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# ATARI

**USER**

Issue 55 £1.95  
April/May

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The magazine  
for the Dedicated  
Atari User<sup>®</sup>

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Issue 55 - April/May 1992



## TURBOFLEX

Jeff Minter's first Atari game -  
in Basic but with much  
of the style that was to come

## SUBSCRIPTIONS

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The next issue of  
NEW ATARI USER  
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# ATARI USER

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### THE CREDITS

- All of the content stuff in an issue is first from the people who made this issue possible.
- Lee Ellington** did the usual spreadsheet, layout and graphics grunge, register, printer, printer, printer, and finally the various and sundry ads of "Christmas, men looking the article and so forth in addition to tasks of typing, editing, and finalizing this column which remains very through!
- Andy** did everything around the office apart from the things possible that
- Problems** did all these things that Andy didn't do.
- Christy** is available to help anyone who needs to help!
- The regular contributors, who provide the best, best of the magazine and also generally have a great time in coming up with good articles and reviews, are:
- John H. Denton**  
John Denton  
James Matthews  
Alan Kay
- John Gordon Jr**  
Paul Wilson  
Ian Finlayson  
The Topical

All other contributions for this issue are built utilizing content, computer, and other bits of great stuff. Thanks to everybody for sharing their talents with other Atari users.

The people on the cover should be Jeff Menden's **FORGOTTEN** box, to be honest, it is not well illustrated and it may be misleading, as well as misleading. If it changes, we'll be sure to let you know soon from when it is.

Before it is too late, we have a special offer for the first 1000 copies of **FORGOTTEN**, the first issue of the magazine, which is available at the special price of \$1.99 (plus shipping and handling) to our first 1000 subscribers. To take advantage of this special offer, you must order the magazine before the end of May. This offer is available to our first 1000 subscribers only. To take advantage of this special offer, you must order the magazine before the end of May. This offer is available to our first 1000 subscribers only.

The next issue of NEW ATARI USER would feature YOUR article on program, on APRIL 15 OF 1982.

There is also a special offer for the first 1000 copies of NEW ATARI USER, the first issue of the magazine, which is available at the special price of \$1.99 (plus shipping and handling) to our first 1000 subscribers. To take advantage of this special offer, you must order the magazine before the end of May. This offer is available to our first 1000 subscribers only.

## THE RECESSION IS OVER?

Like almost everyone, nowadays we are feeling the effect of the recession and we have to make some sacrifices as you'll see from this issue. Some things, like the laminated cover, were introduced to give the magazine more impact on the newsstands shelves but, now that we are on firm soil with regular established customers, they are not so important. Another taxing source from dropping the colour section which introduced the ST Plus, a disappointment for those who like to see a few colour shots of games but not something which really affects the content.

One of the main effects of a recession is not that it directly hits any one company but that it affects all of the customers and clients of a company. Advertising revenue drops away as companies go in other directions or go out of business, customers who buy software don't buy quite so much and all the little things add up. The funny thing is that the government says that the recession has ended but for many of us it feels like it has only just begun! The first half of last year was fine as far as we were concerned, not really different from any other year. Then, about September 1981, the government announced that the recession had ended and we suddenly found out what the recession was all about: The last half of the year was very poor in comparison to previous years and it has still not picked up.

In a strange way, one of the comforting thoughts is that we are not alone. Many of the retailers involved in the computer trade had a very poor Christmas with sales, in some cases, down 50% on previous years. Outside the computer trade, things are just as bad. How many shops do you know that have closed down in the last six months?

## WE WILL SURVIVE!

In a large company, loss of revenue means loss of jobs and possible closure and that is one of the reasons why our customers don't spend so much. For the first time ever we have had letters from readers saying that they cannot receive subscriptions because they are out of work. One of the benefits of being in a small organisation, however, is that we can better down the handles, trim costs and carry on regardless. Before we, we will carry on until there are no starts left on the planet!

Of course, we need your help not only in continuing to read the magazine and supporting the *Accessory Shop* but also in writing in articles and programs. For the first time in this issue you will find details of work that can be earned by having your programs or articles published in comparison with many other magazines. The amounts are not large but then we don't have the circulation or advertising income of the major magazines. Most people who write articles and programs for the Atari do so out of love for the machine and to get paid a few bob, plus the thrill of having an article or program published, is an added bonus. We have always worked on that basis - leaving away the professional fee element - since we believe that people who write because they are really interested in sharing discoveries and creations with others come up with something much more interesting.

So, we have to tighten our belts, and I know that many of you have to tighten yours but not too much please, we need you to keep buying the magazine and keep buying stuff from the *Accessory Shop*. We also need those games, utilities, articles and anything you can think of for publication, so knock something up in all those free hours you have because you can't afford to go out any more!

The recession is over? Don't you believe it. The only difference is that you have to adapt and learn to live with it. Maybe that is what is happening to the politicians. It is a bit like having a pain in your side for years. You don't notice it after a while and then someone says "There's the pain?" and you have to stop and think it while before saying "Oh, it's much the same."

*Lee Ellington*

# Grainin International

**8bit Hard Drive Interface** ..... £99.95  
 The 8-bit Hard Drive interface will allow you to connect a 20MB SCSI drive (not supplied) to your Atari XL/XE computer. It comes complete with the MyDOS disk operating system and can also be used with SpinDOS. To complete the system you will need to purchase a PDI (30 bytes minimum) and cables. All units require the XL Adapter board.  
**Hard Drive Interface** ..... £99.95 **XL Adapter Board** ..... £15.00

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## 3-D Modeler for Atari XL/XE

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**ChemCAD Surface Shaper 2091** ..... £29.95  
 Display models produced by Model Builder program in surface shaded format from any projected view, viewpoint 1 light. Light can be individually varied in intensity and/or color. Study or modify the model from any direction. View Objects can be individually translated 3-D space and display together, independent on compound model construction. Program also supports graphic, mirror, mirror/rotation, coloring, automatic clipping, highlighting, ambient lighting and depth viewing of models. Manual in 40 pages. Requires 100K. Comes complete with Model 91 & 2091 (Model 91 and 2091 are 20 pages).  
*3-D Model Rendering (format screen shot) ->*

## Turbo 816 16 bit 68000 CPU Upgrade for Atari XL

This upgrade replaces the 6800 within your Atari XL, with a 68000 CPU which will add 16-bit working registers, a 24-bit address bus, numerous new addressing modes and instructions (available to new programs written to use them) while maintaining compatibility with existing hardware. Includes Turbo-OS PB100 (which can be installed to replace old PB100) or an optional board such as RAM8000 XL, to maintain old OS for full compatibility. Turbo 816 adapter board, CPU ribbon cable and installation guide on disk. Disk also includes support information on the Turbo-816 expansion bus, memory map and Atari cables and functions cable along with MAC/RS compatible sources for 68000 instructions, MAC/RS include disk and several expansion files. Also available: memory upgrade cards, Turbo-Cable (battery based spreadsheet) (also compatible with standard XL/EE), Turbo-Clock (internal real time clock with 32K heavy backed SRAM, AT-Assembler for

Standard Launch ..... £80.00  
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## Let XL/EE Word Processor

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## Rubber Stamp

£15.00  
 A collection of XL/EE-compatible utilities that let you build a library of high resolution icons, including convenient Print Stamp icons. Create up to 4 icons at a time, and save the only file character table for your Atari. Control the height and width of characters to get 32 different character sizes. Print up to 99 graphic labels with label printer. (Disk only)

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 800PB Connection -4800 ..... £9.00  
 800 Cable ..... £4.99

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Atari 800 emulator for Atari ST complete with sets to connect to the disk drive. Software includes utility that allows you to use 1M drive as an ST drive.

## Ordering Information

£1.50 for orders under £50.00. Overseas P&H extra. Cheques / POs / DMs payable to Grainin International. Above is a selection from our product guide + new items. Please send all orders to Grainin International, Dept. PDI, 11 Skiffins Road, Parkstone, Poole, Dorset, BH12 3BS

Free Product Guide Available

# Mailbag

Write to Mailbag, Page 6, P.O. Box 54, Stafford, ST16 1DR

## TESTING RAM

I have had a problem with bad extended RAM in the 1300E. As you may know, extended memory RAM chips in the 1300E are not tested by the self test. I used a basic program from the RAM's 1300E Repair Manual to test extended RAM test, due to copyright, it can't be repeated here. For the benefit of 1300E users here is my own quick version of that program.

```
10 ? "1300E EXTENDED
RAM TEST"
20 FOR BANK=025 TO 037
STEP 4
30 POKE $A017, BANK
40 FOR ADDRESS=16384
TO 32767
50 POKE ADDRESS,0
60 IF PEEK(ADDRESS)=0
THEN ? "BAD RAM AT
"ADDRESS:END
70 FOR ADDRESS, 266
80 IF
PEEK(ADDRESS)=255
THEN ? "BAD RAM AT
"ADDRESS:END
90 NEXT ADDRESS
100 NEXT BANK
110 ? "RAM O.K.":END
```

Runtime is 95 minutes and the machine needs to be turned off afterwards since the RAMRAM is overwritten.

John Smyth  
Australia

## PROGRAMMING CHALLENGE

Do you know of any scheduling programs which could be used for sporting events? It has often occurred to me that this is a perfect task for a computer yet, to my knowledge, no such program exists for me 8-bit machine.

The usefulness of such a program is clear. All communities offer a variety of league sports for children and adults and each league requires a schedule. The sports may be different but

the elements to making up a schedule are common to all:

a) a certain number of teams ... b) a certain number of time slots ... c) the objective that each team play every other team an equal number of times

Sounds simple but ...

Since so many combinations would be available, the program should allow for modification. You would also want to be able to save and load schedules and print them out. You would want to see the results before printing them out, so you would have to figure some method of displaying them on screen, perhaps in a scrolling spreadsheet fashion.

A major decision would be to determine how many teams the program could handle. I suspect a maximum would be in the order of 16 to 25 as any larger larger than that usually gets broken up into three or divisions which can be handled separately.

As for number of games, I'd suggest as a starting point time slots for 8 or 9 per day for a period of about 12 weeks. Five or six daily time slots should be enough to cover the period between day and midnight when most recreational games are played.

Different sports have different seasons, which vary in length. I'd suggest that the program be able to handle a 12 week period. In my experience any sporting season longer than 12 weeks is broken up into halves with each half being scheduled separately.

If you wanted to add more fields and facilities you could:

- increase the number of teams, total games and daily time slots the program could handle
- allow for more than one location (e.g. games might be played at a home rink, or ballpark, or pits), with the result that more than one game might be played at the

(same time)

- make user input as simple as possible (the optimum would be for the program to prompt you to enter all team names, weekly game times, and length of scheduling period, and then basically do the rest for you)

- design a fancy or colorful screen display

- allow for partial or limited visualization (e.g. keep teams 1,2 and 3 the way they are, but recombine the rest)

- optimize printed format so that it is clear enough and complete enough to go on a bulletin board without need for further modification or retyping. Well, there it is. I thought it might make an interesting project for a programmer with greater skills than my own.

Ed Hall,  
Yellowknife  
Canada

Over the years we have had many requests for programs that keep league tables or one club schedules for sports and recreational events like, like etc. we have never come across one. Here is the outline, can anyone come up with the goods? If you do, what is the program and we'll send it off to Ed for testing. It's nice not to be what is needed over it either print it in the magazine or issue it as a disk for the benefit of all. A word of warning though before you begin. This seems like a simple enough project but the core functions are no easy feat the program is likely to be quite complex. I know someone involved in a Health Farm where they have to schedule treatments for clients throughout the day and they will do it all by hand on, despite taking several computer consultations, nobody can come up with a program that takes all possibilities into account? It might just be a little harder than you think and will probably need a good grounding in maths as well as skill in programming.

## VIDEO CONNECTION

Have you ever tried to connect your Amstrad to your video recorder in order to record some of your computer output, only to be confronted with a screen full of wiggly lines?

The reason for this is the computer sees the same channel as the recorder and when the incoming signal is received by the recorder it is disturbed by the outgoing signal. There is a very simple cure. On the rear of your recorder you will find an adjustment screw, usually located near the AE and EF output sockets. Using a small screwdriver, turn the screw slightly to the left or right which will alter the output channel of the recorder and leave the input signal free of interference.

You should now have a clear picture when you connect your computer to the video. Normal video signals will not be affected and a slight adjustment in the tuning of the video channel on your TV will correct any disturbance.

Gordon Hutchison  
Birmingham

## OOPS ...

I just thought that you might like to know that the tips for Pico Mountains like that you put in issue 58 are actually for Mountain Mike Kover.

I would be most grateful if anyone could tell me the name of a game which I have been looking for for 4 years. You are a little blue man and you are in three sort of underground caverns but you are getting chased by this little creature (you make for a knight) and a little blue woman. There was also a big yellow machine and you went round the screen trying to reach your objective.

James Rigby,  
Bristol

## WHERE CAN I FIND ....

The Atari 8-bit computers are, without question, the finest home computers ever designed and can still hold their own against any home computer. More powerful than any 8-bit and much easier to access than any 16-bit, it is a great pity that software and hardware support is dwindling. You can still find support for your machine, though, and this directory should get you on the right track. It is by no means comprehensive and we would be happy to receive details of any other companies, arguments to the contrary that still support Atari.

We cannot guarantee what response you might get if you write to any of these companies, but give it a try. They need your support as much as you need theirs. Stick a couple of international reply coupons in an envelope and, if you don't get a reply, the most you lose is a few bob. But if you do get a response, it could open up a whole new world and add years to the useful life of your Atari.

**Software Infinity**  
942 East Woking Avenue  
State College, PA 16801  
Good PC selection. Have just begun marketing commercial games from overseas.

**Database Software**  
PO Box 134  
Ottawa, ON K4R8C2  
Turbo-BIB 16-bit upgrade board, IBM-style hardware for using IBM keyboards on the 8-bit, and other hardware.

**DEC Computer/Vision**  
3238 Riley Road  
Santa Clara, CA 95051  
408/246-1800  
Huge selection of software and hardware items. Also some rare commercial games, unavailable elsewhere.

**Signature Software**  
2124 Arapahoe Dr  
Lakewood, CO 80126  
Good PC software selection with exclusive distribution.

**Change In Hand**  
12 South Vista Place  
Iowa City, Iowa 52242  
Independent programmer has produced 2 excellent commercial quality games for the 8-bit.

**Broadside Software**  
505 West 5000  
Minneapolis, MN 55414  
Another independent, producing good educational software.

**Circleline**  
33 East 108th Street  
Brooklyn, NY 11218  
8-bit specialty software.

**NEEDS Software**  
10 Worley Drive  
Farmington, NY 11737  
Prototype related software.

**DE Computers**  
8248 S.W. Beaverton Hills  
Way  
Valley Plaza Shopping Center  
Beaverton, Oregon 97005  
503/667-8400

**Softcom**  
PO Box 1040  
Newrytown, Ontario, Canada  
K0M1A5  
The largest PC/sharesware selection.

**Compend**  
PO Box 5140  
San Luis Obispo, CA  
94903-5140  
Classical theme games.

**No Frills Software**  
800 East 33rd Street  
Kearney, NE 68647  
Classical & Friendship games.

**Misses Better Software**  
319/331 Canowak Road,  
Chatham,  
Canada, Newfoundland  
A1B1 2E00  
England  
Surely known to everybody and, apparently highly popular in the US.

**Electronic Clinic**  
4934 Del Ray Ave  
Bethesda, MD 20814  
Refractured equipment.

**Kabo Software**  
5 South Ct.  
Yonkers, NY 10550  
Assorted Home disks.

**Baycom Software**  
1871 East 19th Street, Suite  
0024  
Brooklyn, NY 11220  
PC theme disks.

**Alpha Systems**  
1813 Highland Drive  
Methuen, NH 44000  
Utility software & hardware.

**American Technicians**  
1828A Inverness Street  
San Leandro, CA 94570  
415/320-3787  
Large selection of commercial software at classical prices, and hardware replacement parts.

**Real Electronics**  
8831 The Alameda, Suite 200  
San Jose, CA 95126  
408/242-8000  
Known as the Atari hardware store. If they don't have the part you need, nobody does.

**BBB Software**  
552 West Oakland Ave.,  
Suite 104  
Fremont, CA 94711  
PC/sharesware.

**O&T Computerettes**  
PO Box 803  
Ottawa, ON K7M0J1

**MVPDPS**  
880 North Washington St.  
Madison, WI 44256

**Phantom Atari 8-bit**  
Box 321 Lewis Road  
Meadow, NJ 07049

**Valiant Software**  
PO Box 680  
Massachusetts, VA 22111-0680

**Walk Maker**  
944 East 7 Street  
Ipswich, CA 92020  
Disc-based software games, as well as some original programs.

**Innovative Concepts**  
31172 Mission Drive  
Warren, MI 48090  
313/280-8700  
Accessories, hardware, PC software.

**ONE**  
PO Box 17600  
Brooklyn, NY 11217  
171/850-5245  
Specialty hardware items, 8-bit, repair service.

**San Jose Computers**  
640 Homestead Blvd., Suite  
San Jose, CA 95128  
408/284-8070  
New and refurbished hardware and software.

**Recreation Software**  
233 Robert St. #201  
Harrisburg, NY 17100  
Discontinued 8-bit software.

**Real HardWare Computer**  
233 Robert St #201  
East Harrisburg, PA 17100  
Discontinued software for all computers.

**Aerion Software**  
PO Box 1222  
Brookline Station, MA, NY  
10471-1222  
Markets a rare 8-bit commercial game.

**Toad Computers**  
356 Baltimore Annapolis Road  
Perryville Park, Maryland  
21146  
301/841-0843  
Now offers a selection of software and second-hand hardware.

**Stourbridge Disc Group**  
80 Division Road  
Stourbridge  
West Midlands DY8 4LA  
England  
02024 278275  
Large PC/sharesware library.

**Orion International**  
11 Millers Road, Pines  
Lancaster, PA 17305  
Hardware and software, including PC products.

**More Discount (Overl. Penn)**  
245 Chester Road  
Stoney Brook, Illinois  
312/351-5730  
Large selection of commercial software, also hardware and replacement parts.

**Tiger Developments**  
26 Meadows Avenue  
Walton, Ont  
609  
C174 342  
Commercial 8-bit software.

**Next, is a list of magazines still supporting the 8-bit Atari.**

**Current Notes**  
128 North Johnson Road  
Scottsdale, VA 22170  
A truly excellent Atari-oriented magazine supporting both 8-bit and 16-bit.

**Atari Interface**  
5441 Woodhurst Circle  
Ann Arbor, MI 48106  
616/767-8825  
A magazine supporting both 8-bit and 16-bit, with input from Atari User Groups in the US, Canada and the UK. They also produce a monthly Atari 8-bit disk.

**New Atari User (NAU) 8**  
P.O. Box 54  
Seaford, ST16 1DR  
England  
0780 218808  
A professionally produced magazine supporting both 8-bit and 16-bit, also in a PC library for both machines and commercial software.

**EXCEL (Robert Stewart)**  
21 Strawberry Way  
Brooklands  
Ennis, Strathclyde  
BA1 1 2SE  
Scotland  
Disk based magazine and commercial software.

**8-bit magazine**  
8-bit and 16-bit, also in a PC library for both machines and commercial software.

**EXCEL (Robert Stewart)**  
21 Strawberry Way  
Brooklands  
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Disk based magazine and commercial software.

**8-bit magazine**  
8-bit and 16-bit, also in a PC library for both machines and commercial software.

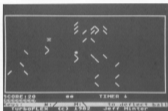
**8-bit magazine**  
8-bit and 16-bit, also in a PC library for both machines and commercial software.

**8-bit magazine**  
8-bit and 16-bit, also in a PC library for both machines and commercial software.

**8-bit magazine**  
8-bit and 16-bit, also in a PC library for both machines and commercial software.

XL/XE TYPE-IN

# Jeff Minter's TURBOFLEX



How often do you get the chance to type a little bit of history into your Atari? Everyone must, by now, know of Jeff Minter and his Llamasoft label but there are not many who were around in 1982 when the first Ataris hit these shores and the first British programs began to appear.

As with all new computers, these initial programs were not particularly sophisticated but the editor can remember going to one of the first Personal Computer World shows held at a jam-packed Barbican and seeing one of the very few new Atari programs (almost like today!) on a stand run by Llamasoft. The program had simple graphics, yet was fast and furious in play and with lots of great sounds. All it involved was deflecting a ball onto a target using rotating deflectors. It didn't even use joystick, yet it was an exciting new development, a new British program for the Atari.

Now you can relive that moment of history by typing the very program - TURBOFLEX - in yourself. Once it's up and running, you will need very little in the way of instruction. Select one of five difficulty levels from the intro screen and control play with just two keys - N and M. The rest you'll figure out.

As you play, you'll spot several things that became Llamasoft hallmarks, the sound, the speed, the high score table. They might seem old hat now, but were innovations at the time. Okay, so the graphics are nothing special but after 10 years all the playability is still there. Try it!







## CONTRIBUTIONS

# FAME ...

## thrills ...

### and a few bob in your pocket!

*Why not turn the love of your Atari into a few pounds to spend as you wish? Lots of people have done so by getting something published in NEW ATARI USER and they have also experienced the thrill of seeing their name in print. There really is something special about opening up a magazine and finding something that you have written all nicely laid out with your name at the top!*

We pay for articles and programs on the following basis:

- £50** for the 'star' program listing each issue
  - £25** for all other listings published
  - £50** for the DISK BONUS program, if used on its own
  - £50** or more for multi-page articles
  - £25** for a single page article or review
- plus other steady payments for various items published

## WHAT SHALL I WRITE ABOUT?

Programs for the XL/XE can be an almost anything, as a team through past issues will reveal. We are short of good arcade games though and love stuff in machine code but Basic is fine if the game is good.

As for articles, the main aim is to write about something you really know about. Chances are that if you have discovered something that interests you enough to write about it, it will interest others as well.

All programs must be submitted on disk, if possible. Comments will be accepted but we can't guarantee that they will load, so the disk is yours. Articles should be submitted as text files on disk wherever possible with printed copy if you have a printer.

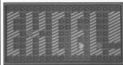
We are not really fussy about presentation, as long as the programs or articles are well written, but the easier you make it for us, the better chance that your work will be published. We work on close deadlines each issue and there is nothing worse than to select a really good looking program only to find that we can't figure out how to use it because the author didn't write up the instructions!

We can't guarantee that we will use every item submitted and we can't write back with answers for not selecting certain articles or programs, but a lot do get published, so our regular contributors will know, so give it a try.

Send YOUR contributions to  
THE EDITOR, PAGE 6,  
P.O. BOX 54, STAFFORD, ST16 1DR

# DISK BONUS PACK MAN

by Robert Stuart



Check out the power of Turbo Basic in this version - with a difference - of the classic PacMan. Top class graphics combine with strategic play to give a very nice game.

Unlike the original where the objective is not to get caught, in this version it doesn't matter if the ghosts - here called tracker droids - get you as long as they don't get each other! The droids will follow your movement as you try to clear each level of the energy pods and you must steer them so that they do not collide. Two droids coming together makes a mighty bang and you will lose a life. Although the droids are not lethal as far as you are concerned, they will drain your energy each time you touch them so it's best to stay well clear if you can.

The first screen is fairly easy, just to get you started, but later on you'll be scratching your head trying to keep those droids apart!

**PACK MAN** is the **BONUS** on the disk for issue 56 which contains all of the other programs from this issue ready to run. Disk subscribers will receive their copy with the magazine, but the disk is available separately for just £2.95. Write to PAGE 6, P.O. Box 54, Stafford, ST16 1DR or place an order by phone on 0785 213636 using your credit card.

# THE TIPSTER



**Q&A:** what have we got for you this time? Good questions! Will offer you the uncolored spend at the computer about at Monday. I've finally got time to sit down and write the column.

This issue sees me/you tackling **HEAD OVER HEELS** with plenty of help also seeing what hints went to by a couple of people. **STAR TREK** shows me up (Scott?) gets a thorough (scrapping) look, errr, from Harvey Miller. Those fighting to that much could (claim) to a set of tips that increase the opposition in **KING OF THE KING**.

Why am I writing this? Filling column inches, increase feedback or building the session, take your pick but what you've got to remember is that no one gives better. About tips than THE TIPSTER about the ego trip out of the trap.

## EVER ONWARD TO WHERE NO MAN DARES TO TREAD!

### YEP, IT'S BOB AGAIN!

Will there be an end to the mountain of excellent tips and advice for **MINER 2049er** as Andy Sherman of Barbary tells us of another feature of this intriguing game.

Start off in a safe place then a good type out the code 133 762 0001 and don't worry on playing at home!

If by chance you fall off the cliff and you learn are going to get killed when you reach the bottom quality game **SHIPT** and press the number of the level you are on. You will have to start that level again but your number of lives (and) has been decremented. If you get tired by those early clues that do the same thing but this time while you are trying.

Another nice tip from Andy is for **KICK OFF**. When you are awarded a penalty, shoot in the middle of the goal and the keeper will just go to one of the corners!

## WHAT YOU NEED, CAPTAIN, IS A DOSE OF DILITHIUM

Taskless rule, well that's what me and Harvey Miller of Edgeart know because through me and him we bring you the full unadorned hints 'n' tips for the bonus game **STAR TREK** from issue 07's disk, sorry Harvey but you're not the Starfleet controller, come on-consultant contact The Savv. What follows are some hints that will make your first year missions to travel and explore strange new worlds all that much easier.

### Ships computer

This should be used for tracking planets and Klingon vessels, but remember in order to use the tracking device to its full potential you should call up the long range scanner's before the ship's computer.

### Science computer

The science computer should be used to scan planets and stars to determine what they are, as well as Klingon vessels in order to determine how powerful they are.

### Impulse engines

To move in the direction desired (as you have to visit all main planets) the following should be known:-

Heading	Effect
0	right horizontal
1	right diagonal and up
2	up
3	left diagonal and up
4	left horizontal
5	left diagonal and down
6	down
7	right diagonal and down

The speed is just the number of squares you move.

### Understanding the long range scanner

K-Klingons  
S-Starfleet bases  
U-Ulars  
P-Planets

The screen shows your present location and the number down the far right hand column are the sectors of the Quadrants shown, which should be read from right to left to indicate the position of other planets and stars e.g.

(Quadrant)	(Sector)
T	
K B S P	
V O I D	1
-Str Fleet HQ-	2,7
U N K N O W N	3

So therefore, Star Fleet HQ is located at Quadrant T 7,3. When using the long range sensor scan, a "T" indicates a Klingon vessel in your immediate Quadrant or in the other two shown.

### Using Warp Drive

To use the warp drive simply type the destination quadrant numbers. In order to conserve energy Warp 1 is adequate at all times.

### Phasers

When encountering the Klingons the science computer will tell you how much energy each Klingon ship(s) has. If, for example, a Klingon ship has 300 energy then 600 should break it out.

### Photon Torpedoes

If you wish to use those that you will be asked the heading (0-7) which is the same as the impulse engines.

**HEAD OVER HEELS**  
is mapped completely  
thanks to *Aftab Ali* of  
*Slough* who includes  
the locations of all of  
the items.

### Quickies ... Quickies ... Quickies

A nice bit of subsidizing has been submitted to help you get the record times in **WARP SPEED**. **COL**, **WIMPLASH**, **BB** by Peter Panagopoulos of Athens, Greece (not a lot of more than \$1 centimeter slightly)

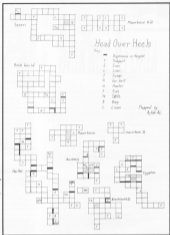
Bought item  
Lobby item  
Buddy item  
S-E-B-B-B-B-B-B-B-B-B-B-B-B-B-B-B-B

You should press the stick at the given direction before and while you're turning in order to make a record run.

**SPACELY CASTLE** is easy to conquer because all you have to do is press Control to advance through the levels.

If you stay on the screen next to the Jet in **CLIMB-FIGHTERS** then you can complete the game as all the villains come this way.

You've got to thank *Taber Ali* of *Slough* for these tips.



## DIUM CRYSTALS!

### Alerts

**GREEN** - This alert is for normal conditions.

**YELLOW** - This should be used in a special alarm.

**RED** - This alert should be used before you step to a quadrant containing Klingon vessels.

In each case, the alert helps to prevent as much damage as possible.

### Making repairs

If the *Enterprise* has been damaged press **II** below and whatever has been damaged will be repaired.

### Saving a game

An undocumented feature within the game is how to make a save. Press **II** and you will get various options.

### Crew members

The crew members appear in the following situations:-

**SPOK** - When a game is saved well, Captain (not Crew) since this game was made during the feature time) contacts **Sp**.

**BONES** - When was the last time the Doc had anything good to say?, it seems like never and he doesn't change this line round. Get his too often and there's a message about the on-screen conditions in the sick bay.

**EMEROY** - In his customary role as chief gunner, you can imagine his excitement as it's "treasures away", in these nasty Klingon vessels.

**SULL** - When orbiting a planet, he will confirm this as well as drive the ship to the desired destination.

**SCOTTY** - If you're running a wee bit low on energy then Marty will tell you so.

**LAURA** - Any incoming messages will be detected by her.

### Ending of the game

There are 8 ways of ending of the game:-

Destroyed by a Klingon vessel

Running out of energy

Being out-manoeuvred by Starfleet for destroying a star or planet

Disappearing down a black hole

Disappearing down a C-D star?

Returning to Starfleet

Some tips that are useful are that if and when **Ultras** gets a message telling you to return to Starfleet control, do not comply. If a **Proton torpedo** disappears before striking the target then there's a black hole so get your butt out of there by dropping energy.

When the *Enterprise* is low on energy (Dilithium decrystallization) you should head for the nearest **Starbase** (low levels are those around 1,000 marks).

Do not head for the nearest **Starbase** at energy levels lower than 5,000 otherwise, as **Honey** found out, your energy will be depleted rather than re-energised.

The scores that get you to where you want to get to are:

You are poisoned	400 pts
Decimated	350 pts
Passaged	280 pts
Destroyed	180 pts
Captured	-1 pts
Escorted	-5,000 pts



### A TINY TIGER TIP

Use **Commander's MESSON JERKON** for a **SECRET** that can't be discovered by passing the **SECRET** code. **CONTROL** and **SECRET** simultaneously, the **SECRET** you're trying to get will occur. You can't do the light go-to-level code if you're in the area of the game's **SECRET**. So, go to **JOHN DASH** from **ARCHON** for the **SECRET** game.

# KING OF THE RING

From an old contact in Italia, you see you Makuluhi attend **Blanca** for finally signing your letter, comes the complete minutes to King of the Ring.

In **KING OF THE RING** there are 21 hours including the champ **Stardust**. From the other 20, it are easy, 4 are medium and 6 are hard to beat. The game consists of fighting 4 hours and then taking on the champ to try and get the crown. You can only fight the difficult hours if first you have fought with one of the medium hours. Your chance of getting the champ's title lies in fighting one of the medium hours and then 3 hard ones. Otherwise, if you fight easy and medium hours and a hard one you won't get the title.

Here's been in the data for the individual hours:

Hours	Training	Strategy	Comments
<b>Easy hours:</b>			
3. Nico Martin	1,2,4,5	2	10 footwork
13. Fero Starininski	1,2,3,4	1	10 attack
4. Steve Lewis	2,3,4,5	2	10 attack
14. Fernando Ortiz	2,3,4,5	2	10 footwork
9. Steve Thomas	1,2,3,4	1	10 footwork
18. John Collins	2,3,4,5	2	10 footwork
12. Pop Papadopoulos	1,2,3,5	2	10 footwork
20. Joe Meyer	1,2,3,5	2	10 footwork

#### Medium Hours:

8. Jay Robinson	1,2,3,4	1	10 footwork
7. Guy St. Cyr	2,3,4,5	4	10 attack
6. Charlie Finney	1,2,4,5	2	10 footwork
10. Jean Rolo	1,2,3,5	2	10 footwork

Once you have fought one of these hours you can attack any of the following hard hours.

#### Hard hours:

1. John Robinson	1,2,3,5	3	10 attack
15. Stan Wheeler	2,3,4,5	4	10 attack
2. Norman O'Mally	1,2,3,5	1	10 attack
17. Dave Brown	2,3,4,5	4	10 attack
5. Luciano Amato	1,2,3,5	3	10 footwork
18. John Craddock	1,2,3,5	1	10 footwork
11. Clem Scott	1,2,4,5	2	10 footwork
16. Earl Vogel	1,2,4,5	2	10 footwork

#### Finally the champ:

21. Mr. The Apocalyptic Man's Stardust	2,3,5,6	3	10 footwork
or	1,2,4,5	1	10 attack
or	1,2,3,5	1	10 attack

If during the later round comments you decide that 10 footwork isn't working then change it to 10 attack and vice versa. If you fight some of the hardest hours (16,18) then you won't be able to fight the easiest hours.

## REALLY COOKIN'!

There must be a hell of a lot more cool disks out there in **Canada** due to the fact that E.J. Conder has sent a magnificent list of **SECRET** tips. Below is a selection of the best ones.

To start with here is a tip for **TROOP** which is on Disk 148 of the Page 670 library. When you start the game, push your joystick to the top left corner. This stops the light cycle so that you can watch your opponent slowly crash.

**MAZE WAR** on the same disk as **TROOP** lets you press 1 to 9 for the speed of the mazes.

For **MAD JAK** you have to start the game on normal and then lose your cars wheels up as close as possible. All the cars that come near you will go straight through if you only go back and forwards.

**ZERO WARS** is made easy by entering "0000" as the code to take you to a higher plain then not get transcendental now that should be level 1. Ed

If you see the light side in **ARCHON** and your opponent decides to use his entire spell, tell him to keep his feet on the bottom and press the bottom. This will cause some sort of creature. If it is taken onto the board and fire is pressed, it then turns into a light side knight. This allows you one extra player.

Use the **Mail** gun to **ETHEREL** to defeat the end of level guardian. Doing this allows you to differentiate between the guardians and your own health. Also if you start off the game as two players then you get some extra credits the game.

E.J. Conder's brother Steve sends a very nice map for **ORB OF ZARKANIDER**. From what I can make of the map Steve there should be another set of rooms after the point where you need 9 keys to get past. If you find out what they are then I will include them in a future issue.

## PANIC! ... PANIC! ... PANIC! ... PANIC! ... PANIC! ...

Believe it or not, this issue we have absolutely no calls for help whatsoever so it's time to indulge myself in what I like.

I desperately need solutions for lots 'n' tips to Level 9 adventures and any other adventures that any reader may have. Even if it isn't complete send it any way and I'll see what I can do about it. This is another plea to the Stafford Computer fan 1 please have all those solutions that you have as I forget to ask you about them at the time.

Remember that this column is as much your column as it is mine so don't just read this column, help write and save the Atari community as it should be served, by the best tips money can't buy, take heed your ego and self esteem into the bargain!

One month after to add to this issue but if any of you want to see the 5th International 10th Computer Show at Wembley on the Sunday did you spot me as I was there advertising the mag in a subtle way that not I mean!

## STOP PRESS! ... STOP PRESS! ... STOP PRESS!

The **ST** books should be out by now if you heard previous ads that figure 420 and 470 cost approx. £250. In a pretty nice bit of 40 and will be available if Atari pull their finger out and market it as it should be, a portable, advanced and fully featured **ST** for those on the go. Not to another **ST** to add to the huge as if something normal, believe me it isn't! It spent as long making it at the last show!

Any game hints 'n' tips to the address below (plus **Adventures** solution if you run out of them)

**THE TIPSTER  
NEW ATARI USER  
P.O. BOX 54  
STAFFORD  
ST16 1DR**

**TTFN!**

# SPECIAL FX 1

**H**ow many times have you loaded a game or demo that contains fancy effects that you wish you could use in your own programs? Games? Handbooks? Well, now you can use some pretty nifty special effects routines to recreate up those old monochrome displays.

This program uses a Display List Interrupt routine to add colourful bars to a normal Graphics 0 screen. Running the program will create two bars, one at the top and one at the bottom of the display, which will slowly fade as you wish you wish to display - a very similar routine is used to brighten up the text screens in the Excel monthly disks.

Once run, the program will stop at line 55. At this point, the vectors in line 50 are being used, with the VIB routine currently turned off. To see the vertical blank routine working lines 20-40 simply type GOTO 40 and press RETURN. This will reset the interrupt vectors to enable the VIB, which increments the memory locations from 1636-1648, which are used as temporary colour registers by the DLJ lines 20-40. Use whatever set of vectors you like in your program. For the colour bars use line 50 and for the rotating colour bars use line 40. Press RESET to switch off all the interrupts and return to the normal Block 0 screen.

You will notice that there are three lines containing colour data (15-17); these are just examples of how you can control the colours in the bars. The first set shades the bar in reds from dark at the edges to bright in the centre. The second set is the opposite; bright at the edges and darker in the middle, shaded grey. Line 17 can be used for a constant coloured bar, but as the colour shades are not in sequence, this one does not work well with the vectors at line 40. Just change the RESTORE value in line 10 to point to which set of colours you want to use. Of course, you can input any COLOR values you like, but remember to end the sequence with a zero, to keep the normal background screen black if you are using a different background colour, then put this value at the end of the sequence.

Line 40 allows the Display List to run the DLJ at the top and bottom of the screen, but you can have as many colour bars as screens as you want. Suppose you require the screen to be split into three sections, with three rows at the top and the bottom, and a bigger area in the middle. Just add two more FOR loops to line 40: FOR% 20075,130 AND FOR% 20081,130. Next, isn't it? The only snag is that the 6502 processor starts counting down when you have a lot of DLJ lines on the screen, but this will not significantly affect your basic programs. More special effects coming soon!

```

05 0 FOR% 10000,10000
06 0 FOR% 0 SPECIAL_EFFECTS_01 0
07 0 FOR% 0 0
08 0 FOR% 0 0
09 0 FOR% 0 0
10 0 FOR% 0 0
11 0 FOR% 0 0
12 0 FOR% 0 0
13 0 FOR% 0 0
14 0 FOR% 0 0
15 0 FOR% 0 0
16 0 FOR% 0 0
17 0 FOR% 0 0
18 0 FOR% 0 0
19 0 FOR% 0 0
20 0 FOR% 0 0
21 0 FOR% 0 0
22 0 FOR% 0 0
23 0 FOR% 0 0
24 0 FOR% 0 0
25 0 FOR% 0 0
26 0 FOR% 0 0
27 0 FOR% 0 0
28 0 FOR% 0 0
29 0 FOR% 0 0
30 0 FOR% 0 0
31 0 FOR% 0 0
32 0 FOR% 0 0
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34 0 FOR% 0 0
35 0 FOR% 0 0
36 0 FOR% 0 0
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39 0 FOR% 0 0
40 0 FOR% 0 0
41 0 FOR% 0 0
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```

*Brighten up your programs with Robert Stuart's easy to use special effects routines*

# GETTING TO GRIPS WITH DOS XE

by Steven Wilds

The arrival of DOS XE has certainly been great news for the XPRG community, however, it does lack documentation. In this article I'll try and explain some of DOS XE's features. I won't be explaining any functions that have remained basically the same as with DOS 3.3.

## DIRECTORIES

Let's start with a look at how DOS XE uses files and directories.

With DOS XE you can organize groups of files into directories. These could contain text files, games or anything you want. Each DOS XE disk has a root directory which will contain everything on that disk but you can create other directories and organize your files inside them.

Each DOS XE directory can hold up to 1280 files as well as other directories which are known as subdirectories. These subdirectories can contain files and even more subdirectories. Picture in your mind the roots or branches of a tree and you'll soon get the hang of using directories on your disks.

Although there is a limit on the number of files per directory there is no real limitation on the number of directories per disk although you are limited by the size of pathnames which I will explain.

## PATHNAMES/FILENAME

Each time you refer to a file with DOS XE you must indicate which disk drive it is on, which directory it is in and, of course, its name. This is called the pathname as it shows the "path" DOS XE must follow in order to find your file. Here is an example:

```
D:\SOFTWARE\BASIC\GAME.BAS
```

The device name "D" is used for normal DOS XE disks while "A" is used for DOS 3.3 disks (before you have loaded the DOS 3.3 code via the "Allow DOS 3.3 Access" option). You can also use other device names like "F" (floppy) or "C:" for the screen editor. The device number is one, i.e. using disk drive one. The greater than (">") symbol is known as the "Delimiter" and is used to separate the parts of the pathname. SOFTWARE is a directory name and is used if the file you require is NOT in the root directory. You must include an extension if there is one. BASIC is a subdirectory name contained inside the directory

SOFTWARE and finally, GAME.BAS is the file you want. Again you must include the extension if the file has one.

Pathnames cannot exceed 80 characters so if you really need loads of subdirectories use short names.

## SHORT CUTS

DOS XE gives you a much needed short cut to use when dealing with pathnames. You can define a working directory which will be remembered by DOS.

On load up the working directory is always D:\\_root directory. To define a new one use the "Working Directory" in the DOS screen. The working directory is always displayed at the top of the screen. The rules to be used with working directories are:

- 1) If no pathname is given, the working directory pathname will be used
- 2) A colon (:) can be used as shorthand for the working directory's pathname
- 3) The less than (<) is used to move back from a directory
- 4) "\*" is always treated as "D:\"
- 5) If a device name doesn't match the beginning of the working directory's pathname then no part of the working directory's pathname is used
- 6) If the device name and number are followed by the "/" symbol, or "\", then no part of the working directory's pathname is used
- 7) If the first character is a "+" symbol then DOS XE will only use the device name and number from the working directory's pathname

Keep in mind these seven rules and you will soon find working directories a piece of cake.

## COMMAND LINES

While DOS XE is, without doubt, a powerful user friendly DOS, it can get a bit daunting to use as most command options require additional information. To get round this and at the same time to give you more speed, DOS XE can accept "Command Line Entries".

With a command line you can enter various instructions at once and then all back as DOS XE carries them out. Say, for example, that you are currently working from the File Access Menu and wish to view a text file on screen. Using the conventional method of input you would enter "V" and then press Return. Following the prompt you would enter the pathname of the file you want to view and then press Return again. With a command line you would just have to type: V D:\FILE and press Return. DOS XE then displays each prompt and fills in the responses to the questions with the parameters (arguments) given in the command line.

A command can be the first letter of an option, or you can use



whole words to make things easier to understand. DOS SE only looks at the first letter of each word so the exact wording doesn't matter. You could use "VIEW" or just "V" in the above example.

DOS SE treats each space in a command as a press of the **SP** key. After it accepts the V, it sees the space and "presses" **RETURN** so that the option is executed.

Any commands that require a prompt to be answered by pressing **RETURN** cannot be used this way. This is to safeguard your files from accidental deletion! Also, error messages will bring your command line operation to an abrupt end.

You can move between menus within a command line. This is done by first going back to the main menu by using a full stop in the command line (like pressing **Escape** in a menu prompt). Once back to the main menu you can then choose one of the submenus or exit to **Basic**, i.e. **V DIALOGUE . E**. This example goes back to the main menu after viewing a file and then exits to **Basic**.

Multiple commands can be entered on a command line by separating them with semicolons (;). Selecting a menu is not treated as a new command although it is good practice to always use a semicolon anyway. The semicolon will answer any remaining prompts in the current command with **RETURN** and then move on to the next command. This enables you to quickly access commands with default parameters. **F** will give a list of the remaining chevrons on screen.

A command line cannot be more than 80 characters (two lines long). Lets take a look at the following command line in detail and see exactly what each section does:

```
. J S OLIARE. P P;
```

The full stop means that we are starting off from the main menu. The first **J** then selects the System Function Menu while the second **J** selects the "Set Current Date" command. "OLIARE" is the date we want to enter and the semicolon completes the operation and passes on to the next command which is another full stop. This once again takes us back to the main menu. The first **F** selects the File Access Menu and finally, "P" selects the Files Listing command with default parameters.

While this should not be treated as an ideal command line, it does at least give an example of how DOS SE operates with Command Line entry. All of this information will come in handy with batch files but before we move on here are a few things you might find useful.

- A space, or group of spaces, is treated as a **RETURN**
- A semicolon answers ALL the remaining prompts to a command with **RETURN**
- DOS SE allows you to print out everything that appears on screen. Type **CONTROL** and **F** to activate this command and type **F** again to turn it off
- The scroll of information on screen from a file that is being "viewed" can be passed by pressing **CONTROL** and **I**. Press the two keys again to restart. The scroll can be aborted by pressing **break**.

## BATCH FILES

BATCH FILES are nothing more than command lines saved as text files. When you run a batch file from the "Run A Batch File" option in the System Function Menu, the command lines are executed. A batch file named **RETURN.BAT** will run automatically when DOS SE is loaded up.

Commands may be separated by semicolons or they may be on individual lines separated by **RETURN**s. A batch file is limited to 811 bytes although it can run another file as long as its last

command is **.JH FILE**.

The exclamation mark (!) can be used as a **BEM** statement. Anything after it on the command line is ignored. This comes in handy as you will want to keep your batch files for a long time. Also, remember that you can use descriptive word commands instead of one letter entries.

You can view a batch file from the "View A File" option in the File Access Menu and they should be identified with the extension ".BAT".

The following batch file goes to the File Access Menu and turns itself on screen. It's not a very modest batch file:

```
FILEMENU  
VIEWFILE DIALOGUE.BAT
```

As you can see, it first goes to the main menu and then on to the File Access Menu where it selects the "View A File" option. You can create a batch file with any word processor that produces ASCII text files - use the "RAW ASCII" command with **StarWriter**+. You can also create batch files directly from DOS SE by copying from the screen to disk. Use the following command line to create a modest batch file:

```
F C E DIALOGUE.BAT
```

This takes you to the File Access Menu from the main menu, selects the Copy Files option and selects the screen editor (E) as the source and **MOUSE.BAT** as the destination. An empty screen with cursor should appear and you can now type in your batch file using the Atari's on screen editing facilities. Press **RETURN** as you finish each line and it will be sent to disk. After entering the last line press **RETURN** and then press **CONTROL** and **I** to close the file. Your batch file is now ready for use! If you've used **MSDOS** then this should be roughly familiar!

## NOTE AND POINT

While DOS SE the **NOTE** and **POINT** commands refer to a position within a file instead of a physical position on the disk as in DOS 2.X. As they are relative to the beginning of the file, **NOTE** and **POINT** do not change when a file is copied to another disk. You can also now refer to a position at or beyond the end of a file. This gives you the chance to use **POINT** to append files, and to make files with holes in them. The space for the holes is not allocated on disk until the holes are filled so you can have logical files larger than the actual disk space. DOS 2.X uses two numbers for **NOTE** and **POINT**, a two byte **SECTOR** number and a one byte **BYTE** number. DOS SE uses one three byte number for the position within a file which is passed in the same three byte space used by DOS 2.X. Most languages will interpret the three bytes as the two DOS 2.X numbers.

You may have to mess around a bit to get the correct values. **Star BASIC** requires two numbers - sector and byte. The format for **NOTE** is now **NOTE:CL:HIGH:LOW**. **C** is the channel number, **HIGH** is where DOS SE will place the two-high bytes of the location and **LOW** is where it will place the low location byte.

## EXTENSIVE XIO KOMMANDS

The XIO command uses the format: XIO command, @channel, unit I, unit2, destination, @unit and @unit2 contains auxiliary information. @unit is usually 0 except for **OPEN** and **FORMAT** functions and @unit2 is ALWAYS 0 with DOS SE. In the following explanations **T** is using the following abbreviations:

With books for the 8-bit now in short supply, Page 6 gives you the chance to buy some great British books at incredible prices. Here I'll take a look at two of the books on offer from the Page 6 Accessory Shop.

by **Steven Wilds**

## ATARI ADVENTURES

Adventure books are more well known for their Dragon related books and Popular Computer Weekly than for supporting the Atari. They did, however, bring out the first class books for our machines.

*Atari Adventures*, written by Tony Bridg, is a must for any budding Atari adventure writer and player. It starts off with a look at the origins of computer adventures and ends with a complete game listing titled 'Eye of the Star Warrior'.

The book is split into two parts. The first examines some of the best adventures available for the Atari and gives details on the mechanics, objects and situations you could include in your own adventures. Finally, Tony writes up the pros and cons of both graphic and text adventures. Part 2 is devoted to the 'Eye of the Star Warrior' listing and goes through the program structure showing you how to use the routines in your own games.

*Atari Adventures* is a brilliant, well put together book. It's full of Tony's amazing humour and the reader is in Atari magazine Page 6 (what else?) gets a mention. When first released this book would have cost you £5.95 and was still a bargain. Now, at the price of £1.50 you've got to be mad to ignore it. Start filling in those order forms NOW! It's off to try and find Tony to one of his dark underground caverns...

## THE 130XE HANDBOOK

This Creative Communications publication was written by Peter Leggett and Finzer Robinson, authors of the best selling *XL HANDBOOK*.

Although the title suggests an exclusive use for 130XE owners, the book also covers the earlier 808 models. Indeed much information was passed on directly from the XL Handbook.

Inside you will find information on subjects ranging from the installation of your computer to Player-Miscellaneous graphics! A selection of top rate programs are included for you to try in as you progress through the book. An entire chapter is devoted to sound and music on the XL/XE and advanced information is also included. *FORBID* chapters guide you through the Atari's graphics capabilities - from the SETCOLOR command to Display List programming and more! The appendices give full information on BASIC commands, Error codes, Graphics modes, Character codes and a lot more. If you want the definite solution to programming with the XL/XE then don't look any further, this is the book for you! Available now for just £5.95 - half the original price.

Now THE 130XE HANDBOOK will, almost certainly, be sold out by the time you read this. Ring round the computer shops or try and pick up a secondhand copy.

## DOS XE continued

©Chaswell & Proliferaans.

Here is an example: `XIO 32,FC,0,0,"D:\ATARI\BAY"`

**RENAMING** - The format of the RENAME function is:

`XIO 32,FC,0,0,P,NEW_FILENAME`

You do not need to include the path for the new name, e.g.

`XIO 32,FC,0,0,"D:\PATH\FILE.EXT,NEWFILE.EXT"`.

**FORMATTING** - DOS XE uses three XIO commands for formatting disks. The first one is command number 35) and the format is:

`XIO 35,FC,0,0,drive type`

The drive types are the same as those used in the INITIALIZE DOS option on the DOS XE screen. In a standard configuration the choices would be: AT386, AT386, XPS51, 130HAM and 386D.

Command number 35) varies slightly, the format being:

`XIO 35,FC,drive type,0,drive number`

e.g. `XIO 35,FC,3,0,"35"`. In this example we are formatting an XPS51 drive which the computer recognises as drive 3. If the drive type was 0 then a single density format would be done, otherwise the number corresponds to the following configurations:

1 AT386 - 2 AT386 - 3 XPS51 - 4 130 RAM - 5 386D

Finally command 34) formats the disk in the current drive configuration. This is what the disk drive thinks it is and NOT what DOS XE thinks it is!

Format: `XIO 34,FC,0,0,drive number`

## OTHER COMMANDS

Here are the other DOS related XIO commands available:

COMMAND	FUNCTION	FORMAT
13	STATUS	XIO 13,FC,0,0,P
30	ERASE FILE	XIO 30,FC,0,0,P
35	PROTECT	XIO 35,FC,0,0,P
36	UNPROTECT	XIO 36,FC,0,0,P
37	NOTE	XIO 37,FC,0,0,P
38	POINT	XIO 38,FC,0,0,P
42	NEW DIRECTORY	XIO 42,FC,0,0,P
43	DELETE DIRECTORY	XIO 43,FC,0,0,P
44	WORKING DIRECTORY	XIO 44,FC,0,0,P

Try and incorporate the new XIO commands in one of your own programs or try and modify Paul Hillier's 'Walk Disk Formatter' (issue 5) so you can choose between all the different density formats.

This article does not pretend to be a complete guide to DOS XE but I do hope that it helps you to get a little more use out of a really good DOS. The article is dedicated in my good friend Charles South and to people like John Stepph who believe in the XPS51 and had the courage to go out and buy one.

# 850 TO CENTRONICS

## MAKE YOUR OWN CABLE

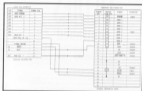
*There has never been a standard cable available to connect the 850 interface to a Centronics printer but making your own is easy. Dave Bedford shows you how.*

The following instructions will enable you to make a cable to connect from the parallel printer port on the Atari 850 interface to a Centronics standard type printer. This cable was made up to connect my Panasonic KCP 1090/1091 printer but will work with any standard Centronics printer.

You will need to purchase a standard Centronics printer cable for any computer and cut off the 24 pin plug. This will be replaced by a 28-way plug and cover available from Maple Electronics address: 8829 for the plug and 2886 for the cover. Please use 87p and 81 28 respectively. Now using a circuit tester, if you have one, or by identifying the wires by colour, make the connections up pin by pin as in the diagram.

850 Interface Signal Pin	Centronics Signal Pin
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	21
10 not used	
11	20
12	22
13	11
14 not used	
15	9

All crossed cables are not back. Check carefully by sight for any short circuits between the pins and also use a circuit tester if you have one. Place the plug in the cover, connect up both ends and you should find that your printer will fire into 850.



## BACK ISSUES

*The following back issues of  
NEW ATARI USER are still available*

Issue 31	Issue 44
Issue 32	Issue 45
Issue 33	Issue 46
Issue 34	Issue 47
Issue 36	Issue 48
Issue 37	Issue 49
Issue 38	Issue 50
Issue 39	Issue 51
Issue 40	Issue 52
Issue 41	Issue 53
Issue 42	Issue 54
Issue 43	

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BACK ISSUES are £1.95 each in the UK (incl. post & packing),  
£2.40 for Europe or outside (incl. airfreight and £2.50  
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Each disk is £2.95. Postage FREE in U.K.  
Overseas add £1 per order (only number of disks)  
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## THE A-Z OF GOLDEN (AND NOT SO GOLDEN) OLDIES continued

**SPY V SPY** ★ ★ ★  
arc/adv First Star Software 1984 (J, L) mid

This was one of the first and best split-screen two player games. You have to move your spy through rooms and search of the furniture, as well as lay traps for the other spy. When the two spies meet each other you can battle it out with swords or run away. There are many entertaining and humorous sequences, not least the effects of some of the large assortment of traps. All in all, good fun, with a high standard of sound and graphics.

**SPY V SPY 2: THE ISLAND CAPER** ★ ★ ★ ☆  
arc Datasbyte 1985 (J, L) mid

This is essentially more of the same, but with even better graphics and different traps than its predecessor. This time the spies are on a desert island (before overall size and shape you can choose). Rewards include quackwad, coconut bombs, pits and rope traps. There is even more of a cartoon feel to this than 'Spy v Spy'!

### THE KEY

#### Star Ratings:

★	poor	☆☆	games in available on tape
★ ☆	poor/mediocre	☆☆☆	games in available on disc
★★	mediocre	☆☆☆☆	games in available on CD-ROM
★★ ☆	mediocre/good		
★★★	good		
★★★ ☆	good/excellent		
★★★★	excellent		
arc	arcade game	(J)	game is available on tape
adv	adventure game	(L)	game is available on disc
arc/adv	arc/adventure	(J, L)	game is available on CD-ROM
arc/adv	arc/adventure with pictures	text	language
adv	strategy game	text	language
adv	arc/adventure	text	language
arc/adv	arc/adventure with pictures	text	language
mp	family role playing game	text	language
adv	arcade game with puzzle/shooting/trapping etc	mp	game is not available on tape but available on import from America
		arc/adv	no price range available, because game is very old, but to get hold of

The asterisk and format (adv, arc etc) suggest special use intended in guidelines. Also, games which are imported into the UK and also can now be found on cassette and disc versions. The asterisk also indicates if the game is available on import.

**SPY'S DEMISE** ★ ★ ★  
plot Electric Dreams 1985 (J, L) mid

Surely one of the most frustrating games ever written. You guide a little sprite across platforms which contain vertically moving obstacles. The trouble is, you can't stop running unless you've started, and if you've set for a collision course you have to push the joystick the opposite way. As with 'Spy Strikes Back' the continuous, varying music is excellent, but the game, although very simple and addictive, soon becomes less frustrating to play!

**STAR RAIDERS** ★ ★ ★ ★  
arc Atari 1979 (J) mid

Okay, I must be pretty fussy. Who would give a simple 3-D shoot 'em up a four star rating. Well, you have to take into account when 'Star Raiders' was written you sat, and the impact it had on the home computer market. There is an old slant film which revolutionised Cinema. 'Star Raiders' was in computer games what this slant film was to Cinema. The game has you scarping round the galaxy, disposing of the Zylon fleet, repairing and refuelling at starbases and also defending the starbases from Zylon attack. The game's graphics may not seem as stunning as they were in 1980, but the gameplay still remains excellent. 'Star Raiders' sold a lot of Atari's in the early 80's and it is a game no Atari owner should be without.



**STAR RAIDERS 2** ★ ★ ★ ☆  
arc Atari 1985 (J, L) mid

Worthy follow-up to the all-time classic, retaining its parent in the audio visual departments, but losing out slightly on playability. The main game's action is a 3-D view of space on which you dispatch Zylon fighters and motherships, and you can also call up an impressive looking galactic map/chart. A classy shoot 'em up in all respects. My only complaint is that a game can last anything up to ninety minutes because those Zylons loved the robots.

**STARBUCKE** ★ ★ ★  
arc/adv Bubble Bus Software 1986 (J, L) full

Well designed arcade adventure with hundreds of nicely drawn locations (although only in two colours), still, that's the price you pay for high resolution (Graphics II screens). Lots of blasting, dinking, collecting and puzzle solving to do, as you help B.L.D.B. (Biologically Dependent Being) rebuild a planet's core.

**STEALTH** ★ ★ ★ ★ ☆  
arc Broderbund 1985 (J, L) imp source

Why is it that a lot of great American Atari games were never released over here? 'Stealth' is an attractive looking shoot 'em up with a three dimensional view of your ship and the landscape it dinks over. You are placed slightly above and behind your ship, and from there you can make it weave left and right, or accelerate and decelerate. A barrage of missiles await toward you. Watch out especially for missiles which come swooshing up and almost shoot out of your T.V. set. First rate graphics.

**STEVE DAVIES SNOOKER** ★ ★  
arc CDS Software 1985 (J, L) mid

This is a reasonable attempt at recreating snooker on computer. As well as the usual power meter, you also have the choice of stroke, stun, topspin and left or right side. Games can be played between two players or one player and the computer (Steve Davies, appropriately). Don't expect too much.

**STONE OF SISYPHUS**

arc **Trp/Adv. International** 1982 (2) **impr/score** \*\*\*

An unusual graphics adventure where you have to select your actions from a few choices presented elsewhere. Therefore, the amount of typing required is down to a minimum. Surprisingly, even with this limitation, 'Sisyphus' plays a lot better than many other standard graphics adventures. It can be especially recommended for solo players because you have to create and build your character before entering the dungeon.

**STORM**

arc **Mastertronic** 1987 (2) **bud** \*\* \*

This is a lot like 'Gauntlet', but the screens do not scroll. You have an overhead view of your character moving through the maze-like limited dungeon, searching for food, keys, potions and magic etc. Sound effects are of a high standard and there is a rousing tune accompanying the info screens. Graphics however are a little disappointing and unclear at times.

**STRANDED**

gr adv **English Software** 1983 (3) **score** \*\* \*

One of the first cassette based adventures for the Atari to feature graphics. However, a price must be paid for not using data compression techniques, so the graphics are rather simple and the text is a lot on the short side. The game's plot sees the cool-but 'weak' forced on a strange planet and you may have trouble getting your commands accepted by the limited parties. One for adventure buffs only.

**STRATOSPHERE**

arc **Players** 1987 (2) **bud** \*\* \*

One of a series of XL/512 releases from this software house (see also 'Bubble Trouble' and 'Erosion'). This is probably the worst of the bunch. It's a weird shoot 'em up, boasting colourful graphics and fast sound effects, but gameplay is virtually non-existent.

**SUBMARINE COMMANDER**

sim **E.M.U./Creative Sparks** 1982/1985 (2,3) **mid/bud** \*\* \*

A submarine simulation with the emphasis on action rather than technical detail. You scour the Mediterranean in search of convoys to destroy, and are rated for your performance at the end of the game (each game can last from thirty minutes to a few hours). Game screens include a map, instrument panel, sonar, radar and periscope view. Extremely playable and holding its age very well.

**SUMMER GAMES**

arc **Epyx/U.S. Gold** 1985 (2) **mid** \*\* \*

There are eight Olympic events in this package, the best ones being the pole vault, diving, gymnastics and clay pigeon shooting sequences. The four swimming and running events lack variety and can get boring. Overall though, 'Summer Games' has nice graphics and animation and genuinely exciting gameplay. Watch out for some bugs though if a few of you are playing.

**SUNSTAR**

arc **CRL Software** 1986 (1,2) **mid** \*\* \*

Fast, noisy and unusual shoot 'em up with strategic elements. You have a 3-D 'out of the cockpit' view of a huge grid, along which you glide smoothly. There is a fair amount of blasting to be done as you search for green energy crystals.

**SUPER BREAKOUT**

arc **Alert** 1979 (2) **mid** \*\* \*

Here you have the original, ancient, 'Breakout' arcade game (the one where you smash through a brick wall with a ball and bat). In addition you have a few refined 'breakout' derivatives. Graphics and sound are on a basic level, but playability and addictiveness levels are high.

**SUPER HUEY**

sim **Cosmi/U.S. Gold** 1985 (2,3) **mid** \*\* \*

A helicopter fight simulator with three different missions: mapping, combat and rescue. Control of the helicopter is well implemented and the sound of your rotor blades is excellent. If only they had put more work into the graphics side of things though. For instance, in the combat scenario, enemy helicopters and tanks are no bigger than a few pixels high.

**SURVIVORS**

arc **Atlantis Software** 1987 (2) **bud** \* \*

'Survivors' is a 'Boulderdash' derivative in which you control three druids and attempt to rescue 135 people from a damaged building. Strategy plays an important part because each druid can only do a specific task. This could have been an interesting game, but poor graphics and some of the worst scrolling you'll ever see hinder it considerably.

**TABLE FOOTBALL**

arc **Rhino Marketing** 1987 (2) **bud** \*\* \*

Bar Football on computer? What did they think of next? Fair graphics, hardly any sound, but it is no substitute for the real thing.

**TAIL OF BETA LYRAE**

arc **Datasoft/Databyte** 1984/1986 (2,3) **mid** \*\* \*\* \*

The ultimate 'Swordsmen' clone with superb graphics and music. The founder of a horizontally scrolling shoot 'em up was written by Philip Price, and the music was by Gary Gilbertson. They later went on to write the 'Warzone Reality' games.

**TANK COMMANDER**

arc **Creative Sparks** 1986 (2) **bud** \*\* \*

Okay strategic shoot 'em up with a four-eye scrolling, bird's-eye view of a battlefield. You move your tank, complete with 360 degree rotating turret, over the battlefield and neutralise enemy tanks and buildings. Sound and graphics are reasonable and the game is quite challenging.

**TAPPER**

arc **U.S. Gold** 1984 (1,2) **mid** \*\* \*

Enjoyable little game which has you playing the part of a bartender in a variety of pubs. Pressing the joystick button serves the beer by sliding it along the bar. Moving the joystick moves you to the next set of customers. Ability to keep up with the orders inevitably means the loss of one of your three lives. Graphics are cheap, the background ranging from country and western pubs to punk rock and space age bars.

compiled by  
**Kirk Ruebottom**

# A-Z OF ATARI SOFTWARE

## TEMPLE OF ASPHALT TRILOGY ★★★

tp Epyx/U.S. Gold 1986 (J,G) full

All three Epyx 'Asphalt' games in one set with a large background storyplaying manual. First off, you create and equip your character, then you guide him through dungeons using both joystick and keyboard commands. Your view of the game is an overhead one, reminiscent of 'Gauntlet'. Indeed, these games could be described as slowed-down versions of that game, with more thinking to be done and with more puzzles and traps to be negotiated. For the role players out there, this package represents good value.

## TEN LITTLE INDIANS★★

adv Mysterious Adventures 1983 (T) scarce

This is a text adventure in which you are charged with finding ten coloured treasures in a major house and its grounds. Like the rest of the Mysterious Adventures titles, locations are numerous due to the lack of detailed text descriptions. This however does not detract from the game's appeal.

## TENNIS★★★

arc Atari 1983 (T) mid

Graphics are reasonable, but playability is superb in this computer translation of tennis onto computer. Games can be in any one player/two player/computer player combination and you can also choose from doubles or singles play. The range of shots available is quite large, as the more deft you are with the joystick, the greater your chances of winning.

## THEATRE EUROPE★★

strat PSS Software 1986 (L,G) full

A wargame with arcade shoot 'em up sequences which has the Third World War as its scenario. Elements such as chemical warfare, nuclear exchanges and conventional warfare are all represented on the map, battle and city screens in a particularly nauseating and sensationalist manner. Not brilliantly programmed by any means, but with enough substance to please wargame buffs.

## THRUST★★★

arc Firebird 1986 (T) bad

Basically, 'Thrust' is a combination of 'Lunar Lander' with a shoot 'em up element added. Guiding your terra-rover ship through narrow caverns, collecting fuel and shooting gun emplacements can be quite absorbing. Control is done entirely from the keyboard. How else didn't they include a joystick option?

## TOMAHAWK★★★★

sim Digital Integration 1987 (L,G) full

No doubt about it, this TMI helicopter simulation for your machine. The 3-D vector graphics 'wow!' and the many tanks, guns and helicopters are drawn and animated to the highest standards. Control and feel of the helicopter is excellent. This is another of those rare games, appealing to simulation enthusiasts as well as arcade addicts.

## TOUCHDOWN FOOTBALL★

sim Electronic Arts 1986 (G) full

This is generally a poor attempt at putting American Football on computer. All of the strategic elements you would expect are present, and the controls are fairly well implemented, but the game's graphics and sound are atrocious. Once a tackle takes place the players dive on top of one another, so that all you can see is a big blue and purple spot on screen. If you're desperate to play American Football on your computer I will recommend having a look at this before you buy it.

## TRACK AND FIELD★★★

arc Atari 1984 (T) mid

'Track and Field' contains six events, namely 100 metres, 110-metre hurdles, long jump, high jump, javelin and hammer throw. Graphics and animation are adequate, nothing more, but the game is fun to play with a few friends.

## TRANSDISK★★★★

ut Digicom/Page 6 1984/91 (G) full

Digicom continually updates this utility which enables you to transfer your cassette games to disk. It can handle all tapes, regardless of their length or built-in protection. Easily the most powerful of the many similar utilities available.

## TRIVIAL PURSUIT★★★

strat Demarc 1986 (J,G) full

Enjoyable, well done conversion of the popular board game. A cute little green character called Mr. T.P. is your quizmaster (he also provides some electronics after you answer a question). Game screens include a nice representation of the new familiar Trivial Pursuit board, Mr. T.P.'s living room (where the questions are asked), and various clues indicating the performance of each player.

## 221B BAKER STREET★★★

strat Datasoft 1987 (G) mid

Some board games do not translate well to computer and this is one of those I'm afraid. Each player moves his detective over an angled 3-D view of a board representing London City streets. When you enter a building a clue pertaining to the case appears on screen. You must string together these clues and solve the case. The game moves along far too slowly and you have to look the other way when a clue appears on-screen for the other player. Nice graphics and reasonable speech synthesis are here, but you'd still be better off buying the board game.

## TURBO BASIC AND COMPILER★★★★

ut Public Domain/Page 6 1987 (G) bad

There's been enough said about this tremendous package in these pages many times before. Suffice to say that there is no excuse for not owning it.

## ULTIMA 2★★★★

tp Sierra On-Line 1982 (G) imp scarce

## ULTIMA 3★★★★

tp Origin/U.S. Gold 1984 (G) full

## ULTIMA 4★★★★

tp Origin/U.S. Gold 1987 (G) full

In its time, 'Ultima 2' was the biggest and most complex computer role playing game ever. In a you guide a character over a 3D-see view of a sprawling landscape dotted with trees, mountains, hills, oceans and towns. Combat with monsters plays an important part in building your character's expertise. Equally important is conversation with the many townspeople you meet. 'Ultima 2' also featured level through space and time. All game commands are issued from the keyboard and take the form of pressing 'A' for Attack, 'I' for 'Interact', 'B' for 'Board Map', 'C' for 'Cast and Save Game etc. The 'Ultima' series has basically the same format but improvements were added as the series progressed. Each became larger in turn and featured better control screens, more characters to interact with, filled in 3-D dungeon graphics etc. They are masterpieces of programming and probably the best designed and most involving computer role playing games to date.

**UNIVERSAL HERO**

arc/adv Mastertronic 1987 (T) bud

It's a shame, because this pretty arcade adventure was going to seem very tight and I found out that there was a fatal bug in it. This has the effect of rendering the game useless and unplayable after you have been playing for five minutes or so. Don't buy it. null said?

**UP 'N DOWN**

arc U.S. Gold 1985 (Ld) mid

A wild car racing game, viewed from above and with a vertically scrolling screen. You must collect all the flags dotted about and avoid the other traffic by jumping over them! You can also jump from track to track. As very little of the track is shown at one time you may find yourself hitting other cars before you've actually seen them. Graphics are fairly average, but a catchy title ditty jingles away merrily throughout the game.

**UP, UP AND AWAY**

arc Starcade/Bug Byte 1983/1987 (T) bud

In this horizontal shooter you must watch out for holes, storms, asteroids, airplanes and stone-throwing kids, all out to spoil your trip in a hot air balloon. Everything moves at a leisurely pace (probably too leisurely), although older games players may enjoy it.

**U.S.A.A.F.**

arc S.S.I. 1987 (c) full

Complex simulation of allied bombing raids over Germany during World War II. This is a game for strategists and wargamers, not for those who like fast action. Graphics are better than in most S.S.I. games, but their usual attention to detail has not suffered because of this.

**VEGAS JACKPOT**

slm Mastertronic 1986 (T) bud

Okay full machine program with all the features you'd expect, such as gambles, holds and nudges. Graphics are jacking a little in height onsets but are well drawn. The whole game is controlled using the console keys (Start, Select and Option). If you're a full machine addict then 'Vegas Jackpot' could help out with your rehabilitation.

**VOODOO CASTLE**

(gr) adv Adv International 1983 (Ld) mid

This first saw the light of day as a text adventure, later being incorporated into the 'S.A.S.A.' (Scott Adams' Graphical Adventures) series. It has the distinction of being written by Scott Adams' wife. The story concerns events in a spooky castle and a means to lift a curse from the Count of Monte Cristo. Nice pictures, limited vocabulary, helpful guides.

**WARGAME CONSTRUCTION SET**

ut S.S.I. 1987 (c) full

The file of this piece of software speaks for itself. It allows you to design your own units and create battlefields maps. Even an screen colours can be altered to your own taste. The end product could be anything from a medieval battle to a space age showdown. The package also includes several ready made wargames designed with this utility. The only drawback with 'WCS' is that you need it to play the wargames you design.

**WARHAWK**

arc Firebird 1986 (T) bud

A shoot 'em up that is over the top is just about every respect. It features an awe-inspiring screen and stunning music and sound effects. Put simply, 'Warhawk' is a vertically scrolling shoot where everything comes at you. There is little variety but plenty of action.

**WARRIORS OF RAS**

fp U.S. Gold 1986 (Ld) mid

This package contains two previously released role-playing games, 'Dungeon' and 'Yajir'. Both games follow essentially the same format, giving you a birds-eye view of your character and his immediate surroundings. Instructions such as fighting a torch, using, equipping and fighting are all accomplished via key presses. Their graphics and basic gameplay make this suitable for only the leastest role players.

**WAVY NAVY**

arc Sirius Software 1983 (c) imp-score

Fast moving, flexible shoot 'em up, in which your ship (of the coast-guard variety) has to contend with waves of diving planes, helicopters, missiles and submarines. Graphics are colourful and the sound effects are first class.

**WAXWORKS**

adv Mysterious Adventures 1983 (T) science

Another colourful text adventure from the once prolific software house. In this one you are stranded in a spooky warehouse, isolation and you must find your way out. Pretty atmospheric and also challenging, even if the location descriptions are short and the game's vocabulary even shorter.

**WHIRLINDS**

arc U.S. Gold/Americanas 1985 (Ld) mid

Polished game with scrolling screens in which you must help the Hunt avoid all the traps and eat at the food. With fifty screens to complete it should keep you busy for some time. Novel controls, humour and good gameplay make 'Whirlinds' well above average.

**WINTER OLYMPICS**

arc Tynesoft 1987 (Ld) mid

Downs of the fore-runner to the excellent 'Winter Olympics' released a couple of years later by the same company. Some of the five events included here (speed skating, ski jump, slalom, downhill and toboggan) would have been better if they were written in Russian! Of all the events, only the speed skating and ski jump could be termed average.

**WIZARD OF WOR**

arc Bixxon Corp. 1981 (8U) science

'Gaurter' owes much of its gameplay to this ancient programme. Okay, there is no scrolling and you don't have to pick up food or potions, but the one and two player shooting elements are present. 'Wizard of Wor' also scores equally as high on playability as its more famous descender.

**WIZARD'S CROWN**

fp strat S.S.I. 1985 (c) full

If you like the tactical and strategic elements of role playing games then look no further than 'Wizard's Crown'. The game's emphasis is not on role playing, but in detailed combat sequences and exploration of the game map. True, role playing elements are here (characters, treasures, dangers), but consider that a single fight can take anything up to half an hour! An absorbing game, suitable clearly for the fantasy wargamer.

**ZAXXON**

arc Datasoft 1983 (Ld) score

Adequate conversion of the famous, innovative arcade game. 'Zaxxon' has the claim of being the first scrolling isometric 3-D shoot 'em up. Of course, not all of the features of the arcade version are present in this conversion, but there is still enough to keep trigger happy fingers busy.





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ZORK I	*** ☆
adv Infocom	1981 (H) full
ZORK II	*** ☆
adv Infocom	1981 (H) full
ZORK III	*** ☆
adv Infocom	1982 (H) full

The Zork games are classics of the text adventure genre. Their central themes are underground exploration (being adapted and enhanced versions of the famous 'Colossal Cave' adventures, the first computer adventure ever). They offer scenes of descriptive text, big vocabularies and tons of humour. Any serious adventure will have these in his or her collection. With the emphasis now on graphical adventures, it is pleasing to know that this trilogy carved its own special niche in the history of the computer game.

ZORRO \*\*\*

arcadv Dataeast/US Gold 1985 (L,G) mid

Armed action and puzzle solving is the essence of this graphically attractive game from Dataeast. Zorro can walk, climb, jump, pick up and drop items etc. He will also dispatch enemies with a few quick punches of his blade. Working out exactly how to solve each screen and what to do with items you find is sometimes pretty absorbing.

... and so ends one of the biggest  
surveys of Atari software published  
in any magazine. There are some  
cracking programs included in this  
article - all you have to do now is  
track them down but, sadly, it  
won't be easy!

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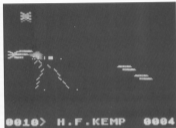
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# FIGHTER



by H.F. Kemp

*What is the more important aspect of a game, graphics or playability? Most people would agree that it is the latter which is why games such as Breakout and the original Pong were such a success and are still played today.*

*FIGHTER is a good example of a game with minimal graphics but good playability. It is the author's first attempt at writing in assembly language and he has come up with a nice little shoot 'em game. Thus, the alien craft are just big crosses and there is nothing but the darkness of space as background graphics but that doesn't detract from the game. It is simple and it is fun. Try it.*

*Disk users should type in the main listing only, save a copy as a Basic file and then run the program with a blank disk in drive 1. The Basic program will create a machine code file which can be loaded and run from DOS by using option 1.*

*Cassette users should first type in second short listing and **SAVE** it to a new blank tape. Remove this tape from your cassette deck but make sure that you don't rewind it. Now type in the main listing and save it on another tape. Insert your original tape and run the main program (with a memory) which will then create a machine code file immediately following the first listing. To run the game, rewind the tape and **LOAD** and run the first program which will automatically load and run the main game.*





# CHROMACAD MODEL BUILDER 91 and SURFACE SHADER XE91

## a Short Review

These two new programs for the Atari 486 computers in review<sup>1</sup>. They sound pretty startling on its own these days, but how about "I have two very impressive new programs which are not games or editors"? That is really startling. Unfortunately I have only had these two programs for a couple of days and the copy deadline is imminent, so I have only had time for a quick initial look at these packages. I need some time to investigate them fully so I will do a quick initial appraisal now and come back with a full report for next issue.

### SERIOUS STUFF

First what are these programs for? Their names Model Builder and Surface Shader give a clue. Model Builder is a program to construct complex 3-D models, not just boxes, pyramids and spheres but complex sculpture like objects. The sculpture is built up from multiple layers each like a contour map. The contours can be highly detailed and the layers can be as thick or thin as you decide, so the end model can be very complex indeed. The publicity says "3,000 to 10,000 facet models are not unusual" (a facet is a triangular surface). I have not built any models of this sort of complexity, but there is an example of a human head on the disk which gives an indication that this is possible.

The documentation says that Model Builder works with Atari computers over 486k, it certainly works with an unmodified 8000k.

Surface Shader is for 386 computers, it does not run on my standard 8000k, but there is a version included in the pack that is for expanded 512k and that works OK on my 8000k, with the Hamble XL memory expansion. Surface Shader works with the models generated in Model Builder and allows the surfaces to be coloured and shaded. It can display up to five models in up to six windows and provides a large variety of lighting and rendering options. It can produce images for 3-D viewing through red/green glasses. I have only had time to take a quick view of some of the models provided on disk. My first impression is that the program is slow - this is probably because it has a great deal of work to do. Also the finished models are flickery. I think this is because the program uses two or more screen frames to generate the picture showing each frame has a slightly different pixel shading pattern so that the overall effect is of cross shading. Maybe the 50% screen refresh rate here in the UK makes the flicker more obvious than the US 60Hz system. This needs more investigation.

**Ian Finlayson makes an initial appraisal of some exciting new serious software**



Ian Finlayson  
(TV Screen Photo)

### HIGH RESOLUTION

As you know the TV screen does not give very high resolution graphics. These programs are capable of generating detail that is beyond the capability of the normal display screen, but it is possible to split an image over several screens so that they can be photographed and then combined into one. I look forward to trying this to see what the results are like.

The programs come with a good quantity of documentation, and that is just as well as there is a lot to take in. Although the documentation says that the programs have been tested with 14 year olds, they are not for the faint hearted or impatient, but the manuals do lead you step by step through the various features of the programs in a tutorial style.

The programs are distributed in this country by Gratin International priced at £29.95 each. It seems to me to be a fair compensation that the two programs go together so closely that you will need both. Not cheap but then, unlike many other screen packages, they are not cheaply generated with obvious, professionally produced materials.

### ANY GOOD?

So first impressions are that this is an exciting new package which will be of considerable interest to those who are serious about the graphic arts but cannot afford the very high prices of dedicated graphics computers. But I think that a good deal of patience will be essential.

Software available from Gratin International

# MASTERING MIDIMASTER

**A**s a buyer of New Atari User's Midimaster I'm always sure a bit disappointed that I have never seen any user's articles supporting this package. So, after reading "Making Music" in issue 52 about the Yamaha PS5 780 synth, I decided to start up my good old Atari Winter Plus to put something on paper about my own experience with my PS5 780 and Midimaster.

## INITIAL PROBLEMS

Shortly after buying Midimaster I discovered the major problem John S. Darrin's notes about, when I found out the PS5 780 is not able to use the RETURN command of Midimaster properly. This problem was solved by buying an extra keyboard (a cheap PS5 480). Apart from the fact that I could now use Midimaster's sequencer to retune my songs, I discovered another possibility - using the two keyboards connected to each other with one main cable. It appeared to be possible to transfer Music Computer songs into sequencer format. For interested users of Midimaster I will describe how to do this later on.

Other possibilities of Midimaster, which are not described in the manual, are "dubbing" or "copying" tracks and "merging" tracks. These features are possible using only one keyboard. So, set up your equipment and let's go.

## DUBBING TRACKS

What is the use of dubbing (or copying) tracks? Well, if you create two identical tracks in your sequencer you can play each track with its own voice or program-number. It's good to hear songs this way, because two different instruments playing together make your songs sound "deeper". If you are smart enough you can even (using dubbing and merging) copy certain parts of a track onto a second track. In this way these parts of your music will sound more "full". The trick will work either with the PS5 780 and with the PS5 480, so I expect it to work with the PS5 680 and other synths as well.

Well, key in a track with your sequencer, or load a song ready made from disk and choose a track of this song you want to copy. Let's say you want to copy track 1, then proceed as follows:

- choose an empty track, for example track 3
- key in on track 1: PLY 01
- key in on track 3: REC 01
- set ALL other tracks to 00 (PLY and REC)
- \* set your keyboard to midicode 00
- set your keyboard channels: transmit: 1 / receive: 1
- hit R (record)
- check if the buffer is counting down
- press CPTOS when track 1 has finished to play

**John van der Spoel**  
discovers new depths  
to the popular  
Midimaster sequencer

- set track 3 back to REC 00
- run key in a different program-number on track tracks 1 and 3
- set track 1 to PLY 01
- set track 3 to PLY 00
- \* set your keyboard to midicode 00
- press P (play)

\* = NOT necessary on the PS5 780

Now you will hear two identical tracks, each playing its own instrument it really sounds great. Try it!

## MERGING TRACKS

Merging is possible in nearly the same way as dubbing. The main use of merging is to add notes to a given track. Let's say you want to add notes to track 1, because you're simply forgotten them or it appeared the sequencer did not pick them up while recording. Proceed as follows:

- set track 1 to PLY 01 and ALL other tracks to PLY 00
- set an empty track (for example track 2) to REC 00
- \* set your keyboard to midicode 00
- \* set your keyboard channels: transmit: 2 / receive: 1
- press R (record)
- while hearing track 1, key in the notes you want to add at the right moment. (You will notice you don't hear these notes on the PS5 480 so you have to use your feeling as you have to remove these notes later on. Another way is midicode 00 to connect your midi-out plug to the PS5 480 and your midi-in plug to the PS5 780, this way you will hear the notes you add being played on the PS5 480 and the notes on track 1 on the PS5 780.
- when you're finished, set tracks 1 and 2 both to PLY 00
- set track 3 to REC 00
- \* set your keyboard to midicode 00
- \* set your keyboard channels: transmit: 3 / receive: 3
- press R (record)

\* = NOT necessary on the PS5 780

# IMASTER

Tracks 1 and 2 will now merge on track 3! You've created a new track and you can wipe tracks 1 and 2 and copy track 3 to track 1 if you wish. Before doing this though first check if track 3 sounds okay.

I have to admit merging does not always work properly. I don't know exactly why, but I expect the problems to concern when notes have "run into each other".

So, if you want to merge tracks you have to take care that the notes on and note-off messages on both tracks don't overlap each other. The trick is to play notes just into a "gap" on the track you want to add them to.

## TRANSFERRING MUSIC COMPOSER FILES

As you will have noticed MidMaster's editing functions are not very ideal. So, if you could use a proper music-program to create and/or edit songs and could transfer these songs into sequencer-format later on, it would be a great improvement. For that reason I tried to find out how to transfer Music Composer Songs and Advanced Music Systems songs into sequencer format. This could open great new possibilities such as adding permission for example. I've really succeeded in transferring Music Composer songs but sadly it has proved impossible, so far, to transfer AMS songs correctly. Maybe the notes of these songs are too complex and confuse the sequencer. It could also be possible that the MidMaster package (software and/or hardware) is not fast enough to record the notes correctly. Is there anybody out there who can tell? I don't understand, because the AMS midi-player programs does play the AMS songs correctly and you can store them in your keyboard memory!

Anyway, you can start transferring Music Composer songs as follows:

- load the MC midi-player program and adjust tempo if necessary
- set the player to POLY mode
- play the song and store each voice of the song into a separate memory bank of your keyboard (Maybe you have to refer to your manual how to do this).
- be sure while playing back your keyboard memory banks that each bank transmits its own channels: e.g. bank 1 stores voice 1 and transmits on channel 1, bank 2 stores voice 2 and transmits on channel 2, and so on
- now start up the sequencer program
- key to track 1: REC 01 and track 2: REC 02 and so on if the song has 3 or 4 voices
- to be sure the sequencer will record all notes you can store the same voice of a song in several memory banks of your keyboard and record them double into the sequencer using 2 or more tracks for each bank

- connect your PS5 480 keyboard multi-out port with a multi-cable to the multi-in port of the PS5 790
- connect only the multi-out part of the PS5 790 with your XL-system
- lower the MidMaster's midi-in plug
- now play the memory banks of your keyboard ALL TOGETHER (as MidMaster has no clock facilities from the PS5 480 using the PS5 790 into the sequencer and check if the buffer is counting down).

Well, now the Music Composer Song is recorded in sequencer-format and you could add permission or other instructions to improve the song! I suggest you start with a song containing just two voices. When you're managed to do this, then try a song with 4 voices.

Notice this trick will not work on one keyboard, at least not on a single PS5 480 or a single PS5 790. If you play the memory banks of the PS5 480 straight into the sequencer, it only records the first note and then the sequencer halts up. The PS5 790 can't even store songs played by the multi-player programs, because the programs use channels 1, 2, 3 and 4, which channels are used by the PS5 790 to receive the vector synth-messages and not midi-messages. So ONLY playing the memory banks of the PS5 480 using the PS5 790 into the sequencer will do the trick!

## A FINAL HINT

I also have another hint to use the PICTURE command of MidMaster if your keyboard has no midimode 80 (or Local off mode). Although you won't hear anything there is one method to make it work: just pull out the midi-in plug, set your keyboard channels transmits 1/receive 1, press T and set your keyboard keys to transmit 1/A. As you don't hear anything, you'll have to use your feeling or a metronome. If you've got a second keyboard (or can borrow one from a friend) plug in the midi-in plug to this second keyboard, and you will hear your existing capabilities as well!

## READY-MADE SONGS

I have put in some songs in sequencer format to help a small circle about you and find on this issue's disk. I have more MidMaster songs and submit songs in the a sequencer or MidMaster songs can be built up and made available in the Public Domain. The way each can hear each other's songs and learn about them.

The songs you will find on the disk are as follows:

### SONG 1: THE ENTERTAINER

Filename: EN1001.MID (014 entries)

Track	Instrument	Notes	Program	Description
1	drums	00000	004	This song was created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.
2	drums	00000	004	This song was created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.
3	drums	00000	004	This song was created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.
4	drums	00000	004	This song was created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.

### SONG 2: THE FIFTH (intro-part)

Filename: F5101.MID (014 entries)

Track	Instrument	Notes	Program	Description
1	drums	00000	004	This song was created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.
2	drums	00000	004	This song was created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.
3	drums	00000	004	This song was created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.
4	drums	00000	004	This song was created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.

### SONG 3: POMOJO

Filename: POMOJO.MID (014 entries)

Track	Instrument	Notes	Program	Description
1	drums	00000	004	This is a song created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.
2	drums	00000	004	This is a song created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.
3	drums	00000	004	This is a song created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.
4	drums	00000	004	This is a song created using Music Composer and contains 4 channels. It only has two voices and requires 4 voices. It only has two voices and requires 4 voices.

# AIRBALL

**D**espite the absence of new 8-bit releases in the UK, there are still a few items of great value for Atari gamers. The lack of products to sell has prompted some vendors to import games from Europe and the States which have not been widely distributed here before. A typical example is AIRBALL - a ROM cartridge from Atari US, developed by Microval UK and packaged for the short-lived '88 Video Game' promotion a few years ago. It appears that Atari, with their legendary wisdom, didn't think that British users would be interested in Airball so it's only now that we are able to judge for ourselves. The review copy was kindly supplied by Mike Dismant.

The story begins when you happen to become acquainted with an evil Wizard. Not being a particularly pleasant chap he you might have expected, would be immediately desirous to transform you into a ball and send you bouncing off into a vast mansion. Once you're in there, he explains, you'll need to pick up various objects and search for a spell-book if you ever want to escape. It doesn't take a great deal of time for you to decide that it's not one of the most appealing afternoon activities you've ever heard of, and you're just about to make a run for it when the evil Wizard begins to cast his terrible spell - 'Mortal human, weak and small, turn into a bouncing ball'. In the end there's not a lot you can do except retreat on this peculiar mission.

Airball shares many characteristics with arcade adventures such as Chuzzlewit. Head Over Heels and Medieval Man which originate from the age-old Atari 8-

concept. It's based on a complex of over 150 rooms, each presented in highly detailed graphics and positioned diagonally to form a realistic 3-D perspective. There are lots of ingenious traps and a wide variety of ramps, archways and platforms throughout the system. There's a general impression that the game's author has put lots of effort into graphic design. The music is of a similar high quality, though an unaided disc becomes rather irritating after a while.

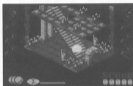
When the game kicks off you're situated on top of an air pump in the main room of the magic mansion. Air pumps are of major significance because you're suffering from a slow poison! You must sit on the pump to re-inflate yourself, but don't hang around too long or you'll pop! Once you've obtained enough air you should roll off the pump and start to explore the surroundings. To move you simply push the joystick in the desired direction while the fire button lets you jump over ledges, climb stairs and negotiate certain obstacles. Naturally the Wizard has conceived there's no shortage of spears, spikes, prickly floor tiles and other piercing hazards for you to contend with. If you're unlucky enough to hit three you instantly deflate, while around the rooms to shrivel and return to the last air pump you visited. Amazing as it is, you only have a few lives to survive so you can't afford to do this too often!

As you wander through the mansion you should keep your eyes peeled for precious stones and gold bars scattered on the floor. The Wizard has concealed a flashlight, a lantern and a candle in certain rooms and you can be sure these will be needed sooner or later. You can only carry one object at a time though, so you may have to drop one and return for it later. Occasionally you may find a crate which can be moved to reveal a hidden

treasure or strategically positioned to avoid other hazards. When you eventually find the spellbook, you should take it to the starting room and avoid further instructions. As with all adventures of this type, the best advice is to make a map!

I must say I was pleasantly surprised by Airball. The graphics are superb and the game as a whole should keep you entertained for many hours. On a critical note, I'd like to see a few more components to the task in hand - alternative difficulty settings for example - but this is a minor complaint of an essentially excellent package.

Atari are probably better known for their mistakes than their achievements and their failure to release Airball this side of the Atlantic can only serve to justify this reputation. Atari UK have long since abandoned the 8-bit altogether but it makes you wonder how many more top-notch games they had the right to publish, and ship.



Title: **AIRBALL**  
 Publisher: **Atari Corp.**  
 Price: **£17.95**  
 Format: **ROM Cartridge**  
 Players: **1**  
 Reviewed by **Paul Dixon**



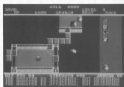


# ROGUE

**H**ere's a rarity amongst Mastertronic's Atari range - a game which doesn't seem to have any direct competition from other budget producers. **ROGUE** is a role-playing adventure that gradually unfolds in the dimly lit dungeons of doom! As the player, your mission is to explore the dangerous dungeons in search of the Amulet of Yendor. For protection you have some armour, your trusty enchanted magic plus a bow and arrow. Your little provisions are limited to one meal so as you descend through the levels you'll be

able to acquire additional food, as well as better armour and more destructive weapons. If you're lucky you may also stumble upon hidden treasures - gold pieces, magical items, potions, traps and scrolls that will help in your quest for the Amulet. Watch out for the monsters and traps though!

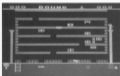
Before you commence play you're required to enter your name. A menu appears offering you a choice of starting the adventure, selecting a joystick or restoring a previously saved game. A status line at the bottom of the screen displays your maximum 'hit' tolerance, your strength and the protective value of your armour. The main screen picture consists of a map of the dungeon system, which gradually builds up as you explore new sections. To manipulate your character you must position a



cursor on the map and press the fire button so that the screen scrolls to it. You can also point at one of several keymaps displayed above. Up and Down have an obvious purpose if you're positioned at the top or bottom of a staircase and Search will tell you if there are hidden traps or treasures in the immediate vicinity. Objects are picked up when you walk over them, provided your carrying pack isn't already full. If it is you may need to drop, eat or wear something, though point at the required object, and you're pre-

sented with a menu of options. You can't wear more than one set of armour at once, and wielding one weapon will un wield another. You can kill monsters by shooting arrows from a distance or clobbering them with your wand. A whole world of exploration and discovery awaits the next Rogues. The graphics aren't amazing but the general approach is quite novel and the game would seem to offer lasting appeal. If you enjoy role-playing adventures, this is one you won't want to miss.

**Title:** ROGUE  
**Publisher:** Mastertronic  
**Price:** £1.99  
**Players:** 1  
**Format:** Cassette  
**Reviewed by Paul Ryan**



**I**t would seem there's no limit to the range of activities and situations that have been subjected to micro simulation. The job of a Despatch Rider may not spring readily to mind as the most obvious choice for computerisation, but Mastertronic have proved it can be done! The objective of the Despatch Rider (yes, that's a real) is to earn as much money as possible in a 15 min scale of Yendor hours, by collecting parcels from one part of a city and delivering them to another.

The screen view is split into three sections, the largest of which is an overall plan of the city on which your current position and intended destination is displayed. Pressing the joystick trigger highlights four refuelling stations, but only for a total of two seconds per game. A parcel in the middle of the screen comprises a clock, to inform you of the ever-widening deadline (a strongly familiar thought!), a fuel gauge and a tally of your current earnings. The third area is a 'zoom in' on your current loca-

tion - it's this tiny box in which you must concentrate as it provides your only view of your trusty motorcycle, the cubs, and any obstacles you must try to avoid. Fuel weather conditions (shown above the map) could have an adverse effect on the bike's manoeuvrability.

Once you reach a pick up point the view changes to represent a high-rise office building. The aim here is to catch parcels as they fall from the office windows. Assuming you manage to grab a package you must transport it as quickly as possible to the delivery zone, being careful to avoid collisions with the less or dangerously placed steps. If you crash into the kerb you forfeit some time but if you hit a step it's highly probable disaster as you can't see one coming in advance! You're re-positioned

at the starting base. In the last phase the parcels are delivered by firing them through open doors to another high-rise office building - it sounds easy but (problems, problems - I the door don't stay open for long!

Despatch Rider is basically one of Mastertronic's characteristic productions. You wouldn't call the neighbours around to see the graphics or listen to the music but the package as a whole is reasonably addictive. Compared with many full-priced games, Despatch Rider is a genuine bargain.

**Title:** DESPATCH RIDER  
**Publisher:** Mastertronic  
**Price:** \$1.99  
**Players:** 1  
**Format:** Cassette  
**Reviewed by Paul Ryan**

# DESPATCH RIDER

# GO ON, OPEN THE CUPBOARD

*Have you lost that old enthusiasm for your Atari? Don't worry it will come back. Remember Mark Hutchinson? Here's a story to give heart to anyone whose Atari has been locked away*

I know it had happened to other people, they wrote to me and warned me. Either that or suddenly, and for no known reason, they stopped their regular correspondence. Once, and a point of several weeks, I had seen someone disappear before my eyes. Well, I had lasted longer than most. I had faith in myself. It just would not happen to me. I did not even know the name of it but I had faith that it was lurking out there.

It is irritating how you can ignore the symptoms when they happen before your very eyes. Initial wandering on to other subjects, starting overwriting, things not working, email. That, at last, you just do not bother any longer. Time passes and you never realise that months may have slipped by since you did anything. 'What?' Does it all sound familiar? Can it be worse? Who knows? This is my story ...

## JUST AN EVERYDAY FANATIC

Just over three years ago I was a healthy STARS fanatic. I loved my 8-bit system and felt very comfortable with it. I could even help other people with their problems. I used my 8-bit system for more than games, but last, but not the least, this was the best time for some reason I did not have the inclination to program the thing - even though I had several language packages at my beck and call. Apart from WP, I would enter my time away with simple, low level games, or cards - bridge, and I worked out that the computer knew all the hands - and milites.

The usual downward step was my frustration and moving onto an IBM machine. This should have entered my blood but, because it was all new and I had a lot to learn, after doing a full day's work I was coming home mentally tired and found it hard to switch my mind off. More than ever I used the games as a passport, but more and more I would find myself staring at a blank screen. I found excuses in all other things instead.

At that time I had been writing a regular column for PAGE 6 for some years and had just changed the format from a beginners material to meetings about the computer world. A lot of people seemed to like it, some did not. I liked that, as I would not measure and the reaction started to fall and some computer files disappeared. I started to lose the computer信心 that kept me in information for my columns. I decided to have a break from the magazine; after all, it had been a long time since I started writing from issue 5 and the only other

person who could beat my number of contributions was the Editor himself.

## THE SYMPTOMS AND SOLUTION

I rested for a few months before I realised that I had the same symptoms as all these people before me. Suddenly I felt very old and inertial, another step in the downward path. I wanted to do things but it was always 'tomorrow'. I re-read my correspondence, but there was no solution for me.

Strange how fate can take a hand in matters and from a really uneventful occasion, I saw an email and air duster when I ran get it but never joined GAMMA, the Campaign for Good Air, because we have so little real air in the province that it practically does not exist. I did not even know we had a local branch but up ten years ago, which shows how active the past committee were! Until I was thinking beside a Scotswoman who started to talk about herbs. It turned out that this very same Scotswoman was the current Chairwoman of the N. Ireland branch! So, I joined and started to complain about lack of scuttage, herbicide etc. Well, you know what happens when you start that? Right, I got elected as Social Organiser.

## HEY THIS COMPUTER IS USEFUL!

Shortly after this I needed to contact the membership about events, so I turned to my faithful, and much neglected, STARS-TEK. I used an old American program called PROMPTMASTER to set up letters for events. Towards the end of my year's term I started up the branch's first quarterly newsletter. I used FASTEST WORDS PUBLISHER, an original version and much superseded by now. I had help from a girl who used WORD PERFECT 5 on an IBM compatible and in return I sold her about computers and word processors. I even swapped my 8-pin DASH printer for a 24-pin Epsons. I had hit bottom but was bouncing back!

As an added I had seen WORD PERFECT with windows and I thought that I would like this as it is a powerful, fully fledged WP package that can be used for DTP as well. It was in IBM format so I decided to get AT-ONCE, a bad choice and a sort of a setback, but that is another story.

## FINDING A CURE?

No, as I cured? Who knows? I still have to spring clean the computing room. So things away. Pick up my hard disk and colleague of my floppy again. In fact, all the hard work that helped cause the dreaded malaise. But I am now Chairman with a threefold increase in membership since last year, a heavy social diary for the branch and my policy is very progressive, I want to get things organised and that means work, not only for the last of my computer as well. I have found my cure and, while it may not get me back to those dizzy heights I attained several years ago, I am on an upward path.

I hope that this tale brings hope to all the STARS users out there who have a computer gathering dust. It can be done, it has been done.

This tale has ended but my story has begun again.

Mark Hutchinson

# THE ATARI CHARACTER SET

*Ann O'Driscoll presents a basic, no frills, introduction to defining character sets which, if used with one or two other articles should set you on the way to redesigning your Atari*

## THE BASICS

The standard Atari character set is made up of 128 different characters, each consisting of 8 lines of 8 bits (1 byte). The set takes up 18, or 4 pages of memory (128 characters x 8 bytes each = 1024 bytes) and is stored in ROM from locations 97344 to 98303.

Memory location 780 is a shadow register for 94260 and points to the start of the ROM character set. Normally, PEEK(780) = 224, indicating that the characters start at page 224 (224 pages x 256 bytes/page = 57984) as shown above.

## INVERSE CHARACTERS AND INTERNAL CODES

The 128 inverse characters, with ASCII numbers from 128 to 255, are accessed by "turning on" bit 7 of the normal character. You do this when you press the ATARI key; you can also use POKE 894,128. The computer's display handler (D) checks the ASCII codes with the value in location 894 before it prints to the screen. While the inverse characters aren't stored separately in ROM, they do have their own internal code; this is got by adding 128 to the ASCII order figures given above. Table 2 shows the internal codes for all 256 characters.

Internal codes are mainly encountered when you POKE in or PEEK across RAM. Each point on the screen is stored in memory locations in RAM. The countdown field in screen RAM for each character are the internal codes. For example, if you print a 'P' at a particular point on the screen and then PEEK the memory location for this point the value 34 is returned (ASCII for P=80; then subtract 46). Similarly, you have to POKE the internal code values to get your characters printed.

## CREATING NEW CHARACTER SETS

To make a new character set you must:

1. Reserve an area in RAM for the set.
2. Copy the ROM set into the reserved area.
3. Alter the shapes of the RAM set by adding in new data.
4. Tell the computer to use the new RAM set.

The short listing given here redefines three characters to show these steps in operation.

### Step One - Reserving RAM

This is usually done by moving the top of user memory - generally called "RAMTOP" - down to a lower memory location. The area between the new RAMTOP and the old RAMTOP is then used for the set. Four pages of memory (256 bytes x 4 = 1024) need to be reserved for a full set.

Memory location 180 holds the page number for the top of RAMTOP. PEEK(180) normally returns the value 158, showing that RAMTOP is at page 158 or memory location 40960 (158 x 256). We move RAMTOP with the command POKE 180,0 where "0" is our new page number. Line 220 of the listing starts the character set at page 158 and Line 230 moves RAMTOP to page 158. You may notice that this leaves 280 bytes - between the top of the new RAMTOP and the start of the ROM character set - vacant. This was done because some commands clear out the locations just above RAMTOP. Generally it's safe enough to leave one free page as is done here, as graphics and clear screen commands wipe out just 64 bytes. However, scrolling the text window clears 800 bytes of memory above RAMTOP so programs with such routines need a much bigger gap between the new RAMTOP and the beginning of the second character set.

### Step Two - Copy from ROM to RAM

This can be done from BASIC or by way of a machine code routine - the listing gives you a choice between the two methods (Line 260).

With the Basic routine, we first define the beginning of the ROM and RAM character sets by multiplying their page numbers (lines by 256) (lines 280 and 290 respectively). Next we use a FOR NEXT loop to copy each of the 1024 character bytes from their ROM memory locations to RAM. You will see that the routine is quite slow. The countdown display at Line 320 contributes in part to this; it was included to make the waiting more interesting but is entirely optional and can be omitted if you want faster copying. Another way to speed things up is to turn off the screen (with a POKE 556,0) during the duplication. To try this out, take away the ROM statements from Lines 280 and 290; you could also delete Line 320, as the countdown is superfluous with a blank screen.

As might be expected, the machine code transfer is extremely fast. A number of routines are available to do this. The one shown here is as handy as any and was taken from an old issue of Page 0 (article an animation by Robert Gibbons in issue no. 25). The machine code data, stored in Lines 480-470, is put into the MB string by the FOR NEXT loop and then called up by Line 450.

### Step Three - Altering the shapes

The first stage here is to decide which shapes you want to alter. Since you can only define new characters at the expense of characters already in the computer, you should set up the

```

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 *****
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72 72 000 *****
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75 75 000 *****
76 76 000 *****
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88 88 000 *****
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 *****

```

```

01 000 *****
02 000 *****
03 000 *****
04 000 *****
05 000 *****
06 000 *****
07 000 *****
08 000 *****
09 000 *****
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88 000 *****
89 000 *****
90 000 *****
91 000 *****
92 000 *****
93 000 *****
94 000 *****
95 000 *****
96 000 *****
97 000 *****
98 000 *****
99 000 *****
100 000 *****

```

low useful ones first. Secondly, you must know the addresses of the bytes in RAM where the new DATA is to be FORCED. Table 3 shows where the opening characters in memory are located; our set is being moved to ROM1, so the first character starts at ROM0+8, the second at ROM0+9, and so on with the rest starting at ROM0+0\*10-1. Lastly, you must know what data to FORCE in. Each character is 8 bytes long, and each byte can range in value from 0 to 255, depending on which bits are set or 'on'.

The listing shows 3 consecutive characters - # # and % - which take up the 24 bytes from RAM0+04 to RAM0+27 inclusively. The new data produces a squarish shape when the 3 characters are printed together. Table 4 shows how the 3 characters was altered to make the left hand side of the shape the vertical and right hand parts were produced using the same principles.

#### Step Four - Tell the Atari to use the RAM set

We do this by FORCING the new opening page number into memory location 756. Line 710 of the listing directs the computer to page 152 or RAM0+256 as this is where the RAM set starts in this program. Incidentally, as a graphics-oriented makes the contents of memory location 756 reset to the default value of 255. This FORCE must follow every Graphics statement. Finally, Line 720 of the listing prints the redefined characters in the middle of the screen and the program ends.

**TABLE 4: ORIGIN OF DATA AT Line 630 TO PRODUCE LEFT SIDE OF SPACESHIP**

	BIT DATA VALUES
	00 04 08 12 16 20 24 28 31 ->RAM
Line 1	0 0 0 0 0 0 0 0 0 0
Line 2	0 0 0 0 0 0 0 0 0 0
Line 3	0 0 0 0 1 1 1 1 1 0
Line 4	1 1 1 1 1 1 1 1 1 0
Line 5	1 0 0 1 0 0 1 0 1 0
Line 6	1 1 1 1 1 1 1 1 1 0
Line 7	0 0 1 1 1 1 1 1 1 0
Line 8	0 0 0 0 0 0 1 1 1 0

**TABLE 1: CHARACTER STORAGE IN ROM**

ORDER IN ROM	PAGE	ASCII NO.
0 - 30	(204)	32 - 63
31 - 63	(205)	64 - 95
64 - 95	(206)	96 - 127
96 - 127	(207)	128 - 159

**TABLE 2: INTERNAL CODES**

INTERNAL ADDRESS	CHARACTER CODES TO FORCE	BY
0 - 99	00 - 99	00
100 - 199	0 - 255	04
200 - 299	100 - 255	04
300 - 399	128 - 199	04
400 - 499	200 - 255	04

**TABLE 3: LOCATION OF CHARACTERS IN MEMORY**

POSITION	BYTES	CHARACTER
0	0 - 7	SPACE
1	8 - 15	1
2	16-23	"
3	24-31	#
4	32-39	\$
5	40-47	%
6	48-55	&
7	56-63	'
8	64-71	(
9	72-79	)
10	80-87	*
11	88-95	+
12	96-103	,
13	104-111	-
14	112-119	.
15	120-127	/
16	128	NUMBERS 0-9

# USEFUL APPLICATIONS

If you've looked on in envy at the goodies described in the ST File's PD World column, prepare to be amazed - the green gaze days are gone!

In the first of a regular series, Edmund Blake describes the wealth of public domain software available for the S-bits ...

**K**now what? As an Atari Classic user, you're one of the luckiest S-bit owners in the UK. Sure, I know all about those games which never made it to a conversion for the SLS/SE, hardware suppliers whose staff somehow stops short of finding its way into an expansion slot at the rear of our favorite machine, and the extreme lack of interest of every major magazine publisher (except, of course, the one whose mag you're holding in your hands right now ...). But what we've got more than any other S-bit owner, is a vast amount of copyright-free software, and it's all just there for the taking. In this series I will explore the whole range beginning with a couple of the more serious programs that I have found to be extremely good.

## DISK DIDDLING!

DiskMaster is a program typical of the quality of software available from the public domain. If you've ever wondered at what goes on beneath the floppy's three outer coatings, DiskMaster is the software to show it to you. Positively bristling with features, the program enables you to examine directories, disk sectors, the VTDC - even binary files!

DiskMaster is controlled from a simple but smooth menu front-end. It's reminiscent of early IBM applications for the IBM PC, before programmers discovered how easy it was to produce drop-down menus, but don't let that put you off. Lacking user interface razzamazzam, but DiskMaster is one of the best disk diddlers around. It's divided up into five sections,



each exposing a different face of the floppy. Sections include Directory, Sector, VTDC and Assembly Language, as well as a range of built-in DOS and drive utilities available from a separate menu.

Select the Directory section, and you're presented with the first sector of the current disk's directory. Size and location information is displayed for each file, together with a status indicator showing whether the file is active, deleted, locked or open.

There's a list of directory-related commands across the bottom of the screen, and using these you can look, unlock and rename files, change drives or look at the next directory sector. Not only that - and this is where the Directory module gets interesting - but you can recover a deleted file or perform a program trace.

Trace automatically locates every sector associated with a selected file. And once traced, a binary file can be characterised to the screen or printer by selecting the Assembly Language section from the main menu. Tracing protected software is out, but the feature is perfect for locating the coding sectors behind all those public-domain programs you're about to acquire.

Back on the main menu, choosing Sector overwrites the program into an advanced sector editor. Sectors are displayed on a byte-by-byte grid in both hex and ASCII, and the screen is divided into two sections with the upper showing the sector and the lower, positional information and a command prompt. If the sector is displayed as a file, the next link in the sector chain is also indicated.

You can address and change any byte, copy an entire sector or more if. If you've previously traced a file, the first and last sectors can be displayed, and there's an on-line help statement with the console help key.

One nice feature is Sector's ability to search for hex or ASCII strings. You can confine the search to a traced file or allow the program to search every sector.

The VTDC (Volume Table of Contents) is a new sector map of

for disks sector allocation, DiskMaster's VTCC section gets you right in amongst it. Traced files are indicated in the VTCC display, and you can edit and save any bytes, print the VTCC or return to the main menu without change.

Finally, there's the Utilities section. Here you can format and check the integrity of disks, or test the speed of the drive.

But how much DiskMaster services complements the others? Trace a file with the Directory module, examine its sector map in the VTCC section, then use the Sector module to edit the file's individual bytes. Each module is free-standing, but all work in close harmony.

The program is written in Assembler and is very fast. All the sections work smoothly, and everything appears to be utterly crash-resistant.

There is a slight downside. DiskMaster will only work with hard DOS disks. The program was written while SpecialDOS was still a novelty in ED's colosseum era, and users of the replacement DOS will have to look elsewhere.

Not only that, but DiskMaster won't allow you to quit back to DOS - even if you simply reposition the DiskMaster main menu. The program requires what the Americans call a "power down cycle" (ugh!) to return to DOS. Assuming, but typical of the applications programming of yesterday. You could, of course, use DiskMaster to disassemble itself and bypass the reset trapping routine.

Obviously, you'll need at least a modicum familiarity with Atari's disk structure to get the most from the program. There's an excellent introduction by Steve Proffer in Page 6 issue 88, but DiskMaster is accompanied by excellent on-disk documentation - with copious of course!

If you're even vaguely interested in the dark processes of your disks, get a copy of DiskMaster, you won't be disappointed.

## ALL AT C?

A legend in its own land time, C is no longer, everyone wants to code with it. Why? Because unlike BASIC, C is a bare-bones language which exploits the advantages of machine code with a high-level command structure. In addition, it's extremely portable. You can write a program on the SAGE, and run it on a PDP-11, down at your local pub.

With the possible exception of Lightspeed C, the various commercial attempts at an 8-bit version of the language were flawed and soon faded into obscurity. There was even an ACE, offering features as Deep Blue C but it was so bad, one Starbase reviewer quipped "...only the most desperate would attempt to use it. Strong stuff

John, Patrick, the programmer behind Deep Blue, wasn't about to take criticism like that lying down. He joined forces with Hugh Wadley and together they wrote ACE C, the direct answer to DRB's critics. Most of DRB's functions were re-written in assembler, then formed into a separate run-time module known as the Engine. The result is a C compiler producing code which executes 10 to 15 times faster than Deep Blue C's. Initially faster compile times and an extended function range complete a package which is as close to a standard C you can get without the addition of a big fat price tag.

ACE C comes on a double-sided disk containing the compiler, linker, assembler and a selection of sample programs. First though, let's take a minute to get that meat out of the way.

Unless you're familiar with C, the on-disk docs are almost entirely useless. They're well written, but intended simply as a get-you-going guide to the peculiarities of ACE. Text files detailing the differences between ACE and Deep Blue C, in-line assembler routines, graphics handling and so on abound, but as a reader, you'll need to look elsewhere for a tutorial (Learning to Program in C by Neil Kanaris, priced £4.95, and published by Forward Robert ISBN 0950142004 is an excellent cheap introduction).

Writing C programs with ACE is a breeze. First your favourite text editor, back to the code, and save it with a .C extension. Then run the compiler. This produces an intermediary .CCC file. Now run the linker. The result is an executable .COM file. To reduce program size, C library and Atari graphics functions can be kept external, appearing alongside your C program as a routine module. Alternatively, you can include them in the code, creating executable software which can be distributed to friends.

How close to Kernighan and Ritchie is it? Surprisingly so. ACE provides pointer and errors as well as char and int declarations, arrays (single dimension only), loadings of unary and binary operators, #DEFINE and #INCLUDE, various constants and a decent complement of statements including SWITCH and CASE.

In addition, the compiler takes a healthy stab at the floating point beastie. The standard block of most 8-bit Cs, ACE provides a regularly available way around the problems associated with floating point manipulations, without actually implementing it as a data type.

Bottom line? It's excellent. For all those receiving daily C assignments at college, BASIC programmers looking for an alternative, or dabblers coasting about for something just the tiniest bit different, ACE C is perfect. A mere subset of C, sure, but at the primary cost of pretty much nothing, you're unlikely to complain, right?

## AND FINALLY ...

And you thought public domain was all about 16 letters grilling over more of their own way, while our Eighties were left out in the cold? Forget it! It isn't all serious stuff like the programs reviewed this month, either. Next time, I'll be taking a little look at some of the really games you can expect to play for one stop short of nothing.

### HOW TO GET THEM!

All of the programs featured in the volume are available from the Page 6 disk PD library. Each has a unique reference code as well as a distinct name, but it's the reference code you should use when ordering or making enquiries. Contact Page 6 if you don't have a copy of the PD catalogue or Auxiliary Shop leaflets, or to check system requirements for the programs. The disks referred to in this column are:

4700 DISKMASTER  
08 400 ACE C

Prices are £2.95 per disk, or £2.50 each for lot of three. Order from Page 6, PO Box 24, Stafford ST16 1DR, Telephone 0755 218800, Fax 0755 844444. (Credit card orders accepted).

# TUTORIAL TIME

## USING CHARACTER SETS

**T**he uses of character sets with your Atari computer are varied. Many games for this computer use character sets rather than player missile graphics to achieve dynamic animated effects. A *Panther*, for instance, could be made to move along a line by using a series of characters in a special character set. These characters would all be similar, but would each be drawn displaced one pixel to the right of the previous one. As the title figure is moved out of the 8 x 8 square that defines one character it becomes necessary to provide a combination of two adjacent characters to make up the whole. This may seem complicated, but it has the advantage that high speed animations can be achieved using quite a small amount of memory. However I digress from the subject I was going to talk about this time, and that is the loading and use of two character sets.

### BACKGROUND

First a bit of background for those of you who know nothing of character sets. The text displayed on your television screen when using your Atari is generated as a series of dots on an 8 x 8 grid. You will see what I mean if you look closely at a black and white TV screen. On a colour set the structure is confused by the dot registers of the TV set itself. The data from which these individual characters are created is stored in ROM inside your computer. ROM (read only memory) is the non-volatile memory in the computer which contains the instructions to make it work. ROM can not be changed by a program.

No, if ROM cannot be changed, how can we use a different character set? The answer is to hold the character set in RAM. The Atari computer normally uses the built in character set because there is a pointer in the operating system that is automatically set to point to the ROM character set we start up, but this pointer can be changed to point anywhere in

memory. We can set up an alternative character set in RAM (volatile random access memory) and then point to it when we want to use it. Indeed we can have several character sets in memory at the same time if they are needed (and if there is enough memory available) and switch between them by re-directing the pointer. These character sets can be loaded from disk, be generated as this tutorial shows or alternatively we can copy the character set data from ROM into RAM and then modify it to create a new set from scratch within a program.

### THE PROGRAM

The program shows how to copy two character sets from disk into RAM and then does a little dance of switching from one to another. I have used the *IOCB* (Input /Output Control Block) to move the character set data fast. This technique is the same as I described in a previous article about saving and loading screen picture data, so I will keep the description brief.

- Line 20** dimension *PB*, the variable that will be used to store the name of the character set file to be loaded
- Line 30** contains the first character set to be loaded. I have called it *POSM1.SMC*, but you will have to change this to the name of the set you want to use. You will find that character sets are 8 sector files on a disk. They usually have an extension of *.PWT* or *.SET*. A good source of data is the *New Atari User* disks if you have a disk subscription. There were several on the disk with issue 93 - December 1991 / January 1992. It should be possible to load a character set from cassette if you have one stored on tape by making the file name "C:". This is obviously not as fast as a load from disk, but if you are creating a game with a lot of changed characters it would be more efficient to load a modified character set that had already been created rather than to create the set from a large number of data statements within the program itself
- Line 40** - This calls the character set load sub-routine, then when it is loaded makes *SET1* equal to the starting point of the new character set data in RAM
- Line 50 and 60** repeat lines 30 and 40 for a second character set
- Line 70**. Now the character sets are loaded we go to a simple demonstration of character set switching starting at line 100
- Line 100** is the start of the character set load sub-routine. The first thing it does is to reserve a bit of memory for the character data by moving the top of memory down 1 Kbyte. Location 100 holds the high byte of the address of the top of memory (the low byte is always zero). This is followed by 4 to reserve 1 Kbyte (4 x 256 bytes). One character set is 128 characters of 8 bytes each, or 1024 bytes.
- Line 110**. The graphics command in line 110 is there to reset the display but putting it below the new top of RAM if you leave this line out, you will see when you run the program that the character set data corrupts the display bit as it loads, destroying the screen display
- Line 120** opens *LDX Character 1* to get data from the file





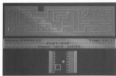
# LINKING LOGIC

**F**isher-Price are well known manufacturers of educational toys but I wasn't aware they'd diversified into computer software. I also didn't know that Fisher-Price is a trade mark of the Quaker Oats Company, but it's all revealed in the packaging of LINKING LOGIC - a learning game for the four to eight year old age category, recently imported from the States by Micro Discworld.

Children of the specified age group are beginning to learn how to think logically and plan a series of actions. Linking Logic aims to introduce

these skills in an additive game format and also teaches pattern recognition by asking children to exactly up similar shapes. From my experience the greatest challenge here is working out exactly what you have to do! The usual method of load it and see what happens' met with little success, so I eventually had to resort to reading the instructions!

Linking Logic has a total of four difficulty levels and each level has four boards. The screen depicts a 'building' constructed from five horizontal platforms with a partial row of tiles at the bottom edge of the building and status information in the borders. The player's task is to guide one of two alternative characters - 'Buddy' or 'Dotty' - from a starting position at the top of the playfield to an exit point at the base. Throughout the journey you can 'break' the chosen



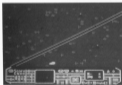
character to collect patterned tiles which correspond to those missing from the row at the bottom. If you grab tiles that don't match, you lose points. You can't directly control the path your character takes so to ensure that all the tiles can be obtained you must fire 'power' 'beams' through-out the building. The joystick manoeuvres Dotty the Bird who can pick up certain useful objects at the foot of the screen and drop them again elsewhere. For example, a bridge might be used to prevent your

character falling down a gap, or a ladder to climb back up. Each level can only serve its purpose once, except for a double bridge which holds for two uses.

Unfortunately I wasn't able to test Linking Logic with the intended age group as I couldn't fully assess the suitability of the concept. However, I suspect that those children who are unable to rapidly complete the four levels may give up trying to decipher the rules!

Available from Micro Discworld

**Title:** LINKING LOGIC  
**Publisher:** Fisher-Price  
**Price:** £6.95  
**Players:** 1  
**Format:** ROM Cartridge  
**Reviewed by:** Paul Dixon



**O**h dear, not another shoot 'em up! Yep, that's us. This one can only be described as Blue Max 2000: Mark 2. Your aim is to save the remaining humans on Planet Xonon before the alien hordes carry out their evil intentions, so what are you waiting for?

Naturally you're the only pilot in the Federation's air force capable of flying their top attack craft, the Panther. So when an alien invasion wipes out the whole of your planet's defences (except for the Panther, of course) it's entirely down

to you to save the day. All you've got to do is fly across the landscape and pick up any stranded humans you spot en route. 'Insect' them to the spareport and they should all be safe. Easy? Well, not exactly. The enemy have spread their forces far and wide so you're bound to come across the occasionally irritating creature. The Panther has five Phoenix shields to protect against alien fire, but they don't last for long once you're in the thick of battle.

The visual presentation of Panther is based upon diag-

# PANTHER

ally scrolling graphics similar to those of Blue Max and Zaxxon. You begin your mission in the desert and fly across mountains and water before eventually reaching the City state. Here you must clear around city structures to avoid interception by war-torn air mobile henchmen. Strangely your craft resembles a miniature bar of soap and the screen design is such that you don't have an awful lot of space to manoeuvre. It's not easy to judge the accuracy of your shots at the enemy since unlike Blue Max, Panther offers no indication when you're travelling at a constant altitude. You must either rely on the altimeter, or just keep hitting the trigger! When you reduce altitude the speed of your ship decreases, and you stop completely if you take on more passengers. Unfortun-

ately the enemies don't have any sense of moral responsibility!

At first sight Panther seems quite impressive but on closer inspection you can't help feeling a greater effort could have been made. However, ignoring the ridiculous shipman square craft, the graphics are above average and the music isn't bad at all. Panther isn't an additive as Blue Max but as shown on 'ups' go, it belongs to a group that's inherently playable. The satisfaction of rescuing those human survivors makes the whole thing seem worthwhile!

**Title:** PANTHER  
**Publisher:** Megasoft  
**Price:** £1.99  
**Players:** 1  
**Format:** Cassette  
**Reviewed by:** Paul Dixon

# THE ACCESSORY SHOP

## ISSUE 55

### BARGAIN SOFTWARE

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# MERCENARY III

## - THE DION CONSPIRACY



**T**he original *Mercenary* was without a doubt a landmark of its time. Based in a world of wire frame 3D reality it introduced a bizarre world where a complicated adventure must be followed through.

After a great many years of waiting, *Mer* would say for too many) the follow up, *Danacris* was released. With a greatly enhanced graphics engine and a clever planetary system controller you could travel throughout the solar system with your robotic aid, *Danacris*. In order to save the world from the *Danacris* comet, if you succeeded you were considered quite a hero but thanks to doctor Mr. Whisker you were imprisoned in a time warp until the dawn of *Mercenary III*.

Now that *Mercenary III* has arrived, you are released with your 30 million credits and a bus pass!!! You must move out into the world and interact with numerous characters who will set you off on various missions which will yield certain financial rewards.

Initially your only mode of transport is to either take the bus (which involves some waiting - what's new?) or to jump in a taxi. It is here that your first encounter with one of the new features of the game will take place. You? There are actually other people in *Mercenary III*. You are no longer alone! There are loads of taxi drivers in the different cities, some are decent fellows, whilst others are decidedly dodgy types who won't think twice about

taking you half way around the world and charging you a fortune towards a bit like London rates). However, it is essential to use them in order to reach your first destination - the ever helpful PC *IM*, the man behind your quest. After a bit of exploration and inter-planetary hop-ping, however, you will soon discover

what sort of a cheap *IM* really is and you'll encounter numerous people who won't think twice about slugging the guy off behind his back.

As far as the *Mercenary* games go this is without a doubt the most complex, and unlike the previous two there is considerably less emphasis on combat. This time it's much more of an adventure with even more complex puzzles than you will have seen before. The result is something that is considerably more playable and something which seems to present you with a much greater sense of purpose. The ability to interact with other characters on the planets makes the game much 'hookier' than ever before.

Graphically there have been a lot of enhancements over *Danacris*. The screen update is much faster and all of the 3D objects have been filled in colour to give everything a much more solid appearance. Undesirable things do tend to slow down a bit when there's a lot on screen, but this is a rare occurrence! Unfortunately the sound hasn't been improved all that much but this is no big deal. I actually quite like the gungy little noise that *Danacris* makes when he gives you a message!

Overall I was really quite impressed with *Mercenary III*. The overall style of the

series has been retained, but enough enhancements have been made to set this particular title apart from the others. All those of you out there who like 3D adventures that involve exploration, flight, driving and puzzle solving should spend many hours experiencing the delights of *The Dion Conspiracy*! As before there are numerous solutions to the game so even if you do manage to complete the game it is possible to go back and do it again in a completely different way!

- **RIGHT AND SOUND** - Graphically it is just not enough and is a considerable improvement over the previous two *Mercenary* games. Seriously, not a lot has changed but the sound effects and images are more than adequate.
- **GAMEPLAY** - What can I say? You either love it or loathe it, but personally I think it's fantastic!
- **OVERALL** - A superb game that should keep you impressed for many hours. The scope of the puzzles coupled with the new character interactions make this a tremendously playable game.



Title: **MERCENARY III - THE DION CONSPIRACY**  
 Publisher: **Norwegian**  
 Price: **£29.99**  
 Reviewer: **John Davison Jr**

## FLIGHT SIMULATORS

# TWO OF A KIND F-15 STRIKE EAGLE IIa

I recently received two more flight simulators for review, and as they're similar in nature I thought I'd cover them in one article. Both are also re-bundles of earlier products.

First up is F-15 Strike Eagle II by Miragepro. The original version appeared about 7 years ago on the 8-bit machines, and although it wasn't a particularly good FLIGHT simulator, as a flight COMBAT simulator it was second to none! In fact it's still one of my all-time favorites.

The new ST version is supplied on two double-sided disks together with a glossy 128-page manual, and maps of the combat areas, which look remarkably similar to those in Miragepro's F-15 Stealth Fighter package (reviewed in issue 47). There's also a useful reference card explaining the keyboard controls and Head Up Display (HUD) components. It runs on 8128 STX86 and up, and can be controlled via the keyboard, mouse, or joystick.

As usual you start by "logging on" to the pilot roster, so this enables you to track your pilot's progress. You're awarded points for successful missions, and receive medals and promotions when you've collected enough points. Several pilots can be "active" simultaneously, so you and your friends can fly missions competitively if you wish.

## SIX SCENARIOS

Next you choose the difficulty level - Bomb, Plot, Vietnam, or Air - and then the mission scenario. These include Libya, Persian Gulf, Vietnam, Middle East, North Cape, and Central Europe. Following a briefing on primary and secondary targets, you find yourself in the cockpit, with weapons already loaded and navigation computer preset with appropriate waypoints.

As in the original version, F-15 II has a simplified cockpit layout. The instrument panel is taken up mainly by a moving map display, a tactical radar display showing positions of threats and targets and a tracking camera display showing a view of your currently selected target.

There's also a fuel gauge, altitude gauge, a few warning indicators, plus readouts showing the numbers of Sidewinder, AIM-9M and Maverick missiles, and Base and chaff dispensers remaining. Unlike the original program, in this version there are no bombs to drop. There's no choice of weapons to load either - you're armed with a preset mix of missiles, plus your cannon.

Most of the traditional flight instrumentation has been replaced by HUD functions. The HUD is projected onto the canopy immediately above the instrument panel, and displays vital flight data such as airspeed, altitude, compass heading, and pitch and roll information. It also indicates current stall speed, safe landing speed, and climb/descent speed, plus flight path and weapon navigation indicators. Integrated with all this is your target tracking and weapons delivery system, which help you steadily pick out your target and aim and release your missiles. Below the HUD is a strip display which shows de-coded radio messages - usually to warn you of enemy aircraft or missiles.

In action F-15 II looked very familiar. This wasn't because I knew its 8-bit predecessor, but because its external scenery presentation seems remarkably similar to F-15 Stealth Fighter! I found it easy to control, if perhaps a little "wooden" in its response, but this makes it easier for beginners. Take-offs are relatively easy, but landings require practice, particularly for missions involving recovery to an aircraft carrier!

All the usual views from the cockpit are available - plus external views of your aircraft, from a chase plane, and a "hor" view. There's also a "tail-on" view looking past your aircraft towards the current target, and a "reverse tactical" view from the target back towards your aircraft. Finally, "director mode" automatically switches views to show critical actions whenever and wherever they happen - enemy planes scrambling, a SAM site fir-



ing at you, target distraction, etc. It's quite entertaining, but not much help when you're in the thick of a dogfight!

## F-19 CLONE?

Overall, the program's graphics are reasonable - virtually identical to F-19 in fact, but I thought the briefing, debriefing, and other non-flying screens a little crude. Sound consists mainly of engine noises and explosions, although there are a couple of bursts of sampled speech over the aircraft radio.

I found F-15 II quite exciting to use, so it has retained many of the features of its predecessor. There are lots of opportunities for dogfighting with enemies and missiles, and for avoiding enemy SAMs, as well as taking out the ground targets required by your missions. To survive you need to pay strict attention to fuel usage, and to avoid enemy radar by flying low, but this requires much concentration because of the turbulent air near the ground. As in the original you can sustain multiple missiles and gunfire hits. Each hit usually causes damage to the aircraft, so it gets harder to control, eventually reaching the point where you have to eject.

Overall I'd class F-15 II as a good beginner's flight combat simulator, but the experienced user might find it a little disappointing. This is especially true if you already own Miragepro's F-15 Stealth Fighter, as the two are very similar.



# II and MIG-29M SUPERFULCRUM



## MIG-29M SUPERFULCRUM

I reviewed the original version of MIG-29 Superfulcrum less than a year ago (see issue 56), and already Domark have launched this updated version. From all the hype I expected it to be a significant improvement over the original, which I found a little disappointing.

It's packaged in a large box, which contains one double sided disk, a 116 page spiral bound manual (half of which is in Italian), a campaign chart/reference guide showing your area of operations and summary of the program's controls, and a glossy 46 page book describing over 40 of the world's top military jets.

The manual is physically larger than its predecessor's, and contains some new background information about the development of the MIG-29 however the rest of it feels identical to the older version, including a reference to "training mode", which seems to have been left out of the program this time around.

## NEW SCENARIO

The most obvious difference is the change of scenario. The original program had five different missions covering the Middle East, China, and what was the USSR. This one has a single campaign based scenario in South America,

where a military coup has put a large army under rebel control. UN Resolution 608 states that the rebels must surrender to the legitimate government or be flown out by a non-biased force (USN force, which includes American F-15 fighters and the new Soviet MiG-29M). You're there to fly the latter.

After the usual automated bootstrap screen you "log in" to the pilot roster and choose whether to arm the aircraft for air-to-ground combat, air-to-air combat, or for a mix of the two. Next you're given your objectives, which are to break the rebel supply lines, capture several enemy airbases, attack strategic installations and finally to destroy the rebel headquarters. This involves taking out bridges, depots, trucks, hangars, SAM sites, communications centres, and tugging with defending F-15's and Huey Cobra helicopters. Damage to supply lines can be repaired by the enemy, unless you carefully plan your missions to take out the appropriate supply depots at the right time. You can set your own navigation waypoints to facilitate this.

Domark claim improved graphics in this new version but this isn't immediately evident. True, there's a bit more ground detail in the form of hills, mountains, and other features, but including these seems to have slowed the frame rate down a little. You can reduce the detail level to speed things up a bit though. Also, the instrument panel has been redesigned, but the instruments still retain that simplistic look of the original version - i.e. the instrument dials are mostly uncalibrated. However, you get most of the flight data from the HUD, which is very similar to F-15 II's but slightly less cluttered.

Virtually all the original MIG-29 features are here. It retains the famous helmet mounted reticle aiming system, with all round steering in 45 degree increments as you can aim a missile simply by looking at the target. There are outside views of the aircraft, views from your base

base control tower, from the enemy view-point, and that "inmate's eye view" of course. It uses the same elements of realism, uncalibrated instruments, and Aphid and Kerry guided missiles too.

## DYNAMIC FEEL

Control is via keyboard, mouse or joystick, both retaining control for the latter. Aircraft handling is as good as its predecessor's, having a very "lively" dynamic feel to it - nearly better than the feel of F-15 II, and almost as good as Prof'light or Flight Simulator II. And that's good indeed!

Overall, MIG-29M surely are as being more than like a mere "inflation disk" than a complete new product. If you already have the original version then it's not worth buying at it's current price. Even if you don't have the original, I still think it's a little expensive for what it is. I found it quite enjoyable though, but the F-15 II I consider to a beginner's flight simulator, rather than one for the expert flighters too.

Choosing between the two packages is difficult, as each has its own strengths. F-15 II has a wider range of missions and better combat aspects, and is more generic. MIG-29M is superior in the area of pure flight simulation, and needs more thought to get the best from it. My choice would be MIG-29M, but your requirements might be different. If you have to choose, try to see them both in action before making up your mind.

**F-15 STRIKE EAGLE II**  
Microprice £35.99

**MIG-29M SUPERFULCRUM**  
Domark \$29.99

Reviewed by John S Davison

## OH MORE NO! LEMMINGS

**T**hey're back! Those crazy, suicidal lemmings are ready to march across your screen again, bringing you more tantalizing frustration. The gameplay is identical to the original *Lemmings*, but those devious people at Psygnosis have added lots of new graphics, music, traps and puzzles.

Just to clear you over see the original: they fall perfectly formed lemmings march along in mindless queues the land wags, dying by the hundreds as they come to cliff edges, runs of acids, freezing creatures and countless other deadly traps. You must use the mouse to select from a row of icons and instruct particular lemmings to build bridges, smash through walls, block the way, etc. in order to clear a path to the exit on each level, while keeping as many lemmings as possible alive.

The new game has over a hundred new levels. There are twenty levels each of *Time*, *Crazy*, *Wild*, *Wicked* and *Blaze* (at least I assume there are twenty *Have - I am only on level 64* at the moment), plus another twenty(?) two-player levels.

Sadly they have still not come up with an easy way to see how close an an RT to the second player is still head swapped by having to use the keyboard and the joystick.

As before the game starts off very easily with the *Time* levels - anyone should be able to complete those with little difficulty as the number of lemmings you have to save is not very low. Then suddenly the game jumps a level of magnitude in difficulty when you get to the *Crazy* levels. Some of the new puzzles are



experts will have you scratching your head for some time as you check out all the possible routes and find most of them are red herrings. There seems to be even more levels than before which both completely impossible when you first see them, especially as you often have to save ALL the lemmings! The only reason I have seen so far is on level 62 (labeled 2) which is called 'SMITHSQUINC' 51-PIELEMING' - he moves at double speed! Sadly he hasn't yet reappeared, but I have at least 140 more levels to do, so maybe he will be back.

If you have the original *Lemmings* you can save all by buying the cheap disk version.

### FACTS

Title: OH MORE NO! LEMMINGS  
Publisher: Psygnosis/CMA  
Price: £25.99  
Developer: John Sweeney

### SIGHT & SOUND

Blink - lots of lovely effects, gory deaths and happy tunes!

### GAMEPLAY

Just as addictive as the original, but with plenty of challenging levels for the most hardened *Lemmings* devotee!

### VERDICT

If you enjoyed the original you will love this. If you haven't tried any *Lemmings* yet then you are missing a treat!

### FACTS

Title: LOTUS ESPRIT TURBO CHALLENGE 2  
Publisher: Quantum Graphics  
Price: £25.99  
Developer: Bomar Norwich

### SIGHT & SOUND

Pretty picture and average action, nothing to grab the attention though

### GAMEPLAY

Hardy addictive, although a smooth scrolling game, multi-use a nice touch, controls responsive

### VERDICT

A decent addictive race game that is looking on its predecessor as possibly good for clubs otherwise fully out of the rest



**T**his is the successor to the somewhat successful *Turbo Challenge* which proved to be fairly innovative in its day. Numbers two does not reach the same heights of excitement and innovation however it does have some extremely pleasant additions which make it an interesting treatment for clubs with avid car racing game members. The graphics certainly are wrong and actually live up to some of the screen shots on the box cover and some of the effects give the driver of the car world, although others are a little short of that which today's gamers expect.

The big error for the club

## LOTUS ESPRIT TURBO CHALLENGE 2

players is that the game provides the means to interconnect up to four machines to pro-

duce an interlinked race game. A pleasant touch, possibly not for the ordinary home user's best good to clubs.

Graphically the game is strong, and coming as it does on just one disk I can only assume that the lengthy loading time is due to a great deal of video-compression of data as it loads into the machine. Sadly these loads take place on a regular basis so there is a great deal of player time spent grinding through awaiting the next level or screen. The controls are extremely simple and all of the options available the alternate joystick is both recommended by the game and by this reviewer. These controls even allow a measure of

automation since an auto fire option even allows for full acceleration with no effort. I found that this game became less challenging with play, and even the various weather and lighting conditions made little difference to the gameplay. The main tactic seemed to be drive fast and turning left and right or changing lanebreak opponents and road users often. Even the sparsity of instructions in the accompanying booklet seemed to underlie the rather slight game play element.

I was not overly impressed and, although it is better than *Clare Road*, it just does not have any real competition in the play. Indeed there were several occasions when the loading time to be dragging on forever and I felt that the next feature was a better option than the five features.



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# WHO'S HENRIETTA



**S**oftballs are relatively rare in the ST arena, but they've been around since 1980 producing educational software for non-Apple computers. They've now begun releasing products for the ST, at over the best example of them I'll be looking at some of their offerings.

The first two packages I've reviewed are designed to help children improve their arithmetic and language skills - with the National Curriculum in mind, of course. Both use the same two character names, namely Henrietta and Hopeless Henry, who always seem to be in trouble. You have to help them out by solving arithmetic and word-based problems.

## HURRAY FOR HENRIETTA

This package is aimed at 8-12 year olds. It contains one single-sided disk, a 105 page instruction booklet, and a large package. It refused to run on my IBM-XT (dark mark, Scotland!), but worked perfectly on my old ZX2K IBM. It's controlled via mouse and keyboard.

It was what I used to be the default scenario of all time, but the kids will probably find it hilarious. Henrietta and Hopeless Henry are about to get married, but their wedding plans have been derailed by John the Parrot. First, he stole Henry's wedding clothes and now he has kidnapped Henry. What's more, if Henry isn't rescued in time John will cover him with cold custard! To save him from this terri-

ble fate you must help Henrietta to rescue him (plus his missing hat, coat, trousers, and boots).

It's based around four screens. In each of which Henry is seen doing around (obviously) unaware he's in mortal danger of immolation by custard! You have to help Henrietta prevent this by correctly answering eight

arithmetic problems within a set time limit. Success gives you one of Henry's missing items of clothing - collect all four to launch the ramp straight into matrimony.

Incorrect answers waste time, reducing your chance of saving Henry before the three expires. After three incorrect attempts at a question the program displays the correct answer and moves on to the next problem. Exceed the time limit and Henry gets a close encounter of the pillow kind, and you have to contact with new problems.

## DEATH BY CUSTARD!

In the first screen Henry is standing on a platform suspended over a tank of custard. Henrietta is frantically spinning up a rope, helped by your answers, to get to the mechanism which will raise him in safety. When time's up John the Parrot seizes the rope holding the platform, causing Henry's rapid descent into the you-know-what.

The second screen shows Henry standing on a sawhorse in a river, with a large tank of custard hovering over him. Henry is chugging towards him in a motorboat and will get there just as the time expires. Meanwhile Henrietta frantically focuses on the crew of her rowing boat with the aim of leading him to it, propelled by your correct answers. It's crucial for Henry if the parrot gets there first.

The third screen is probably the easiest. John the parrot is putting custard

balls into a wheel looking machine, and eventually one of the balls trips a lever causing a pair of scissors to cut the rope holding a large bag of custard above Henry's head. Meanwhile, Henrietta is having to leap a flight of stairs to reach the scissors first, boosted by your correct answers.

In the final screen John is swinging a demolition crane at a wall on which Henry is standing, under which is yet another tank of custard. Henrietta is desperately trying to haul a platform up to Henry so he can walk across it to safety. It's a time race out the wall is demolished and Henry tastes custard again.

## RANDOM PROBLEMS

The problems are randomly generated each time the program is run, providing an endless supply of different questions. A wide range of addition, subtraction, multiplication, and division problems are possible, and as the highest levels these may require the use of pencil and work-sheet, or even a calculator if appropriate. Once you've completed four screens the program increases (or difficulty level and restarts from the first screen. There are eight main incremental levels, but overall difficulty can be set to low/medium/high from the 'parents/teacher screen'.

You may also alter the time limit, select problems using any one or all four arithmetic functions, toggle the mouse on/off, toggle rowing (recoiling on/off, and save the new settings as defaults. Reward recording keeps track of your answers on disk. Once when they can be later reviewed (correct or pointed out). Up to ten sets of results can be stored, and there's also a high score table for the ten highest scores.

To hold a child's attention educational programs need to be both challenging and entertaining, the latter usually achieved by exploiting the computer's graphics and sound capabilities. In this case the graphics are fairly simple, but there is some good animation in places. On the sound side there are a couple of good speech samples (especially Henry's cry as he disappears into the custard!), but music and effects are fairly unconvincing.

# ETTA?

## JOHN S DAVISON IN PURSUIT OF GOOD EDUCATION

ing soundchip generated sounds. First, my ten year-old son, initially wasn't very impressed by the program. He thought the sound and graphics fairly average and the problems didn't seem challenging enough for him. However, his opinion improved somewhat when I increased the time limit and set the overall difficulty level to 'tough'. The program then did a clever job of providing useful advice positive to a challenging and entertaining way.

## HENRIETTA'S BOOK OF SPELLS

This one is aimed at 7-14 year olds. It's supplied on one double sided disk, accompanied by a 32 page instruction booklet, a "quick-start" summary card, and a legal badge. It runs on 11.38. STPX's and above, and is operated via mouse and keyboard.

In this scenario Henry has unwittingly upset Morgana the Sorlock, the rather nasty witch of Castle Spellod. She retaliated by turning him into a frog, and to reverse him Henrietta has to find a number of magic letters hidden in the castle, from which she can form the magic word which reverses Morgana's spell.

To help her find each letter you have to correctly answer a number of questions involving spelling and language skills. There are five separate exercise screens, called Flash, Complete, Crack-It, Hang-Up, and Jumbled, and all take place in Castle Spellod. On each screen, Henrietta has to reach a chest containing the magic letter, achieved by various physical activities assisted by your cursor answers. Unfortunately Morgana is trying to do the same, and so is alerted by Coiric the Skeleton. The program shows your performance, and this is used as an overall score.

A correctly answered question results in Henrietta getting one step nearer the chest, with eight correct answers needed to reach it. Three incorrect answers to the same question results in Morgana getting THREE steps nearer the chest. If you're really stuck you can request help, when a hint will be given, but this adds a time penalty to your score. If Morgana reaches the chest first you have to restart the exercise - using the same set of questions, which could get a bit boring.

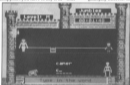
## WORD EXERCISES

The five exercises are:  
**FLASH** - a word is displayed for a few seconds for you to memorise. When it disappears you have to try to fit - with

medium/high, set the help key (time penalty, and choose to complete all five exercises or any one of them). You can also request text recording, as in Henry for Henrietta. The program's word lists (containing about 2500 words) can be modified as required, and you could use this facility to insert foreign words to allow foreign language vocabulary practice. Word lengths from five to nine letters can be selected, the letters producing some very challenging problems! Again, the new settings can be saved away as defaults.

The idea behind this program is excellent, but I was disappointed it didn't exploit the PC's abilities more. It uses unimproved sound effects, crude single channel music, unexciting graphics and animation, and is somewhat lacking in gameplay interest. Once again my ten

year old son reviewed the program, and wondered why the authors couldn't make it as entertaining as the Plus School program reviewed in the last issue. However, on the positive side the exercises themselves are quite good, being both varied and challenging. Also the program is easy



to use (although sometimes slow to keyboard response); is flexible enough to accommodate children of wide ranging ages and abilities; and the program's tracking feature is very useful. On balance I liked it.

In summary, both these Scottish products meet their educational objectives quite well, although to fully exploit them you must remember to change the program defaults to match each child's abilities. It's obvious really, but an easy point to miss. Overall they're not bad programs, but they lose out on the sound and graphics front, giving the feeling they're a little overpriced for what they are.

After successfully completing the exercises you have five magic letters, from which you form a magic word. Get it right and Henry regains his original identity.

## CUSTOMISATION

There's a 'parent/teacher screen' for customising the program to specific requirements. You can toggle the sound on/off, set the overall difficulty to low/

medium/high, set the help key (time penalty, and choose to complete all five exercises or any one of them). You can also request text recording, as in Henry for Henrietta. The program's word lists (containing about 2500 words) can be modified as required, and you could use this facility to insert foreign words to allow foreign language vocabulary practice. Word lengths from five to nine letters can be selected, the letters producing some very challenging problems! Again, the new settings can be saved away as defaults.

The idea behind this program is excellent, but I was disappointed it didn't exploit the PC's abilities more. It uses unimproved sound effects, crude single channel music, unexciting graphics and animation, and is somewhat lacking in gameplay interest. Once again my ten

**HOORAY FOR  
HENRIETTA  
HENRIETTA'S  
BOOK OF SPELLS**

Scottlander Software  
£24.99 each

Reviewed by John S Davison

# THE COLONEL'S BEQUEST & CODENAME: ICEMAN

**S**IERRA, sadly, no longer seems to be supporting the ST. Last time I spoke to them they had no further releases planned for the ST, and have not had any for some time now. So I asked them to send me review copies of a couple of their games from last year (1988). Unfortunately the two games they sent me cannot be two of the worst they have ever produced!

Sierra games, as always, look and sound pretty good, and you and the people you meet nicely animated, but they still have made very little progress with programming the games so that you can type commands in which can be easily understood. Too many times I was unsure what to do next but had to try four or five different sentences before I was understood. The other major problem is the speed. Maybe they are playable on a 25MHz 386 PC with 11MB disk access time, but on an ST they are just SOOO slow to be playable. In both games I was driven to getting a book out to read while I waited for the response. The Colonel's Bequest is by far the worse of the two: 30 to 40 seconds to move from room to room (sometimes over a minute if I was heading outside - even if you have the music turned off), 3 seconds to acknowledge that you have clicked on an object, 15 seconds to walk across a room - very tedious!

Although Codename: Iceman is a little faster it has some very slow sequences.

For example there is a trivial dice game you have to play in real life you can play each round of the game in around 30 seconds, incredibly slow interaction means that it takes over 2 minutes (on the computer) there are some really nice first-class examples of interactive graphics adventures with reasonable responses - Monkey Island, Elera and Cadaver to name but a few - why can't Sierra do it?

All that aside though, if you are prepared to accept that the games are a "bit" slow and you don't mind guessing what you have to type in next, there are the games are good!

In **THE COLONEL'S BEQUEST** the aged Colonel has gathered ten of his greedy relatives and servants together in an isolated mansion and told them that his money will be split between anyone who "kiss bigger than him. Besides it is a very similar plot to Agatha Christie's Ten Little Niggers, but without the trivial 11 books like someone is killing everyone all so that they can inherit all the money, and in fact someone is killing everyone all so that they can inherit all the money!

You are not expected to find, arrest or stop the killer in any way. You just have to wander around the mansion and gardens finding bits of clues. The time jumps by quarter of an hour when you enter certain rooms (except at 10:45 you when you will get continuously stuck unless you manage to find Ethel who is wandering randomly around the garden). To successfully complete the game you only need to wander around finding these trigger rooms and perhaps three or four crucial artifacts in the last half hour. THEN you will be told how many clues you found and be given a score.

You can't actually DO anything with any of the clues so it all seems a little pointless. You also get extra points for finding the treasures and reaching the exit early. Unfortunately there are "bugs" in all these areas which mean you are extremely unlikely to succeed. For exam-



ple where you stand in the elevator and say UP it says "The handle is stuck".

**CODENAME: ICEMAN** tells you that you don't have it! To progress you have to guess that the HANDLE can only be referred to as a **LIFELINE**!

**CODENAME: ICEMAN** is full of stupid dialogues and irrelevantities. You wander along the beach and find a collected net. Nothing happens. You try again without your shirt on - now there will be a game going on and you get to practice your Cardiology/Physiotherapy. Fortunately when a girl nearly drowns, you have to guess which words to write you to type in from the instructions in the manual and you get 4 points. "What does this have to do with your mission to save the world from nuclear terrorism? Absolutely nothing!"

Once you have worked out how to leave the beach area you get to pilot a multi-engine using a fairly primitive simulated and an even more primitive course plotting computer to reach the Middle East and rescue a kidnapped US Ambassador.

If you do decide to perseverer with either of these games then you would probably like to know that Sierra have a hot line on 0754-304084 - no charge except for the actual phone call - but you will need a touch-tone phone on a digital exchange.

● **RIGHT & WRONG** - Up to Sierra's usual excellent standard, but hopes may be a bit a little short!

● **GAMEPLAY** - Slow, Sluggish

● **VERDICT** - If you want a good Sierra game buy King's Quest II!



Title:	<b>THE COLONEL'S BEQUEST</b>
	<b>CODENAME: ICEMAN</b>
Publisher:	<b>Sierra</b>
Price:	<b>£24.95/£24.95</b>
Reviewer:	<b>John Swaney</b>

# MICROPROSE GOLF

**I**f you golf games, you couldn't wait to get to grips with this major new release from Microprose. Its attractive packaging contains three double-sided disks (program disk plus two control disks), a 112 page instruction manual (with separate 50 supplement), three cards showing the layout and details of each hole of the six courses simulated, and a card showing distances you could expect to knock the ball with each club. The program runs OK on 512K, and although keyboard and joystick control is possible, a mouse is preferable.

Up to four players can take part, and each may be computer or human-controlled. Each player can be designated a novice or have a handicap allowed, and may be right or left handed. As a left hander myself I was pleased to see this feature (it's possible to set the style of play for a computer opponent, you can alter such things as his power level, putting ability, aggression level, and other characteristics). You can then choose the type of competition you wish to play from the seven different ones supported, using strategy or handicapping rules as appropriate. Finally, you choose the course to play from the six provided. It's not clear whether these are real life courses or just inventions of the programmer.

Each hole begins with a 3-D isometric view, showing all the major obstacles, etc. Also shown is the planned trajectory of

the ball, if struck CORRECTLY with the current club and with no external factors affecting it (such as wind velocity). You can alter the trajectory with the mouse to aim the shot directly, but the power of the shot is decided later. You can also measure distance from the ball to obstacles, length of shot, etc. on this screen. Other

possible changes include the club you're using, the height and position of your tee, and even your stance and foot positioning!

Once at the tee you see a rear view of the player - correctly oriented for left or right handed - with a view down the fairway beyond. Green areas, trees are the two circular arcs of the "swing-meter" (ie, nothing to do with General Electric!). This is used to gauge the power of his shot (backswing) and the timing of contact with the ball (downswing). The former governs the distance the ball flies while the latter controls the amount of "back" or "slice" the ball receives, which determines its direction from straight flight. Mastery of the swing-meter is essential for doing well at this game - it depends on split second timing of mouse clicks used to make the shot.

New for the spectacular test after hitting the ball it flies off down the fairway, and the view tracks along with it, as if seen from a TV camera.

In fact there are five different camera views available, offering various selections of tracking and panning shots - some of them involving switching between two cameras. The effect is stunning - just like you see in TV golf coverage events. The realism is heightened by the excellence of the scenery graphics. They're cleverly drawn and shaded to show all the bumps, bumps, hills, and valleys you'd expect on a real golf course. There are also plenty of hazards in the form of trees, bushes, ditches, streams, lakes, and bunkers of course.

Sampled sounds are used for added



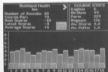
realism. It's all here, the words of the club, the crack as it hits the ball, the thud as the ball hits the sand in the bunker, or the splash as you tee it in the lake, and finally that satisfying wobble as it drops into the cup!

When you reach the green you have to "read" it for slope and speed - it's definitely NOT just a case of hitting the ball straight towards the hole, as some of the greens are anything but flat! As in real golf, putting is an art in itself and it takes some skill to finally hole the ball. After completing each hole you see your scorecard, allowing you to track how well (or badly) you're doing. Do well and your handling improves, opening up more of the program's options to you, such as the Live! Head and Tournament play.

It has many other useful features, such as action replay, all sorts of disk save facilities, including similes (do you really did get that hole in one?), player profiles, and games, driving range and putting green practice facilities; and much, much more.

Microprose have a real winner here, and it really deserves the title of golf 512K/LA-70K rather than golf game. In fact, it's so good it could probably be used for teaching the concepts of golf to beginners in the real life sport. If you enjoy golf, you must buy this program. If not, buy it anyway and you'll soon become addicted!

- **LOOK AND SOUND** - superb graphics, good sound
- **GAMEPLAY** - excellent, even you'll master that swing-meter
- **VERSATILE** - the best golf game on the ST by far!



Title: **MICROPROSE GOLF**  
 Publisher: **Microprose**  
 Price: **\$34.99**  
 Reviewer: **John S Davison**

# MAKING MUSIC WITH YOUR ATARI

## John S Davison's regular guide to music on your ST

**I**n the last issue I described the MIDI sequencing facilities offered by C-Lab's fabulous Notator package. This time I want to look at its other major feature - score printing.

For me Notator's greatest asset is that its sequencing and score handling facilities are fully integrated - you don't need to mess about transferring files from sequencer to scoring program as with some products out on the market. Once you've recorded something with the sequencer it's immediately visible in standard music notation form. It can then be viewed, edited, and printed either in isolation as a single track or in 'full score' form along with previously recorded tracks. And again, because of the tight integration, any changes made graphically to the score are immediately reflected back in the MIDI data held on the sequencer tracks.

The simplest way of using the score editor is for making minor corrections to music you've recorded in real-time via a MIDI keyboard. A click on the sequencer screen's edit button brings up the score editing screen, showing the track you're working on or the full score (multiple tracks/multiple staves) if you prefer. Obviously, it won't all fit onto one screen so two



dimensional scrolling is employed. Horizontal scrolling is used to view later parts of a track, and vertical scrolling to view any tracks/staves that overflow off the bottom of the screen.

To get more onto a screen you can request a miniaturised notation display. A series of small icons at normal size



# NOTATOR THE SCORE FACILITIES

contains a great deal of detail, one reason why Notator now only supports a high resolution monochrome monitor - it's much easier on the eyes!

Graphical note editing is achieved by mouse selecting a single note or group of notes and applying an editing action to them. Notes can be moved in time or pitch; note duration changed; notes copied elsewhere, across staves if necessary; deleted; or new notes inserted where required. Symbols for new notes, rests, etc., are obtained from two 'partboxes'. A small, permanently visible partbox contains the most commonly used notes symbols, while a second, pop-up partbox contains the remainder. To use, click on a symbol to select it, move the mouse pointer to the required position, then click and hold the right mouse button. The selected symbol will fly from partbox to pointer, and can then be accessibly positioned using the mouse. Selecting a symbol from the pop-up partbox also automatically transfers it to the small partbox, so you can easily move it from there if required.

## SCORE PRINTING

But Notator isn't just about score editing as a means of correcting your sequenced tracks. Its facilities extend far into the music 'desk top publishing' area. There's no need to record via the real-time sequencer either - you can input the music directly via the score editor, so you can still create professional looking printed scores even if you can't play a MIDI keyboard. Because of the integration, creating a score automatically creates a sequencer program, so you can also *PLAY* your scores via MIDI to hear what your made sounds like as you write it! This is a godsend to any composer or arranger, and a fantastic aid to music education.

Imagine you want to produce a song arrangement for a small band, including say a piano, bass, drums, guitar, saxophone, and a singer. You need a full musical score for the band's musical director, plus individual parts for each instrument, and finally the singer's part. Doing this by hand in the traditional way with pen and manuscript paper is a real pain, but with Notator the task becomes much easier and quicker.

The first step is to set up six tracks, one for each of the parts. Each part requires one slave, except the piano which uses the normal bass/treble into slaves. You can then set the required oct. line, and key signatures for each slave, and begin entering the notes. The quickest method of note entry is to play them into each track in real-time from a MIDI keyboard via Notator's sequencer. If your keyboard skills aren't up to this you can use stepwise entry, i.e. input the notes one by one. You have the choice of 'MIDI step input' of single notes or chords directly from your MIDI keyboard. Or if preferred, you could use the score editor for input as described earlier.





As each section of music is entered you can check how it sounds via MIDI. If you're using a multitrack synth, enter you can play each track with its appropriate sound patch. The only problem area is the singer's track, but you can always substitute another instrument for this, or perhaps even sing the part yourself. If you have a multitrack tape recorder (especially a Focus model) and C-Lab's Unitas interface you could record an audio track of yourself singing the part, and run this locked in sync with the sequencer tracks, as described in the last issue.

You can choose from bar lines of various styles (only repeat marks if required), and first line/second time, etc. symbols can be customised to span the required number of bars. Chord symbols can be inserted as text and/or guitar tablature, the latter allowing you to set the fingerings and barre positions whenever you want.

A wide range of note head direction symbols is possible, from semibreves (false note) down to hundredths (quarter sixtyfourth notes). There are also dotted and triplet notes. Triplets of up to 15 notes can be handled too, and you can even insert miniature cue notes and grace notes where required.

As well as the standard note heads there are 14 other styles, useful for scoring drum tracks. Notator also has a drum mapping feature which allows you to allocate note head styles to specific drum types and to control where they're displayed on the staff.

You can treat the singer's part exactly as an instrumental part, but the partial way which is use Notator's 'lead' mode. This doesn't use note beaming - each note is shown individually, distanced from its neighbours. This helps when you want to print the song's lyrics along with the music. Notator permits two types of text to be inserted into the score. 'Normal' text is used for titles, credits, comments, etc. and can be positioned anywhere on a page. Lyric text is positioned under the notes in a chosen style, and Notator auto-centres each syllable under its note, and even adjusts note spacing to suit the text - an incredible timesaver! Up to 16 different GEM fonts may be used, assuming your ST's memory is big enough!

The basic notes are only one aspect of printed music, it also needs instructions to help the performer deliver it as the composer intended. This mainly covers guidance on tempo, dynamics, and playing technique and involves placing various symbols and text at appropriate points in the score. Notator has just about every symbol you can think of for this. It has dynamics (pp through to ff), pchd-on/off, various trills and other ornaments (DC, DS, and their related marks), symbols plus individual note modifiers such as staccato, accent, piano, etc.



The shape of many of these symbols can be easily varied using the mouse. For instance stem (plusus) markings can be stretched to the required length and be drawn leaning upwards or downwards with whatever degree of curve is required. Similarly, ornaments and ornaments 'tempo' symbols can be similarly stretched, and the angle between the jaws made as wide or as narrow as necessary. The vertical spacing symbol for staccato/breath can also be stretched to cover any size chord.

## THE VISUAL ASPECT

As well as sounding right an arrangement also has to 'look right' on the printed page. Needless to say Notator has facilities for laying out the score in a visually pleasing manner. For instance you can control the distance between notes, distance between staves, number of bars per line, thickness of stem marks, size and style of text and lyrics, and so on. Page layout can be previewed onscreen

before printing, although this isn't always 100% accurate - you sometimes need to fine tune the layout by eye after seeing the first draft printed.

Drivers are provided for virtually every printer imaginable, including 8-pin, 24-pin, laser, and bubble jet models. There's even a driver editing feature for building your own if necessary. The only thing missing is a Postscript driver. Printed quality is superb, even on a 9-pin printer like my old Star 36115. I did find the scores printed slightly underbite using this model, although the output was perfectly usable. I also tried it with an IBM 4090 laser printer, which produced truly magnificent results of the current staff font can also change the score to disk as an .BEG file and export it to a separate desk top publishing program, opening up further editing and printing possibilities.

Notator makes printing of our hand arrangement draft easy. Any transposing instruments like the Eb are also accepted and easily handled by asking Notator to transpose the part into the required key. Then you can print the full score or any selected part individually, or to print all parts in one go. Notator automatically extracts, formats, and prints each part onto separate sheets of paper, again an unbelievable timesaver even doing it manually.

Notator has knocked me breathless! I'm not in words of praise - in fact no words can really do it justice. In my career which started with the best computerised I can think of it that it's a truly PROFESSIONAL package - and its incredible features could change your whole musical way of life. My big problem now is how to tell my wife I want to spend \$250 on my own copy, as Second Technology like UK distributors want the review copy back! Any ideas gratefully accepted!

# EXPERIENCING A NEW AURA

**M**IDI opens some interesting possibilities in the area of music education, so I'm surprised there isn't much software which really exploits it yet. C-Lab's MEDIA package (reviewed in the last issue) doesn't really count as it's concerned mainly with MIDI capabilities rather than pure musical topics. C-Lab hasn't forgotten the musical side though, as they've also launched Aura, which really does focus on music rather than technology.

Aura is billed as an 'aural training' program, helping the music student with what some consider the least attractive part of music education, i.e. aural recognition of intervals, scales, chords, rhythms, and melody lines. Working on these can be a strain on the teacher as well as the student, so any help in this area is welcome! Aura is potentially a great help. It runs on any PC/DOS, but does require a high resolution monitor. The package includes one double sided disk and a high quality instruction manual. Ideally you also need a MIDI keyboard synthesizer to be able to hear the exercises and play in the answers, but you can manage with just a MIDI expander module if necessary.

## TAILORED EXERCISES

The exercises can be tailored to your requirements, with options to set MIDI velocity and channel (and) the pitch range of notes used; tempo at which exercises play; note lengths used; and the direction of play (e.g. ascending or descending scales). Overall difficulty level can also be set - for instance, you can restrict the type of interval included in an exercise, or with chord exercises you can



choose from simple, average, difficult, compound, or dominant chords, and from classical, pop, or jazz styles.

## LISTEN AND RESPOND

Aura then presents you with exercises on the chosen topic. They play via MIDI, producing sounds from the attached MEDIA sound source. You listen to an exercise then respond in one of several ways. You can either click on the correct answer from the text list displayed onscreen, or you can click on the appropriate notes of the onscreen piano keyboard, or you can play the answer in directly from the MEDIA keyboard.

For interval exercises Aura plays two notes (simultaneously or in succession, and you have to name the interval. With chords, Aura plays the notes together or arpeggiated and again you identify the chord by playing it yourself or selecting the correct answer from a list. Also, you can turn the notes on/dark by clicking in to analyse and identify any chord (CA) present (it wills - a very useful feature). The scales topic doesn't just cover the usual major, minor, and chromatic scales - it also includes blues, pentatonic, and whole-tone scales, and all these quickly named modes work as diatonic, phrygian, harmonic, etc.

The 'variable lines' topic generates random melody lines according to the various criteria you can set, such as pitch range, number of notes generated, tempo, and key and scale to be used. This time you can only respond via the

onscreen keyboard, or using the MEDIA keyboard, of course.

The final topic involves rhythm and for this Aura generates rhythm patterns based on chosen criteria, including note durations to be used, time signatures, tempo, and patterns length in bars. Rhythms are time related, so Aura supplies a metronome click as a time reference. You have to tap out the required rhythm in time with the metronome using the MEDIA keyboard or the 'Tab' key on the STX keyboard. Difficulty levels have to be set before allowed in timing. Higher levels demand better timing accuracy from you.

## PROGRESS TRACKING

If you enter the exercise as Aura plays it, you can ask for it to be repeated. If you're really baffled you can also ask Aura to show you the answer in standard music notation. Aura keeps track of your right and wrong answers, and also any repeating of exercises, and the statistics can be displayed and printed out at any point to record your progress.

Aura comes with a set of exercises using predefined intervals, chords, and scales. However, you can customise them to allow you to practice any specific problem areas you have. There's not much you can do with intervals except customise their names, but with chords you can enter any required chord into Aura's library together with your own name for it. Scales are treated similarly - you can invent your own if required!

For me Aura has only a couple of shortcomings. I think a non-technical music student or teacher could find it a little intimidating, although this would be overcome with a little practical experience. More seriously, there's no provision for generating exercises containing notation in both rhythm AND melody, an essential requirement in both A Level music and Grade exams. Otherwise I found Aura a bit piece of software - expensive perhaps, but capable of helping anyone over the pain of aural training.

**Title:** AURA  
**Publisher:** C-Lab  
**Price:** \$115.00  
**Reviewer:** John S Davison

# BARBARIAN II

**T**his game is the follow-up to quite an early 80's and Pong-style game called, surprisingly, **BARBARIAN**. This is not to be confused with the Mario Watanabe sponsored Barbarian back and slash game. The original Barbarian had finger slaying, employment contracts in smooth scrolling dungeons and constantly defrating his master's evil brother. It seems that times were good for a while for this hero until he finds out that, in true Hollywood style, the brother did not die and the software writers wanted more revenue.

In his rush to reach the site of his evil brother's (Pheonix) resurrection (Hog), the less than bright, has left all his money in his armor at home. His weapons are also unfortunately at Dean Hacking and thus he has to locate new weapons and armor. To do this he needs to locate various brigands, wizards, gogolies and other unpleasant fiend creatures, severely reconstitute with them, and relieve them of such heavy items as gold and swords. It is fortunate that there are plenty of these around for the blundering Barbarian to offer his services to. With a little care it is not too long until he has a couple of rusty weapons and a few bags of gold.

It is at this point he needs to look round his well drawn wilderness and discover a way through the wood to find his brother. Unfortunately this means finding a dungeon to enable him to get back to

the town and thence to the castle and the evil Sorcer. The game features the now de-rigueur graphics scrolling features and also contains a viable collection of enemies. At least this adventure is not complicated by the need to communicate with your fans.

It will behoove the adventurer to find as many keys as possible and to map as far as possible and to aid in this there are puzzle and mini-quests included. There are several traps around even in the early parts of the game and if the Barbarian ignores the helpful fairy then he is likely to fall in a big way.

It is unfortunate that if the keys are not located early enough then Hog's quest is doomed, so it is well worth noting the position fairly regularly whenever a major obstacle is overcome. The game is pure Pong-style and computers vary well in Shadow of the Beast II is so far as it levels more accessible and proves to be far more user friendly.

I wondered at times if the controls offered too many vignettes. It is not easy to make the hero walk up stairs and he sometimes has difficulty managing his stocks with his weapons and these major problems often prove fatal. The game is also sufficiently related to platform and ladder conventions to make transition across some ladders tricky and in need of very skilled timing - most reminiscent of the original game. The Hoger sprite is well animated and looks far more human than the creature from the wilderness (Beast II). The enemies are also somewhat better defined and have definite intuitive tactics when faced with the weapon wretches that the Barbarian can come up with. There are even opportunities to liberate and obtain hints from various villages which will help in later stages of the game.

I felt that the first dungeon was hard to master but once the keys are found and the vignettes in control are managed then at least progress back in the village seems possible. Although the loading screens



## “ a good sequel ”

are not as dramatic as those on The Beast, they are quicker and, greatly in the game's credit, it is intelligent enough to use both disk drives if present. With a three disk game this saves an awful lot of disk swapping and a great deal of latent frustration.

This game has a great deal going for it, most of all it does not take itself too seriously, for while no great literary achievement the accompanying story is informative and entertaining giving the whole game a second setting. The sound is not obtrusive but it has good and effective open notes. The puzzling part of the hero's excessive player belief that he is a handkerchief and in the Ocean vein. The atmosphere that pervades the game is far more that of a fantasy game and offers the player an escape back and slash.

I would applaud this as a good sequel to the original and in a direct comparison to Shadow of The Beast II have to award it the laurels as a more entertaining game to spend your money on. Try it and see!

- **GAMEPLAY** - Smooth and fun, the sprites even walk with an attitude
- **SIGHT & SOUND** - Graphically strong, well colored and good sprites, musically most acceptable and spot on an overall atmosphere
- **OVERALL** - I Must Die. As Much as I think game this is hard enough to be interesting but not so impossible as to be boring



The	<b>BARBARIAN II</b>
Author:	Pongstyle
Price:	\$29.99
Reviewer:	Damon Roweth

# PD **Paul Rixon's** WORLD

## SPREADSHEETS

For some reason the spreadsheet has never captured the imagination of home computer users in quite the same way as the database or word processor. Consequently it has acquired an unimpressive image as a 'business' tool of minimal interest to the average user. In reality the spreadsheet can be one of the most powerful, time-saving and potentially useful applications in personal computing - a complete solution to any task which involves performing a series of calculations. The only snag is that not if you'd brought home a spreadsheet is to try one, and this you'll expect me to say... if the public domain is considered place to begin!

### AN EXCELLENT STARTER

**GEM CALC** is a straightforward implementation of the basic spreadsheet and is therefore a good introduction to the subject for those who may not be entirely familiar. The spreadsheet comprises a grid of up to 86 columns (labelled 'A' to 'Z') and up to 9999 sequentially numbered rows, but subject to a maximum 32000 cells overall. This is not a great number by 'commercial' standards (86 byrow 2 and 101 Professional can both handle grids of over two million cells, provided there's sufficient memory) but it's more than enough for most users. Obviously you can only see a small part of the sheet on screen at any one time, so its name follows. Gem Calc makes use of drop-down GEM menus for presenting its options to the user. A command line (horizontally) beneath the menu displays the contents of the 'active' cell (the one in which the cursor is positioned) and also forms the input area for figures, dates, expressions and text. Underneath the sheet itself is a status line where the spreadsheet width, memory usage and



**GEM CALC** - not a large spreadsheet - but good for beginners

selected functions are reported. You can use the mouse to position the cursor on the visible part of the spreadsheet but to move around the remainder you must utilize either the cursor keys or slide bars. In both cases there are some short cuts to jump over longer distances - these are needed to avoid unnecessary delay, since the sheet is re-drawn completely each time you move.

Each cell in the spreadsheet can contain text, a number or an expression up to a maximum length of 77 characters. A non-display comment can be added here too. An expression may contain the usual mathematical operators, which are treated using the standard priority rules, together with special functions and constants defined by Gem Calc. These can be split into two groups - common mathematical functions (e.g. absolute value, square root, cosine) and those which operate on the contents of other cells (e.g. sum, average, maximum value).

Various control-key combinations allow you to manipulate the sheet in different ways. You can adjust the overall width of the sheet or insert and delete columns and rows. You can search for errors, mark a cell for future use, copy data (including all references if necessary), sort data and search more. If you need to input a large area of the spreadsheet you can switch to a flag list which enables a hand-drawn character screen and merely set rates (flag list) to be fixed on a screen. It's not exactly easy to read though (or tedious viewing you

can print out the data on a screen sheet or an entire sheet), assuming you have an Eights compatible printer. Alternatively you can drag the screen to a Degas file. One of the most interesting features of Gem Calc is its graphics section. Data from your spreadsheet is converted into a form suitable for display in various types of graph. Several parameters must be supplied before the transfer is made, and

once it's complete the new format can be saved separately to disk. Pie charts, linear plots, strips, stacks, columns, shapes and surfaces are supported. With yet more options on the function keys, it's clear that Gem Calc is a comprehensive product. Although obviously it doesn't offer all the advanced features of full-priced commercial packages, it does have more than the others are lacking.

Gem Calc was written using GFA Basic 2.0 and compiled with the GFA Basic Compiler. In case you'd like to know how it's done, the (forward) source code is also included on disk. In addition there's an adequate helping of user documentation, with a test viewer for effective browsing.

### NEED A BIT MORE SCOPE?

For those who require a more 'advanced' spreadsheet, **SHEET 2.0** is a well-established Shareware package that's got to be worth investigating. It's initially a combination of spreadsheet and task interpreter and so provides many powerful features you don't generally find in commercial packages. It may sound like a strange mixture but anyone who's struggled with the macro language of Lotus 1-2-3 should be able to appreciate the benefits. The disk contains an extensive manual (over eighty-four pages worth) which is divided into logical sections and is full of examples and other useful bits. To explain all of the commands and options would probably fill the entire mag-

time, so it's no wonder the templates and wrap help list make this software a sheet you'll use. You have a maximum grid size of 1,000,000 cells depending on memory usage. All of the standard editing facilities are available and of course the standard bonus is an integral Basic programming language. This has more than fifty commands including the usual IF... THEN, GOTO and FOR... NEXT constructs plus file input/output, mouse and graphics operations. Up to a hundred and fifty variables can be defined in your Basic routines. The functions can be split into mathematical, statistical, financial, matrix, string and miscellaneous categories - arranged alphabetically in all. The program has been written using Mark Williams' C and should run on any IBM or compatible with colour or monochrome monitor. The author, who lives in London, would appreciate a contribution for if you intend to regularly use his programs. You can't really ask for a better deal than that!

If you do find Sheet 2.0 useful you may be interested to know about a supplementary disk called **SHEET FILES** containing a few additions to the main program. This includes printer drivers for the increasingly popular HP Deskjet and Deskjet Plus printers, a phone book utility that's been created with Sheet Basic plus a series of help files that can be loaded into your spreadsheets.

## BIG DADDY

One of the first 'big' commercial spreadsheet releases on the ST was VIP Professional from VIP Technology. This was fully reviewed by the Editor in Page 6 issue 23 and is probably familiar to many ST users since at one time it was used by most in their 'professional' package deals. However, if you haven't seen VIP before you may want to check out the **VIP DEMO** disk. It contains a version of VIP with certain features disabled - sure, more and price among others - but with enough remaining for you to fully appreciate its potential. When you load the program it looks straight into a demonstration that has been created using the mouse facility within VIP. This guides you through the features of the spreadsheet and includes an adventure tutorial plus general information on the subject. The principal 'bonus' point of VIP is simply that it's almost identical to the earlier versions of the best-selling PC spreadsheet, Lotus 1-2-3. On the negative side the OEM version of VIP is rather slow - in fact a faster text-based alternative has also been produced. Of course, there's no shortage of competition in the world of commercial spreadsheets.



**SHEET 2.0** - a large and very versatile spreadsheet that includes a built-in Basic programming language

**VIP** - the productivity of them all and a clone of Lotus 1-2-3. The demonstration includes an excellent illustration of the use of macros that produces all the full version will find quite useful



## ANOTHER LOOK AT EMULATION

Now for a brief update on the totally different subject of **MSX/NE** emulation, which was fully discussed in the **MSX/NE** columns of issue 31. As you may recall, **ST EXFORMER** is a clever program that transforms your ST into an MSX clone, giving you an opportunity to port about thirty software titles from ST disks or to type in all those old magazine listings. Creating 'virtual' disks from the MSX originals isn't the simplest of tasks so if you'd like to try out the emulator without all this fuss you should check out **EXFORMER PROGRAMS 1** and **EXFORMER PROGRAMS 2**. These disks contain programs from past issues of *Amiga Computing* magazine, and although some of these may require a bit of imaginative fiddling a good proportion will be up and running on your ST quicker than it takes for a disk to load on the MSX! If you missed out on the 'good old days' of 8-bit computing, here's a perfect opportunity to catch up on the fun! Well that's the end of another **MSX/NE** column. As usual there have been lots of new additions to the Page 6 ST library and they're all described in the **Amiga Computing** listings, so check the list below if you don't have a copy. Next issue we're going to be looking at printer utilities, so if you don't have a printer you'd better buy one quick!

## HOW TO GET THEM

All of the disks featured in **MSX/NE** are available from the **PAGE 6 ST** library. Each has a unique reference code when ordering or making enquiries. Please contact **PAGE 6** if you don't have a copy of **PAGE 6** Accessory Shop leaflet and check the space requirements for each disk. The **PAGE 6 CATALOGUE** disk containing a full list of disk names and contents is available from the library, priced at £3. The disks referred to in this article are:

ST23 VIP DEMO	ST24 MSX/NE CALL
ST25 SHEET 2.0	ST26 EXFORMER PROGRAMS 1
ST27 SHEET FILES	ST28 EXFORMER PROGRAMS 2
ST29 EXFORMER	

Prices for standard disks are £2.99 each or £2.49 each for 300 or more.  
Write to **PAGE 6**, P.O. Box 64, Stafford, ST16 1SR  
Telephone 0783 373829 or FAX 0783 364445 with credit card orders

# CISCO HEAT

The full title of this game is **CISCO HEAT All American Police Car Race**. That just about says it all. The game is an arcade game from the Japanese stable converted to the MSX. The packaging is somewhat sparse, a large box with a book of multi-lingual instructions that spends more time explaining how to load the game into each of the multitalented machines it works on than in explanation or background.

It would appear that the Japanese have an idea that there is an annual police car race through the streets of San Francisco. This obviously occurs somewhere between the Golden season and the Baseball season and is meant to offer some entertainment to those residents who have not had the opportunity to see *What's Up Doc?*

Upon hitting the player is offered the choice of one of two joystick controlled cars. Despite the fact that they are presented on screen in the manner of a *What Car Monthly* registered display there is no real explanation or discussion of the merits of either. The only obvious differences are that one is blue and the other red and that one possibly handles better than the other while the second has a great speed advantage.

The loading screen also helpfully explains that pressing the fire button sounds the horns and makes other traffic move out of the car's way. The graphical style is colorful and greatly resembles

*Out Run* with panoramic views being offered to the driver and a host of other drivers to contend with. In common with *Out Run* it is also necessary to arrive at various staging points within time limits or else that yourself no longer is in the race. The cars are only controllable by joystick and I find this disappointing since the game would have lent itself to mouse control.

The method of controlling the cars is reminiscent of *Out Run*. Once the race has begun and the player has selected the high or low gear preference there remains the problem of negotiating a way around *Trisco*. This part of the game provides what I can only presume to be a fairly accurate map of the city, at least. It has the hills and lovely houses of Hollywood alternatives have come to recognize. It would also appear that the staging points represent actual landmarks around the city. As such the game may have a great deal of appeal to our pariah Americans or those who have spent a long holiday in *Trisco*.

The game requires the driver to avoid innocent non-racing vehicles and it encourages the drivers to make sharp turns in front of directional arrows. Strangely the instructions seem to think the city has been closed for the day so that only the police need worry about each other. Sadly they seem to have forgotten to inform the civilians who insist in driving large vehicles across the police car path. Other policemen are intent on running you and then slowing you up and ensuring that stages are not completed. Fortunately the cars do respond well to the joystick making the avoidance of obstacles a little more possible.

I felt that this game was a fairly blatant copy of the old classic *Out Run*. I accept that there are a couple of slightly different wrinkles in it, such as horn beeping but the graphic presentation and the control system seemed very similar. I actually bored up my own *Out Run* to



see if my feelings were correct and I felt that this was very much the case. If anything *Out Run* had a smoother feel to it and had a little more guts in the sound effects. *Cisco Heat* even uses the same modified map device to show how far round the circuit the unsuccessful attempt went.

I found the game offered very little in the way of a lasting interest, and it certainly did not rank incredibly high on the originality stakes either. The game may well have some strange claims to those who like *Trisco* and can remember hot dogs at Candlestick Park or claim themselves as the new *Grand Prix* as a racing game. It feels extremely dated. As a final comment it would be my advice to a potential purchaser to play before buying and to try one or two other games in the same genre, especially *Out Run* or *Out Run II*, both of which are now budget priced and offer a somewhat more challenging and fun value for money product. I felt that even the producers were lacking in confidence for the quality of comment about the game certainly offers no hint about the lack of constant within. This is possibly a game in rates. All I need to know now is when this race takes place so that I can ensure any potential holidays into the event.

● **SOUND AND GRAPHICS** - these are nothing special, standard somewhat scrolling screens with convincing music and FX.

● **GAMEPLAY** - an average offering that does not excite the blood coagulates or raise the temperature of the player.



Title:	<b>CISCO HEAT</b>
Publisher:	<b>Image Works</b>
Price:	<b>£25.99</b>
Developer:	<b>Banan Hawaii</b>

# SHADOW OF THE BEAST II

**H**ere we have the follow up to the enormously successful *Shadow of the Beast*, one of the strengths of which was the lycanthropic go-on get the dictionary's nature of the hero. In this sequel he can no longer change shape and is depicted as a rather ferocious man. The plot revolves, as do many fantasy sagas, on the crazy premise that all powerful servants of even more powerful deities do not get second chances. Thus the evil wizard that was beaten by our hero in the original is instructed to find replacement instruments to raise the master. If just so happens that the essential mirror is the 'pick a victim's' stake is the warrior's baby sister.

Of course this brash hero being full of final offences sets out penance and with his man to get back the lost sister. The opening credits (which can be avoided) show the abduction by the shape changing wizard in splendid and colourful semi-animation. This leading screen set is impressive and shows a great deal of skill in computer art. The accompanying MIDI music is most atmospheric and again full of promise for that which is to come.

The game instructions, which run in slow, large and a picture of the eye's down/left/right ones of a joystick, are all the help the player receives for simple tasks such as interacting with others.

This is a game that expects you to hit lots of things very often and occasionally to

talk to things before they beat you up. You are hoping to collect enough gold to buy weapons and lives. This game seems to have a great deal of promise especially when the rather exciting game-line scenery is shown giving a great impression of depth and atmosphere to the game. Unfortunately the hero's sprite is a bit flat on definition being all one colour and semi opaque. At the start of the game it is difficult to spot him hiding behind the tree, if not one of my friends to wonder if the hero actually been modelled as a certain grey game monster.

Gameplay to this is difficult, since there are no obvious clues as to what to ask various people and if you choose the wrong direction the hero finds himself seriously damaged by flying gargoyles and is unable to make sufficient height to last them. All my ventures to the left of the screen ended the same way, being pulled to death by aerial bombardment. In the other direction, the inhabitants of the wood seem unable to construct a conversation that offers any clue as to how to pass them. I believe that there is a

chest made built in here that gives unlimited energy but the actual type is words are unknown to me. The combat options in the game are also limited and until, or unless, the player finds some secret way to get past the wood guardians death is fairly inevitable very quickly.

While being full of admiration for the scrolling, the sound-effects of action and the general responsiveness of the game I feel that this is a real 'run up the register' and possibly the down with the ability to find the chest phrase to get through the woods. Despite being an arid adventurer I've finished *Dungeons Master* for instance) this seemed to offer no logical clue or help to start. Perspective pair-chasers should be aware of the potential frustrating time they will suffer.

I also found it somewhat strange that there was more in the manual about how the game was created as an Amiga 2886



**“ expects you to hit lots of things very often ”**

and the subsequent retelling of its abilities rather than how to play it on the ST. They also seem somewhat proud of the intelligence of their monsters, perhaps it only goes to show that the machine is run far smarter than the by now de-powered reviewer! It is though interesting to note that they feel that state of the art games are produced on 2D graphics Amigas and PCs using advanced technology. Although the visual product is colourful and starting in children's perhaps the programmers should have given some thought to a guidelines of game play?

I sort of liked this game, was impressed by the programming of it but was more than disappointed with the gameplay. This has the hallmarks of too much technical design and not enough game tests testing. Do try before purchase, and do so if you can make it across more than three screens other side.

- **GAMEPLAY** - Good, difficult or impossible - on the other hand smooth and responsive to control
- **ASSET & SOUND** - Sound very strong as all departments, graphics generally good, only the hero sprite on a somewhat more coloured. Scenery that is a disappointment
- **OVERALL** - Far too hard, but a good demonstration of the art and sound capabilities of the ST



Title:	<b>SHADOW OF THE BEAST II</b>
Author:	Psychonics
Price:	£29.99
Reviewer:	Colin Fawcett

THE

# STOS

COLUMN

## STOS 3D is here at last and Dion Guy includes a full review in his column

Since as ever the past few months the STOS scene has been pretty quiet, I was quite surprised when a mysterious looking packet arrived which contained - you've guessed it - the long-awaited (and I mean long!) STOS 3D! Also I have news of another STOS-related package soon to be released as Masterware - Creative Dungeoneering. Sounds interesting? Full details of that in a moment. In this issue are another two early listings for you to type in, a game and a utility. Anyway, as soon as I get to the conclusion right away with an explanation of both programs.

### DICE!

A whop by the name of Peter McLaughlin has sent me a little game called Dice. He says that the game was inspired by the screen shot from John Young's 8-bit game in issue 58. Basically, Dice is a computerised version of Yahtzee. Unlike various Yahtzee clones though, this one is actually very easy to use while

still being very enjoyable. Dice is for 2 players and is mouse controlled. Even if you do not know the rules of Yahtzee you should pick up how to play soon enough.

To get Dice up and running, you must first design 12 sprites! This isn't as bad as it sounds though, all you have to do is design 2 different coloured sets of dice. Using the colour palette 000, 777, 000, 100, 440, 210, 751, 702, 000, 414, 000, 000, 013, 014, 000, 222 for colours 0-10 correspondingly, design 6 10x10 pixel dice to enter, in the sprite bank (i.e. the number 1 dice as sprite 1 etc.). Make the first 6 dice white (colour 0). Next copy the 6 dice to sprite numbers 7-12 so that you have 2 sets of dice. Now change the colour of the dice from sprite numbers 7-12 to grey (colour 0). Note that to design a die you only have to draw one face - i.e. a 6 square with the appropriate number of dots on it (the data book lists if they are black - colour 14). Once you have done this, save the sprite bank into the program, load the sprite bank into the program and you're ready to play!

### HIRESLOW

This simply converts high resolution Digas format pictures into low resolution Digas format pictures. Type it in, run it, select a picture to convert using the fileselector, wait for it to convert (you will see it build up the picture on the screen as it is converting it) and the converted picture will be stored in bank 6. Easy!

### CREATIVE DUNGEONEERING

CD is a new and original concept conceived by Peter Cudbeck. With this package you can link up two STs via MEE links and play a sort of interactive

adventure game. On the disk supplied you get two programs, one called the MASTER program and the other called the MASTON program. What happens is one player is at one ST using the MASTER program and the other is using the MASTON program on the connected ST. It is necessary that either player cannot see the others screen. The player using the MASTER program will be trying to things just like a normal adventure game, but there is a major difference to the way these commands are handled. Instead of his commands being interpreted by the computer, which in turn prints the appropriate responses, the commands are dealt with by the other person on the adjoining ST. The other player is sort of Douglas Maister! We then send back the relevant message using the MASTON program which consists mainly of messages to click on.

Before serious gameplay can start, an adventure world will have to be created - this is done with a very easy to use dialog box program and you can design a relatively large world complete with objects etc. in a matter of hours (obviously providing that you have roughly worked out the locations, objects and puzzles etc. previously). If you want you could use the pre-designed world which is on the disk.

CD is so incredibly flexible and this is where it's strength lies. The player can do virtually what he likes and for classes' have to stick to the old 'GET KEY', 'OPEN DOOR' type of commands. The player could type 'OPEN THE DOOR WITH THE KEY THAT IS ON THE TABLE' and the other person would know exactly what he meant. The flexibility is to the MASTER program. Hey, for example, that the player is not in a tree, and a location he up the tree hasn't been previously designed. If the player typed 'CLIMB THE TREE' the other player could quickly design a new location (using the MASTER program with the text 'You are high up in a sturdy oak tree' or something similar, and then move the player to that



location, for another example, let's say that the player is surrounded by zombies fleeing from the planet Mars. The players, not being armed, could try something original like "REAR ME UP" and the other person, if he was of a kind heart, could quickly design the body of a creature with lasers fused and ensure the player there, out of business way. He could then return the player to the main game action by printing a message like "Not being able to put up with your silly song for much longer, the captain drops you off at a nearby shopping centre" or something similar.

To help you with world designing the author has also put an easy to use map design program on the disk. It's thought of everything, another feature of CD is that you can also have STPC. Machine sampled sound effects during a game! You could have a phaser fire, an explosion, a enemy die or anything. There is a large bank of RFX supplied on the disk to get you started and the author plans to release further disks of handily sampled sound effects for use with CD.

All in all, CD is an amazing package with enormous potential. Not only that, but it is immensely enjoyable as well! All you need is access to a 586 and a pair of MIDI leads to get started. MIDI leads are only about 68 a pair and you could link up with a friends ST.

CD is obviously a 2 player program but the more people there are, the better! If you have a local ST user group or club that you can go to, then CD would surely be very popular! It is a lot more fun if there are several people offering suggestions, and helping both the player and the "master" - it really is a sociable game! I would thoroughly recommend CD to anyone who has the slightest interest in adventure or role playing games. CD should be available from all major FD libraries by the time you read this.

### Program 1

DICE!

by Ross Mc Naughton

### Program 2 covering

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4:             By Ross McNaughton
5:=====
6:             January 1990
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## STOS 3D

At last it's been released! The most anticipated program since the STOS Compiler Anyway, enough hype - let's get down to business. STOS 3D comes with 3 disks, a manual and a quick reference card. One of the disks contains the installation program and also a variety of 3D objects, while the other disk contains the heart of STOS 3D, the Object Modeler for OM for short. Using OM you can create 3D objects for use in STOS.

OM is surprisingly easy to use, and is also quite fast - you don't have to wait around for objects to be displayed etc. Using a wealth of options, you can create almost any object using the 8 basic blocks provided. There are 3 the 'blocker' and 2 3D blocks that can be used. The 8x8 blocks would come in handy for things like wings on a plane. The 2 3D blocks are a cube and a pyramid and using these you can construct objects and guns. There are options to stretch and globally change the shape of any of the 5 percent blocks. Once allowing you to get the shape you want. You can join blocks to other blocks to form an complex an object as you like. There is also another good option which allows you to add outline detail to your objects. Using this you could put screws or legs on objects and add damage to items if they have been hit etc. With OM you can even add transparent windows to objects so that you can see objects within other objects! There are so many options it would be impossible to list them all here but I think you get the general idea that OM is easy to use, flexible and doesn't take forever to do things.

## TACKLING IT ON

Now the other part - the STOS installation. STOS 3D starts off on a hard disk when you realize that the 3D installation itself takes up 57K and that if it's a program you also have to reserve something from 500K-2000K for the objects. All this plus the amount of K your program itself uses would make using STOS 3D a tight squeeze for 1/2 meg users. If all other extensions are removed and STOS is AUTO loaded, then it may just be OK. The 3D installation adds 27 remnants and 30 hardcopies to STOS. Using these you can display the 3D objects and manipulate them in your hands (convenient). You can move and animate the objects quite easily. The speed of the 3D is very fast but not as fast as commercial 3D games, in the package claims. STOS 3D is fast

enough to create enjoyable games but don't expect to have a load of objects moving about on the screen at lightning speed. One of the best parts of the package is the manual. The 104 page manual isn't excellently presented and is very well written which enables you to get to grips with things straight away. It takes you through things step-by-step which is definitely needed for something as complex as 3D.

## PROBLEMS

Now all this is fine but there are a few things that let down the whole package. One of the major problems is the fact that every time you run your program, you have to load in your objects. It is bad enough if you have one object in your program, as this will take anything from 3-8 seconds to load, but if you have any more then it would mean a lengthy wait each time you alter a little bit of your program. Why they couldn't design 3D objects to load in and stay loaded in, like sprites, sounds, screens, sampled sounds etc., is beyond me. The only way round it that I can see is if you use the STOS run disk that come with the STOS Compiler and load all your objects into that before you load STOS. However this is still a bit of a hassle and is only really viable for 1 meg users. Of course, if you own a hard disk drive then this problem is greatly reduced, but then again how many people own a hard disk drive? If you are going to create a full game with STOS 3D then you will need a minimum patience.

The next biggest problem I came across is that there is no easy way to have a floor, or ground, in STOS 3D. If you are doing a flight simulation for example, then a ground would be essential - but there is no facility for such a thing using the STOS 3D remnants. You would

have to create a starting ground with a horizon etc. yourself. The last thing that I find a bit odd, although not really a major problem, is that you are limited to using 20 object numbers in a program.

When you are wondering around a large 3D world, you expect to see more than just 20 objects. You can actually kill off an object if it is not visible, to free up it's object number for another object, but this would all get a bit complex when trying to write a game.

STOS 3D should be in the shops as you need this and can be purchased for the reasonable sum of £25. All in all I would recommend 1 meg users or hard disk drive owners to get this straight away - it is as the whole an excellent package. However, for 1/2 meg users I can see a lot of major difficulties that would be involved in writing anything worthwhile. If you just want to have a tinker about with 3D and have the money to spare - great, go and get it. But if you are planning to write a full blown game in STOS, I think it would be right on impossible unless you have incredible patience.

\*\*\*\*\*

So, we come to the end of another column. If you want me to read any critical eye over a shining new package that you have written - send it in for review! Remember, if you want anything returned to you, please include an S.A.S.E. I'm always prepared to answer STOS questions and the like, so if you have any problems - write in with an S.A.S.E. As usual, I can be found at the following address. See for next!

**Dion Guy  
STOS Column  
11 Shore Crescent  
Bishopscote Waltham  
Hants  
SO8 1DE**



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