made graphically and is very faithful to the old arcade game, it plays extremely fast and furious and maintains a strong soundtrack and spot effects when necessary.

In gameplay there are options to pick up the occasional

bonus globe that will allow for the various mandatory special about 'em up efforts. One interesting variant on the original is that it is now possible to eat your space rules with a force field to prevent damage and theft. There is also the opportunity to have a second cursor running alongside of your ship to give twice the firepower. These innovations probably can also give other various high powered distraction variants, I suggest the only the joystick would make this game a great deal easier.

Having said this there is very little more to the game. Each screen or level is very like it's predecessor only faster and the hyper space mode that is referred as losing all your cap sales in every faster and less decorative than the initial



screen. I fear that I have come to expect a high degree of originality from Polygrams and this game is somewhat of a disappointment from that point of view.

My second bone of contention is with the packaging. It shows some very good screens but it shows the Anarchy sticks available to Blood Money while the PC also shows the reality of the word class of this game.

I am ambivalent about this game. In some respects I would not choose by this if I brought expecting something in the usual Polygrams style, but on the other hand if I wanted an updated version of Defender then this would certainly merit serious consideration.

## FACTS

Title: ANARCHY  
Publisher: Polygrams  
Price: £29.99  
Reviewer: Damon Howarth

## SIGHT & SOUND

The graphics are well implemented but unimpressive while the sound is strong and effective

## GAMEPLAY

A very good arcade conversion, limited content is included, the best value is finally, the game quite fast enough

## VERDICT

I have a different opinion to this but then Defender was never one of my favourite arcade games anyway!

## FACTS

Title: DYNASTY WARS  
Publisher: Capcom/U.S. Gold  
Price: \$19.95  
Reviewer: Damon Howarth

## SIGHT & SOUND

The graphics are huge and set out with great good effects. The loading is fast, the artwork nice

## GAMEPLAY

It seems very repetitive with little to catch the excitement. Maybe if power mode helps a bit but not greatly

## VERDICT

A mediocre game that would suit only the die-hard arcade fans



# DYNASTY WARS

Characters are becoming synonymous with good arcade conversions and this piece of software maintains their image well. For those of you who remember the Water Margin and those strangely dubbed Chinese there there this will be a trip down memory lane.

The very simple scenario is that you will possibly a second player must select one of the four heroes to go out and defeat the raging and tyrannical generals supporting the unworldly dynasty. It is your goal to restore law and order and also to rid China of those difficult Man Chiu upstarts. To achieve this the character must ride his horse

through a hair-raising, wilderness killing and mauling as much of the (pre)story and local culture as possible. Granted they can be tricky with their rankings and the times but nothing a true hero can't cope with!

Should the going become a little rough then each hero has the ability to work magic, this can produce rainbows or fireballs or other such devices to help you out your way.

The controls are a little idiosyncratic and rely on the illusion that the joystick is depressed to build up the strength of the blow. On the whole though the game manages to cope with them. Sometimes selection of a few functions becomes perambulatory but there is a flow to the events that maintains interest.

The major problems with this game is that once you have played for an hour or so it rapidly becomes extremely repetitive and lacking in real challenge. While there is some variety in the choice of the four heroes, both the gameplay and the scrolling backgrounds become a little wearing. The whole game is very well progressed and is an excellent feat of conversion but even so it falls foul of many conventions in that it lacks a long term 'hook'. Perhaps with arcade games it is always the real challenge is to complete it before you run out of money. Sadly I would suspect that even the most avid gamer would tire of this in a matter of weeks. There is a little room for tactical thought within the game and it does not compare with battles, for example, in its challenge.

# SPIDERTRONIC

**T**his game was created by the makers of Captain Blood and shows all the same tactile integrity of that classic. It is a simple game but like all the simple games out there, it requires caring and devotion to play.

Quite simply the player controls a small spider robot that must place various coloured slabs along an exit runway before Professor Nyle's hordes can escape. The only defence the spider has are its web which can destroy or immobilise caught in it. It is an unfortunate fact for the Spiderbot that these coloured slabs are placed all over a very large multi windowed grid full of black holes and all too plentiful worms.

The layout of the board is reminiscent of Marble Madness although the latter stages bring about mazes that are quite confusing. The pace of the

game starts off fairly comfortably but proceeds in front it at a rapid rate. The 3D effects of the maze are good and the joystick response extremely positive. The possibility of running out of levels is somewhat remote but is that unlikely event there is the option to create or restore new levels to your design.

This creates games in both easy and entertaining to do, but once your frustration with the evil balls has risen too far it is most relaxing to take time out to create some more clever and less frustrating settings for the Spiderbot to re-examine again.

It is more more most pleasing to see that budget games are offering such good value and of these games I have seen this one round Spidertronic was my favourite. It maintains



a sense of fun and originality that I sometimes fear has been lost in the games world in this state of conservatism and about 'you ups'. The artists were talented, my interest into several very small levels and gave the cat great pleasure as it tried to bat the balls off the screen!

The screenshots on the packaging are all 3D shots and reflect the game quite accurately. For those of you who enjoy good title music then the haunting score is well worth listening to since it brought back echoes of the Newellman group Force to my ears.

If you see this game lurking underneath in the budget corner of your local shop snag it up and you will not regret it.

## FACTS

Title: SPIDERTRONIC  
 Publisher: Epoch 16  
 Price: \$4.99  
 Developer: Gorman Hewarth

## SIGHT & SOUND

Both of these are excellent especially the leading screen score

## GAMEPLAY

Well graded to maintain interest and objective level, of control are extremely responsive

## VERDICT

We favour this entry, smart, excellent value and good fun, highly recommended

## FACTS

Title: ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS  
 Publisher: Gorman  
 Price: £18.99  
 Developer: John Denton jr

## SIGHT & SOUND

The graphics are mediocre but by no means dreadful, with animation being a little too jerky for my liking. Sound is fairly better

## GAMEPLAY

Should fun for two players, but not so much for one player as it gets a bit tedious

## VERDICT

A reasonable when fun up containing obstacles and plot lines 'thrilling' with excellent 'teasing'



# ESCAPE FROM THE PLANET OF THE ROBOT MONSTERS

you will encounter multitudes of low life robots which will do all in their power to hinder

your progress. However, with a sufficiently high level of 'fire button finger' stamina these can easily be disposed of. At the end of every three levels you will encounter one of the evil legions who must be destroyed by continuous gunfire and bombing. At this time will prove to be a major problem for a beginner, but after some time the elaborate methods of each of these bad creatures can be analysed and counteracted. At the end of every fourth level you will have to traverse the 'Coral Zone'. In this particular stage Jake and Duke must hop into their 'Cyber Glider' where they will have thirty seconds to manoeuvre through the winding tunnels

to reach the next factory level. Gradually this game can be divided into two categories. First is the title screens and 'between level' screens are of a very high quality. The cartoon style graphics are well drawn and very colourful, but the game screens themselves aren't that impressive. The animation isn't particularly good and the definition of the graphics could be better. The scrolling quality is also fairly poor - while not being exactly jerky it isn't especially smooth either. Basically, the game isn't too bad. There's a fairly little time playing in the 'beginner' - nothing marvellous, but it's far from the dreadful droning of many other games.

In terms of playability I would like this game to a three dimensional two player version of Robotron. On the whole it's a good idea.

**E**scape From the Planet of the Robot Monsters is a two player action-strategy rescue mission in which you, as either of the leading heroes Jake or Duke, must rescue Professor Sarah Bellum and free the reprogrammed hostages before they are turned into Robo-Zombies! You must also find and break into the food and health lockers to get special weapons and supplies to help you destroy the evil legions.

The object of the game is to progress through the three dimensional environment of the factories of Planet X, rescuing hostages and destroying the legions which guard them. Around the factories

# SIM CITY

**C**omputer games allow you to enter a fantasy world and fulfill your wildest dreams: you can be a wizard or a warrior, explore distant planets or enter Napoleon's battles, be an ace fighter pilot or a City Planner ... huh? - a City Planner? You mean you have never fantasized about being a City Planner? Well, never mind, try Sim City and see what you have been missing!

You not only get to be City Planner, but Mayor as well! As you set tax levels, there are eight scenarios provided, ranging from Nuclear meltdown in Boston to Earthquake in San Francisco, each with specific objectives to be achieved within a limited number of years, that the main goal of Sim City is to allow you to design the city of your dreams - as long as you plan it carefully and provide places for living, working, shopping and playing, while controlling problems such as traffic, pollution, overcrowding, crime, taxes, etc. Then lots of simulated people (" Sims") will come and live in your city!

The simulation is almost completely mouse driven, using lots of icons and windows (you can use the keyboard for some of the commands - but I'll be getting on with it, and I'll be controlling speed were the only keys I ever used). The main playing area is a large scrolling window showing part of your city plus icons to allow you to: build new areas; build power lines, roads, railway lines, parks, police and fire departments, sta-

tions, power plants, sea ports and airports and designate areas/ zones as Residential, Commercial, or Industrial.

If you make sure that these areas are provided with power and access to transport, then the computer will generate thousands of Sims who will build houses, offices and factories. The Sims manifest themselves to you in a number of ways. First buildings will appear, then lots of little black dots will start zipping up and down the roads showing the traffic density. Secondly they will start complaining - the latest poll figures are available in a window so that you can see what sort of job they think you are doing and what their major gripes are - taxes, pollution, crime, house prices, etc. Thirdly they will start demanding things (amalgams appear at the top of the screen to let you know that they think the roads are inadequate, or that they want a stadium or an airport).

You can open windows to view maps of the city outline, the power grid, and the transport systems, showing traffic density, crime rate, land value, etc. and graphs of historical trends in population, commerce, industry, pollution, etc. The manual has a chart at the back to help you understand how all these things affect each other, so once you have found a problem area (e.g. population dropping rapidly or crime rising rapidly) you can work out the sort of actions which might affect it.

The 50 page manual also includes a Tutorial to help you get the most out of all this information!

Sim City is very flexible as you will automatically develop your own style of play. I usually freeze the action

to go in to check the polls for the main gripes across the overall maps for problems areas relating to that gripe; decide on a plan of action; build/fix, zone and build as necessary; set the action going again (press B), all back and watch for a few months (most) results will take from 10 to 50 months depending on the size of the



**“ design  
the city  
of your  
dreams ”**

city! (Repeat as necessary!)

Everyone I know who has played it has thoroughly enjoyed it, at least to start with. Unfortunately, it does not appear to have as much lasting appeal as I had hoped. Once you have built a couple of cities and solved a few of the scenarios it gets to be a bit "samey". Perhaps a few more scenarios would have helped. Maybe the next one will keep me entertained for longer - it is called Sim World!

● **GAMEPLAY** - Very well designed, allowing you to easily pin point problems areas and implement modifications to your city - the mouse control, icons and windows work well together in most respects.

● **GRAPHICS** - Excellent!

● **VERSATILITY** - Undoubtedly an excellent simulation, even if you don't like that sort of thing you are likely to get some fun out of it - and lots of people seem to get thoroughly addicted to it.



Title: **SIM CITY**  
 Publisher: **Infogrames**  
 Price: **£29.99**  
 Reviewer: **John Sweney**



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# PICTIONARY

**P**ictionary is the most renowned game I have seen in a long time, being a computerized version of a board game with the same name. It's produced by Denmark, who were also responsible for that other brain-busting board game conversion—Trivial Pursuit. In fact, both games have a number of similarities, both in the way they're played and in the general style of the computerized presentation.

Your objective in playing is to progress around the playing board as quickly as possible and be the first to finish. You earn the right to move by correctly identifying a word from a picture representing it drawn on the screen, and if successful you move the number of positions determined by the roll of a die.

Like Trivial Pursuit, the board positions are marked with different subject classification markers, and you have to draw pictures representing words from the category you land on. In Pictionary these are Preset, Free, National Language Classification, Object, Action, Difficult, and All Play. There are still explanations except for the last two. "Difficult" covers challenging words in any category, i.e., cases you're likely to have trouble with. "All Play" can be any type of word, but ANY player can attempt to identify it, not just the current player. The person answering correctly takes the next turn, so it's a way of introducing an element of unpredictability into the game.

Due to four built-in visual players, or two-to-four teams (six players) you play Pictionary. When you play as individuals, the computer handles the business of drawing the pictures. It secretly chooses a word from its 2500 word list for the category determined by your current position on the board, then silently scrolls a blank drawing screen over the playing board.

The screen now takes on the appearance of a drawing program, complete with a set of drawing tools for producing lines, circles, fills, etc., plus a selection of line styles, colors, and fill patterns. The computer now proceeds to illustrate the word with an appropriate drawing. It really is fascinating to watch the computer at work, as it chooses the appropriate tools to sketch out the picture just as a human would.

When playing as teams, one member from each team is nominated as the "Pictionary" (but an awful term!) and has to draw the word chosen by the computer for the rest of the team to guess. First word wins, each containing a different

set of 180 words for each category, are supplied as part of the package. The words are arranged in a matrix so the computer can tell the Pictionary which word to draw by referring to its row and column number. In this way the word remains hidden from everyone else.

The program has a "practice mode" permitting you to use the drawing facilities without playing the game. This turns it into a mini art program, and you can even save your work to disk and reload it later, or transfer it to NeoChrome for further embellishment.

At the start of a game you can set a time limit of 1, 2, or 3 minutes, which sets as a control of difficulty level. The drawing and guessing of the word must be completed in this period. If the guess is correct the computer rolls the die, moves the appropriate number along the board as required, and the process begins over



again. If not, the next player or team take their turn. The winner is the first player or team to reach the last position on the board and correctly guess the final word.

Points are awarded for a correct guess, based on the number of seconds remaining of your time limit. During play you can display the score table, which shows points scored by each player or team, number of words guessed, average time for guesses, and number of games they've won since play started.

Pictionary really is a delight to use. Everything can be controlled with the mouse, joystick, or keyboard—alone or in any combination. There are no commands to remember as everything can be done by menu or button selection. The clear, colorful graphics help too, and there's even a little chug at the bottom of the screen, which reminds you what to do next via speech bubbles.

This is undoubtedly another winner from Denmark. Whether you play with or with friends it's tremendous fun—even if you can't draw very well. If you liked Trivial Pursuit you'll love Pictionary.

- **GAMEPLAY**—easy to use, fascinating to watch, and great fun to play
- **GRAPHICS AND SOUND**—clear, colorful background screen plus intriguing computer-generated drawing suggestions. Sound is limited to mild music plus a few well-executed sound effects—perfectly adequate for a game of this type
- **VERSATILE**—the best game I've seen in ages



**Title:** Pictionary  
**Publisher:** Denmark  
**Price:** \$24.99  
**Reviewer:** John S. Davison

# HOUND OF SHADOW

**A**t first glance this looks like a standard Text Adventure with Fantasy, D&D...

The manual says, "This is NOT a conventional adventure, where the gameplay relies heavily on object collection, manipulation and logical puzzle solving. The Hound of Shadow is a role-playing game - a realistic simulation of an imaginary world."

EDMITH's games have developed the concept of a "Timeline Character", with many, many personal attributes, which you can use not only in the Hound of Shadow, but also in their future games. Unfortunately the initial implementation in Hound of Shadow is much too limited. Thus, the character-creation system is all there - you can spend half an hour inventing your character - sex, age, background, profession (like to choose from, ranging from Pasture Roper to Psychic Lover, Magician, and Alarming Inn or Bar Skill points in over 40 different categories, from Drawing to Electrical Engineering, and from Escapology to Writers Language)



But it all seems to have very little effect on how the game plays. Occasionally you will get an extra paragraph of text developed, relevant to your background or skills, and occasionally it allows you to appear to progress slightly faster. For example, at one point you need to translate an ancient text written in Latin and German. One of the characters could, one couldn't. So, what should I do? I tried to develop my character by getting Latin and German dictionaries and grammars and studying them - the game let me at least this, but then told me I could not succeed anyway. I decide to try and find another solution to the problem (but the game doesn't let you - as soon as you have the reading tools you ALWAYS meet your friend who POINTS out something in the book for you whether you like it or not. Which makes having the skill yourself all rather pointless)

The game is also far too limited in what it can understand. 90% of your commands will be answered with "I beg your pardon?" or "I don't understand that". Most of the game consists of WAITING while things happen around you, and if you are told to do some thing, then trying to guess what is the only command they have programmed in to allow you to tell it what you want to do!

There are quite a few bugs and inconsistencies. Some of the main

bugs include: you must refer to GARGOILING as JOHNSON (despite the fact that all other books are referred to by the author's name), and if you want Minotaur you must WRITE to her (despite the fact that there isn't one), and that when you do the response says that you don't actually write anything. Each of these wanted a couple of hours for me, as I know exactly what I wanted to do, but couldn't get the game to accept my commands! And at the end of the game, just typing WAIT UNTIL 12 instead of WAIT runs

means that you (illegally) die and have to reload the game from scratch - another few minutes of your life down the drain!

On the positive side, The Hound of Shadow does have an interesting Locomotive-style horror plot, there is lots and lots of sex, and the full-screen pictures are excellent.

I understand that they realize that their game is too limited and that future games in the series will use a completely new way. It is an ambitious project and could develop into an excellent series - time will tell!

- **GAMEPLAY** - Pretty good, straight-forward text adventure
- **GRAPHICS** - Excellent, full-screen pictures of London in the 1800s
- **VERDICT** - Good story, not so good implementation - let's hope the next one is better!



Title: **THE HOUND OF SHADOW**  
 Publisher: **Electronic Arts**  
 Price: **\$24.99**  
 Developer: **John Sweeney**



# STOS

## COLUMN

### News about ...

### STOS Vidi New STOS PD

### Programs for ...

### Rainbow Routines Sprite Plotting

### Plus...

### All the latest gossip about STOS

**I**n that time of year again, you know when all those computer shows seem to appear all in one go. The Commodore, Atari and 16 bit shows have just finished and I'm now preparing to pop along to the European Computer Entertainment Show (although by the time you read this it will all be over, ah-hah...!). Actually I didn't attend the Atari show (as you will know if you read last issue's column) but I did pop along to the 16 bit Fair, and what fun it was. New Atari shows were there (although to tell you the truth I didn't find out until I got home, and sifted through the myriad of carrier bags filled with catalogues and leaflets etc.). Maybe I'm getting old but it was really LOUD in those halls, with almost every accessible piece of musical hardware (BBC's, Amiga's, Sega Megadrives, PC Engines) blasting out melodic (and not so melodic) orchestrations.

### VIDI ST

Incidentally, those wonderful manufacturers of Vidi ST had a little surprise on their minds, in that STOS Vidi but they were calling the STOS extension for Vidi. I have a no good willie that the editor for the STOS Vidi extension will be completed soon, by a small group of programmers called the 16 Tech Heroes, watch this space for more information. Anyway borrowing an Atari's CCTV video camera I tested the extension and just between you and me - it's brilliant, everything you can do with the original Vidi editor can be done with STOS, I can't wait for the STOS Vidi editor.

### STOS DEMOS

Also while at the show I met up with Alanair Craig of Riverdale PD, who have just produced an excellent STOS demo with fabulous graphics and wonderful sampled sound, the demo (and its public domain level) is available from the Page 6

PD library) but the source code is shareware and is only available from Riverdale (phone number at the end of this column). I have enthusiastically discovered this source code and have discovered some very interesting new things, one of which is a palette which turns off the mouse completely. Actually a lot of the techniques which the demo uses are classic, they look absolutely great. Meaning that they are achieved so simply you'll think you could write your career thoughts of them.

While I was mugging on about demos there is another STOS demo from Richard Gale (creator of the brilliant STOS Typing Tutor). Using one of the editors from Sprite 600 you can walk around and enter demo rooms (a typical ST demo style) which then lead up a few doors. This one contains a lot more than the Riverdale demo but it isn't quite as innovative. The source code is available directly from Richard Gale (or a small donation towards the Encourage Richard to Write Another Fabo Demo fund) so check it out from the Page 6 PD library.

### THE COMPETITION

The STOS competition is now over (initially but I cannot give you a list of prize winners at the moment 'cos I'm writing this at the beginning of August, a list for next time).

Before we take a look at the programs I must issue a word of warning, anybody sending me stuff must make sure it is STOS compatible (the 1.6 STOS update is PD and available from, guess where?), I must admit that I don't guarantee to implement and upgrade to a 10445075 (I wouldn't cope on my old 5205TPM with single sided internal drive), so if you do not have the STOS update please send me the source code in any program so that I can run it from my copy of STOS if you do not want anybody else to see your source code just say so and it will remain locked away.

### RAINBOWS

Okay, onto the programs (there are 100 quite a few this time), the first two come

## PROGRAM 1

from Anthony Holden who has sent me a solution to the appeal I made for a STDS rainbow test for many months ago. Thanks Anthony, the PD discs I promised are on their way.

### THE RAINBOW MODULE

**PROGRAM 1** creates a small module which can be loaded into a STDS memory bank, here's how it works:

- LINE 10-148** tell you about the program
  - LINE 150** clears the screen and opens a resolution independent window (but remember this routine only works in monochrome low res)
  - LINE 200** reserves a small amount of memory for the routine (800 bytes, less than 1K) and finds the start address
  - LINE 210-230** read in the data used
  - LINE 240** sets the start address. The result from each 'load' is added to the variable CHECKSUM. This allows a rudimentary error checking.
  - LINE 260-269** contain the data for the memory bank
- Oh, so there is quite a lot of data and you really want this routine files? You? but you don't really want to type it in. To solve this problem try the latest STDS column disc, filled to the brim with the programs from the past few issues, available now from the Page 6 PD Library.

### USEFUL RAINBOWS

The next program demonstrates just how useful a Rainbow routine can be, it can make (almost) any program bank change with just a simple CALL command! It may even do a nice version of Pressure Search to take advantage of IPL. Type in **PROGRAM 2**, this is how it works:

- LINE 10-120** just tell you what a generally brilliant person Anthony Holden is for writing such a useful routine
- LINE 130** sets up the screen
- LINE 170** reserves the memory bank and loads in the module saved when you ran **PROGRAM 1** (you did run it?)
- LINE 210-240** draw a 16 colour 8-16

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03 120 *****
04 130 *****
05 140 *****
06 150 *****
07 160 *****
08 170 *****
09 180 *****
10 190 *****
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Program 1 - a machine code rainbow scrolling module

for chart, and display a title message. **LINE 290-295** are the interesting lines. To start/stop the routine you need to pass a value into DEGREE, a value of 1 will start the colour cycling on and a value of 0 will stop it. You will also need to pass the value of the colour register you wish to cycle into DEGREE (1 has red 0-15 in low bits or 0-2 in high bits rest. Of course before you see any changes you will have to CALL the routine using CALL banknumber. **LINE 310-370** actually cause the routine to cycle each bar in the chart individually, this continues until you click on the mouse:

### AN INTERLUDE

A short interlude before the next program, I did fully intend to do a little SPAGHETTI entitled the PD spin generator for STDS (this means but under a month's after looking at the module it seems it didn't see big) but published as a listing (about 20000) so I have put it on the second STDS disk one disk (available from the usual place), if enough people buy it I will publish a small piece on it.

## BACK TO THE PROGRAMS

The last program for this issue is a real corker (it should be, I mean, well, basically it allows you to paste sprites on the screen. It is something that the program team of Fun School 3 needed so that they could create sheets of animation to port over to other machines, so I obliged and wrote this. To use it you just load a sprite bank (the 'L' key) and cycle through the sprite bank (the 'A' and 'Z' keys) plotting the sprites onto any part of the screen you wish (by pressing the left mouse key and then the right, you can then save the screen (press 'S'). The program also includes some very interesting 'tricks' into the sprite bank, here's how it works:

**LINE 180** sets up initial sprite number and reserves a screen buffer for the units feature!

**LINE 190** does a few jumps to set up the screen, load a sprite bank and calculate the information needed about the sprite bank.

**LINE 170** changes the mouse to the image of the first sprite.

**LINE 190-250** do the important bits of checking the keyboard and mousekeys.

**LINE 270** finds the start of the sprite bank (ignores the header information).

**LINE 260-280** find the x and y coords of a sprite determined by the variable `apoint`.

**LINE 400-410** find the x and y (step) of a sprite determined by the variable `apoint`.

**LINE 420** sets up the mouse limits.

**LINE 470** grabs the screen before erasing it with the file selection.

**LINE 480** changes the mouse back to the appropriate sprite if a sprite bank is not loaded and then restores the screen.

**LINE 490** grabs the new sprite bank, gets the sprite palette, finds the number of sprites, changes the mouse to the first sprite and then calculates the sprite information.

**LINE 500** pushes the sprite palette into screen 0.

**LINE 510** restores the old screen (even if you want).

**LINE 550-560** load into the sprite bank to find out the palette.

**LINE 600** grabs a copy of the screen and changes the mouse back to normal. It then pops up a file selector and after typing something restores the screen back to normal.

**LINE 610** jumps back to the main program if no mouse was typed in.

**LINE 620** saves the screen to disk.

**LINE 670** gets the x/y coordinates of the mouse.

**LINE 680** grabs the screen before we plot the sprite (used for undo mode), the sprite is then positioned and passed onto the screen using PUT SCREEN. A box is then drawn around the sprite.

**LINE 730** copies the screen into bank 0, the colour is then pulled into the area in bank 0 that stores the colour palette.

**LINE 770** this bit does the pointing.

**LINE 810** copies screen 0 back to the physical screen.

That's it. I hope you find the program as useful as I know many people have found it over the past few weeks.

## OOPS, MR EDITOR!

Hey, before I pop back into honey land did anybody notice the slight mistake in the last issue? Quite a few people who have written to me commented on my rather unusual spelling of 'business', this is due to the fact that I usually spell disk as 'D' (I'm flipping) with a 'C', but M.A.I. prefers to use the more unique way of spelling disk with a 'K' (still with me?). Anyway to cut a long story about a slight mistake obviously occurred with the Search/Replace functions of the good old word processor. Apologies to those who thought I may have been re-writing the English dictionary.

## SIGNING OFF

Thanks to Sandra Sharkey (all round amazing person) for the collection of PD disks, they are always brilliant! That's it for this time, if you want any of the new STOS PD-disks (they include games, demos and loads of sample disk) contact

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Above - Program 3 - a demo using the rainbow routine

Right - a routine for pasting sprites

# STOS

from PAGE 6

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Page 6 publishing for a full list of their excellent software. If you want to know more about the Knowledge STOS source code give them a bell on 02234 432418.

What the heck, while I'm plugging every company under the sun I might as well mention my old mate (even if it might show STOS club has now reached 700 members. If you want more information

drop him a line at 1 LOWER MOOR, WILKESON TALLIS, BARNETABLE, NORTH DEVON, EX30 6BN and mention how to give me a mention please!!!

Okay here this and I'll speak to you in the next issue (perhaps I'll give you a report on what Manchester got up to at the European Computer Entertainment Show).

# GOLD OF THE AMERICAS

**I**t is 1581. The King has just given you four small armies, three groups of colonists, a couple of trading vessels and two of his best explorers, with instructions to explore and colonize the New World. Every five years he will send out more help, but for well of course want TAXES in return! The main problem is that you are only one of four such groups (England, Portugal, Spain and France) who each want more than their fair share of the Americas.

*Gold of the Americas* is a very colorful, massive-screen simulation of the period from 1584 to 1800. It follows the standard War Game philosophy of allowing each player to enter a set of list numbers for his forces, then resolves them using internal "Combat Resolution Tables" and "situation dice throws".

On each turn you are told through detailed reports of all the previous move's activities. This is followed by the Acquisition Phase, in which you spend your money on armies, colonists, trading ships, tradeposts, privateers, or slaves to supplement those sent from home. The left hand side of the screen always shows the current map of the Americas, and you can point anywhere on it to get an immediate pictorial report of an army's status, development, loyalty, silver strength, mineral and gold resources, climate and agricultural potential.

The next phase is Placement - your resources are all shown graphically, you

just select and drag. You can send explorers to try and open up new areas, or to lead your armies on raids or invasions; you can send colonists to newly explored areas, or to build up existing colonies; you can place your traders, tradeposts and privateers in the various oceans.

Armies are also used to help keep your explorers and colonists alive during the early years, before all the natives die of European diseases!

The last phase is Colony Management - each colony can, optionally, be captured (generally only if they have mines or slaves), developed (put into money into growing land), or plundered (usually it is to plunder the natives and stop them raiding your colonies, later it is to plunder the colonies and stop them declaring independence) - the more nature of you will have noticed that the game finishes 24 years AFTER the American Revolution.

Each of the other players then gets to make his turn. The new status of the world is displayed. And off you go again

for the next turn. If the other players are being run by the computer (you can choose Native, Normal or Expert for each enemy country) then the turn is almost instantaneous. If you are playing against humans then they will probably demand you to leave the room while they make their moves - usually 2 or 3 minutes per player per turn, even if you hurry.

A solo game against the computer takes a couple of hours. You will need to play quite a few games to really understand how it all hangs together. If you develop too quickly your colonies will go independent. If you go too slowly they may die out or not give you enough cash. Enterprising learners mean that you never have enough money, so you can never keep all your fleets and colonies as you would like. The enemy keep trading or invading, and you have no control of your mother country's



foreign policy - France may invade a colony of yours on one turn, then when you try to retaliate you find you are not allowed to because some other back home has signed a peace treaty with them! Privateers, diseases and revolts boost you on every side!

I felt at times that perhaps there was a little too much randomism and that I would like to know the details of some of the CRT's to help me make decisions. There is further variability in that the different countries get different amounts of home support at different stages of the game, for instance Spain starts out with a lot of help from home, which tails off just as England and France start getting lots of help and start really beating Spain up - maybe historically accurate, but very frustrating. Some of that randomism can be removed by turning off the Historical Options.

Playing against humans requires a lot of time as each player will need at least two hours, and there is not a lot to do while your opponents are making their moves - still if you like that sort of game then this is an excellent example of it.

- **GAMEPLAY** - New War Game with lots of features - well-designed mouse interface makes it fun to play.
- **GRAPHICS** - Lots of excellent pictures, well designed so that you can easily see what is happening.
- **VERDICT** - A good war game for 1 to 4 players - on long on you have lots of time.



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