# Sinclair Scene

Timothy Green reports on new releases, Shopper Show bargains and Sinclair networks

've scarcely had time to digest the last three releases, and CGH Services has launched three more QL adventures. The latest offerings are Wreck Dive and Uncle Loonie's Legacy—for all QL models—and Return to Eden for expanded systems.

Return to Eden is a confusing title as it is nothing to do with the Level 9 game of the same name. The QL version is an illustrated role-playing adventure, in which you control three player-characters — Otaga, a Field Marshal, Tana, a fighter, and Sador, a sage. You must use the skills of all three, and liaise with other characters controlled by the computer, in an effort to track down a dude called Morkin who is stranded on the island of Eden.

You play the game by typing commands, as in most adventures. You can enter sentences like OPEN THE WOODEN DOOR WITH THE RUSTY KEY, but only the first verb is recognised. The function keys call up help, or a map, and let you switch between characters. The game comes with a six-page paper manual

The adventure runs in accelerated 'real-time', with a continuous clock display. Clouds judder ponderously across the top of the display. A while after you start playing, the sky changes colour on the screen, as it gets dusky, then dark. Some actions only work at specific times, but there's no limit on the time you spend playing.

Return to Eden was written in German by Oliver Neef, then translated and souped up by Rich Mellor and Richard Alexander. The original German version is still avail-

It's the biggest game ever released on the QL – it fills three 720K disks, largely packed with graphics. A new picture is loaded for most locations, but loading and redrawing is tolerably fast – much quicker than with Adventure Creation Tool. The graphics are simple MODE 8 cartoons, often with a strong family resemblance.

The code is split into three linked parts, so it will run on any QL with 256K or more Ram. It can be configured to use any storCartoon graphics in MODE 8. The printout has reversed the colours.

SER OF SILENCE SHIPERIL The map of the island of Eden. The left edge is lost on a TV, but the main display is OK. Presumably East has an O in German

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age medium. The code is compiled with Turbo, and comes with runtime versions of Turbo Toolkit and Graphics Construction Kit.

### Minerva bug

Return to Eden runs happily on a standard QL or Thor XVI, but it is the first new program I have found incompatible with the Minerva operating system upgrade. The problem stems from a bug in the implementation of the MT.CJOB trap, which does not work properly in tasks running under Minerva. Publisher QView is aware of the fault and hopes to fix it soon.

Minerva has progressed to version 1.67. PAN and SCROLL work as on 'JS', and bugs in Turtle Graphics and SDATE have been fixed. Recent tweaks have set out to improve compatibility with programs that call Rom routines without using standard vectors. QView has supplied 'bodge' routines to patch these programs, but the new Rom is more tolerant and needs

fewer bodges.

Old programs aimed at the 128K machine have been a particular problem, as they often use code that relies on finding all the system resources at fixed addresses. The latest *Minera* copes better with such bad coding, as it mimics Sinclair's 128K setup more accurately.

#### **Loony Legacy**

Uncle Loony's Legacy is a puzzle game written with the Adventure Creation Tool. It comes from the same authors as MacSporran's Lament, which was mentioned in Shopper 18. Unlike most adventures, there's no need to wander through mazes or make maps. Well, you can if you like, but it won't help much. This is a game of puzzles, not exploration.

CGH says Legacy is aimed at crossword and IQ test enthusiasts. It uses the normal 'verb noun' command system, prompts and commands scrolling through the bottom half of the screen, and simple MODE 4 filled vector graphics at the top. Sound effects are optional.

The manual is just four pages short. As usual, it includes background information, credits, a comprehensive disclaimer and some commands to get you started. There are even some jokes, like the 'Royalty Statement' which tells you how much the author earns for each copy sold, and declares that "Nobody connected with this product is a member of the British or any other royal family".

Wreck Dive is another unusual game. This time, you must explore the Spindrift – a cruise ship which sank in mysterious circumstances in 1954. It's an arcade adventure, mainly controlled with a joystick or single key presses. The player uses scuba gear to explore the six-deck wreck, which has over 140 rooms.

I found one minor bug. At one point on the Bridge, moving left flicks you back and forth between two screens, indefinitely. You can move normally between the screens if you choose a different route.

The graphics are simple and jerky, but it's fun to explore and map the decks without running out of oxygen. Hazards include clams, jellyfish, seaweed and a sleeping dragon. Text messages identify these as you run into them, which is just as well. The game is played in real-time, but does not go particularly fast, unless the shark or the eel are after you. You can pause the action with CTRL-F5.

Wreck Dive and Uncle Loony cost £8.80 each, on cartridge or disk, and multitask on any QL or Thor. Return to Eden costs £19.80 and should run on any system apart from Minerva. All three work with a TV or monitor display, and allow partly-completed games to be saved on disk or microdrive cartridge.

These games are not as instantly appealing as Starplod or Valagon, but they're worth a look if you've got spare time to get stuck in. They repay thought, rather than quick reactions. I'm really looking forward to Alan Pemberton's next game, but so far all I know is the name, Voyage of the Beano.

#### C problems

I have run into a few problems running the new version of PDQL's DiscOver, compiled with PDQC. I set out to transfer this month's column to PC format with Multi-DiscOver, but the Thor crashed with 'exception No. 8'. Inetworked the text over to my QL, but again Multi failed; QMON trapped a 'Division by zero' error in the task.

The task proudly declares that it is compiled with PDQC, but the compiler itself is still unsighted, though it has been 'nearly ready' for months. I ended up using the original DiscOver, compiled with Metacomeo C.

## 'Free' ZX modems

Spectrum users have had grounds to be jealous of QL enthusiasts recently, with the release of hundreds of Tandata QL modems at prices of around £30. Now Micronet has come up with an offer that puts your Spectrum online for £23, with a 'free' VTX-5000 modem thrown in.

The VTX-5000 links the Spectrum to the phone system; it was designed for the 48K computer, but can be persuaded to work with later models. Make sure you get the necessary adaptor if you use an Amstrad Spectrum.

The £23 pays for three months'



Psst? Wanna buy a Sinclair? EEC's Bill Richardson likes the QL so much he has bought 900 of them – plus job lots of Spectrums, Microdrives and interfaces. QL prices start at £65

subscription to Micronet. The service is tailor-made for insomniacs, who only need pay the cost of a local phonecall to use Micronet between midnight and 8am. You pay an extra 1.15 pence a minute, on top of the connection charge, if you call after 6pm, daytime calls weigh in at 8.05 pence a minute, plus the cost of a local call.

Once you've got your modern there are dozens of other Vicwdata services and bulletin boards which you can call, including Shopper's own conference on CIX. Many boards allow free access, although you may not be able to reach them on a local number, as you can with Micronet.

#### Shopper Show

At first sight, Sinclair coverage at the first Computer Shopper Show was swamped by PC, ST and Amiga offerings – but there were bargains tucked away for Spectrum and QL users.

EEC (Exotic Electronic Components, no less!) had massive stocks of Sinclair hardware, including QLs from £65 (the manual, power supply and software cost extra). Every purchaser is offered a year's free subscription to the Quanta User Group, which sounds like good news for all concerned.

Spectrum printer prices started at £50 for narrow thermal printers, rising to £80-£140 for full-spec daisywheel and dot matrix units with serial cables. EEC has stocks of Sinclair's original Interfaces 1 and 2; the firm has taken pains to match ZX microdrives with the appropriate version of Interface 1, which should make Spectrum microdriving less hit-or-miss than

Care Electronics had a range of QJump products on display, along with the excellent QEP III Eprom programmer. The company confirmed rumours that Tony Tebby is working on a 'total rewrite' of his QRam windowing environment. The new version should cost around £30, with upgrades at £10-£15 for existing customers. This sounds quite good value, as long as all your favourite programs are compatible, as the new version will include the QPAC accessories.

Care sold out its stock of Miracle Systems QL ExpanderRams at bargain prices – from £23 for a board with a through-port with sockets for 256K or 512K of Ram. It should be possible to fill this for around £40. At the time of writing, Ram prices are still falling, and 150ns 41256 chips are widely available.

An interesting story about these boards is doing the rounds. Miracle no longer makes the ExpanderRam, but plans to reintroduce it now that Ram prices have fallen. A couple of years ago, Miracle captured much of the QL expansion market by selling Ram boards at prices that others could not match. Some suppliers complained that they could not buy 512K Ram chips at the price Miracle was charging for complete boards.

Care Electronics reputedly had a better idea. It bought up hundreds of 512K ExpanderRams, unplugged the Ram chips and sold them to people with other computers. Now Ram prices have fallen, Care is re-stuffing the unused QL boards, or selling empty ones directly to people with access to cheap chips. This explains why its ExpanderRams are unused, but have Miracle's old Bristol address printed on the boxes.

All the QL-speaking magazines were in attendence at our show, including MicroMart and the tokenistic New Computer Express. Even elfin QL World staggered along. Publisher Focus has taken in a band of new managers from rival Argus, so plans to make the magazine subscription-only have receded for the time being.

HiSoft has deserted the QL for the ST and Amiga, but remains interested in the Spectrum market. Show bargains included DevPace at £13 and discounts on ZX Basic, Pascal and C compilers – as well as the Plus Three CP/M package and CP/M compilers for C, Pascal, Cobol. Forth and even Modula 2.

Boss David Link had encouraging words for would-be users of MGT's SAM Coupe: "We are looking very hard at releasing SAM versions of Devpac and HiSoft Pascal initially, and there will be further news in January".

Amiga HiSoft Basic, mentioned in Shopper 17, has been upgraded to version 1.05. The latest release can link compiled Basic with C and 68000 assembler. The ST and Amiga versions of Devpac are about 25 percent faster, after code optimisation.

#### Networking

Shopper reader JE Morgan has written in to follow up our comments on QL-to-Spectrum networking in the July issue. It seems that the problems of networking from Spectrum to QL stem from a bug in the ZX network code, and affect all traffic from

Spectrum to OL.

JE Morgan finds that data sent from a 'JS' QL to a Spectrum is always received correctly, but transfers the other way suffer from corruption. Most of a message is correctly received, but the failure rate on individual characters is too high to resolve by sending the data three times.

Experiments show that the failure rate decreases as the size of each data packet is reduced, to the point that one-character packets are always sent correctly. I find the same result on my QL/Spectrum

It follows that you can network data from Spectrum to QL, but you can only send a few bytes a second as you must OPEN and CLOSE the channel for each character. This is fine if you leave the computers at it overnight, but JE Morgan prefers to transfer data through the serial ports. This link is harder to wire up correctly, but works reliably at speeds up to 1200 baud – roughly 120 characters a second.

#### Network

The latest Sinclair club to surface is Network, a magazine for users of the Plus D and Disciple interfaces. The monthly magazine is supplied on a Spectrum cassette, although it contains tips and programs for MGT disk users.

Editor Barry Turner explains "I decided to bring it out on tape because there are so many disk formats about". The cassette format makes it cheap to produce; each issue costs just £1 in the UK, or £1.50 overseas. Annual subscriptions cost £10 or £14 respectively, and the magazine has been published every month since August 1988. Back issues cost a quid each.

I sampled three issues of Network from last summer. The June issue starts by loading a simple menu section which lists the other parts and shows extra information when you point at them with the cursor keys. The rest of the tape carried four main programs, plus an 'Editorial' section presented in a format similar to Teletext screens.

Netfax pages turn at 30 second intervals, but you can skip to any page by pressing P and entering a two digit page number once the full directory appears. There were 17 pages in the June issue, mostly giving out addresses and appealing for information.

The ENTER key stops the program, leaving INK and PA-PER colours set the same, so it's hard to restart – eventually, I found that GOTO 5 did the trick. This format is neat, and potentially quite flexible, but not as easy to flick through as printed text.

The files take a minute or two to load, with no 'loading screen' to read while you're waiting. Most of the programs can be copied to disk or tape with GO TO 9998 or GO TO 9999, respectively.

The first routine is a disk copier for single drive users. This small Basic program copies every sector of the disk, whether you have used it or not. The data is read in 40K chunks using direct sector access. It takes about 20 You can enter values for each register and see their internal representation. Then you can compare, shift, rotate, increment or decrement values, add, subtract and perform bitwise arithmetic. A short explanation appears as each operation is performed.

The display is rather slow, and it's a shame that negative numbers cannot be entered or displayed. You can compliment or negate values, but the unsigned value is always shown.

MC Tutor is a useful, dynamic demonstration for budding machine code programmers, but you printer – but there's no cassette icon. Apparently, it works if you transfer all the files to disk before running, but I was not sent the program to do this.

The text menu was faster and

The text menu was faster and much more friendly, so I ignored the new one and used LOAD to read the next file. In July, Netfax became easier to use. It just printed text a page at a time and waited for a keypress. Two cheers for simplicity!

The column explains how masochists might use the new menu system Discus in their own programs, along with the icon designer and a 'link' utility. The machine code tutorials continued, with a short program accompanied by an animated view inside the processor, and more translated instructions – this time in cramped but relatively readable 32-column text.

The August issue included more machine code translations, a graphics demo which only worked from disk, and a friendly but sluggish sprite designer. Sprites are icons which can move.

Future issues promise code to animate moving sprites in Basic programs, and a utility to copy tape files to disk so the *Discus* loader works properly. My problems were blamed on bugs in some versions of the Plus D; the editor only has a Disciple.

Network has about 150 subscribers, but few readers contribute anything except their subscriptions. It is a little slapdash in its presentation, but reasonably price and interesting if you program the Disciple or Plus D in Busic.



The picture shows how the MC Tutor explains the machine code XOR instruction. MC Tutor was featured in the June 1989 issue of the Spectrum tape-zine Network

seconds to read or write each chunk, without interleave, and swap disks. Copying a whole disk is a long job, involving 40 disk swaps and about 15 minutes' work. The good news is that the program will copy ALL file types, including files that cannot be moved with standard commands.

The Icon Maker utility lets you design symbols 32 by 32 pixels in size, for use with a desktop control program published later. Icon Maker was slow and hard to control, with Interface 2 cursor keys and a menu of options that I could not provoke into action.

MC Tutor is another Basic program, designed to show the effect of 16 common machine code instructions. The contents of two simulated machine registers are shown onscreen, in decimal, hex and big binary digits. A third row of the display shows the result of operations involving registers A and B, with 'Carry' and 'Zero' flags like those in the Z80 proces-

need a book to go with it.We published a list of Spectrum machine code books in Shopper issue 7, but some of them are hard to find these days. Probably the best Spectrum code tutorial still around is Toni Baker's Mastering Machine Code on the ZX Spectrum from Computer Manuals on (021) 706 6000. The book was published by Interface, ISBN 0-907563-23-6, and costs £9.95.

The next file consists of rather untidy 64-column text which tabulates some Z80 code instructions on the screen, with their Basic 'equivalents'. These translations are sometimes helpful, but can also be rather misleading – some instructions have no Basic equivalent, and side effects like flag changes are not always mentioned.

The July issue ushered in a new menu system, with an erratic pointer controlled by non-standard keys, and instructions that vanish as soon as they appear. You're meant to point at the option you require, then the drive or

## Disk tips

Along with the tapes, Barry Turner sent a few tips for disk users. It can be difficult to tell disks apart, especially if you keep backup copies. Every QL disk has a 10-character name, set when you format it, but the Disciple and Plus D do not allocate space for a disk name.

PC and CP/M systems allow 'volume names'. These are special entries in the disk directory which hold the disk name instead of file details. You might set the volume name to 'Too Loud' so directory listings start with the disturbing message 'Volume in Drive A is Too Loud'. Alternatively, you might choose an informative name!

Barry points out that you can give Spectrum disks a short name, without using up precious directory space, by adding characters to the end of the name of the system file. Normally, this file is called 'SYS' on the Disciple, and

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'+SYS' on the Plus D, but the computer only checks the first part of the name, and you can put any characters you like afterwards - although you're limited to ten characters in total.

ERASE d1"SYS" TO "SYS PASCAL" adds the name 'PAS-CAL' to a Disciple disk, while ERASE d1"+SYS\*" TO "+SYS GAMES" gives a Plus D disk the label 'GAMES'.

Barry notes that sometimes programs cannot be saved to disk because the interface changes a few bytes of memory when it links new devices. However, you can configure a special system file that does not use the printer, flashing border or the Disciple's network.

If you use this system file when saving programs, you are likely to be more successful with sensitive programs that don't like the way the Disciple and Plus D overwrite information in the Spectrum channel tables. You can still save programs or screens to disk, using the magic button, and the printer and network will work as soon as you load your original system file.

Barry becomes the first lucky winner of a Shopper Guru mug for his tips. If you'd like a prize, please send your advice for QL or Spectrum users to Sinclair Scene. I can't promise to reply, but I'll mention the top tips here.

#### SAM arrives

After literally years of waiting, we've received a 512K SAM Coupe computer for review. Just after we finished writing last month's column we tracked down a pre-release machine, but the 'final' system Rom did not arrive until December 10th. MGT has several thousand orders, and says it will ship them all before Christmas.

The long wait seems to have been worthwhile. The Coupe is fast and colourful, yet it runs Spectrum programs. SAM Basic combines the interactivity of ZX Basic with procedures, multi-line blocks and linear addressing, so you can enter up to 480K of data or structured code. The cassette interface loads reliably at up to 5400 baud.

This is the most important launch on the Sinclair scene since the birth of the original Spectrum in 1982. There will be a comprehensive review of the Coupe, and its disk system, in next month's Shopper. Definitely.

Timothy Green thinks this is the ideal time of year to snuggle down with a warm Sinclair Power Supply Unit

#### CONTACTS

Care Electronics, 800 St Albans Road, Garston, Watford, Herts WD2 6NL.

CGH Services, Cwm Gwen Hall, Pencader, Dyfed, Cymru SA39 9HA.

Micronet, Dialcom Direct, The Oxgate Centre, 8-10 Oxgate Lane, London NW2. (0800) 200 700

> Network, 38 Kings Drive, Gravesend, Kent DA12 5BJ. (0474) 334909