

THUNDERBIRDS ARE GO COMPO-GAMES UP FOR GRABS

YOUR SPECTRUM

No 21 December No Limit 95p

HANDS-ON REVIEW

128K



Testing The New Spectrum

MEGAGAME

IMPOSSIBLE MISSION

Tips To Make It Possible!

THE BIG GAME!

SORDERON'S SHADOW

Adventure After Midnight

RED-HOT PREVIEW

RAMBO

The Man, The Map, The Megagame

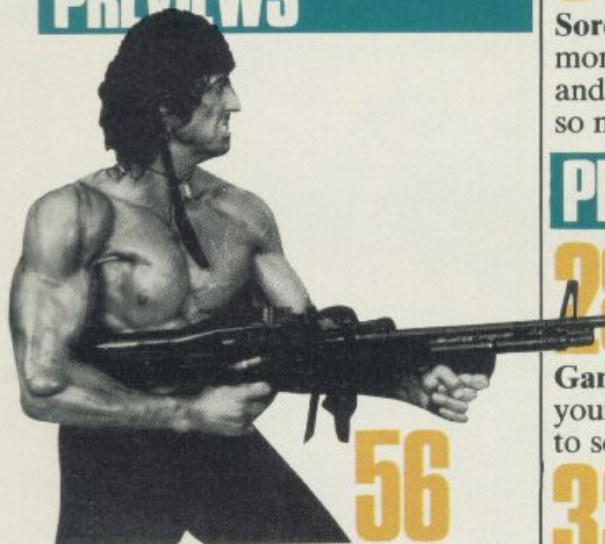
INSIDE YS

MEGAGAMES

37

Impossible Mission Nothing's impossible? Just wait till you've seen US Gold's mind-blowing megagame.

PREVIEWS



56

Rambo Disobey orders and go for blood with our red-hot preview of Ocean's game of the film.

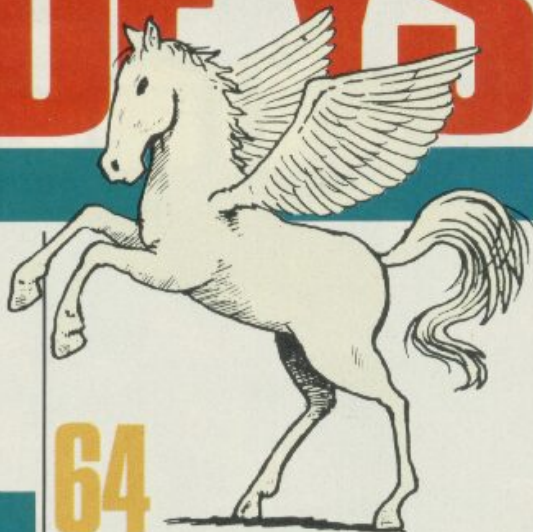
45

Rasputin See the storyboard — and get ready for Firebird's 3D thriller.

FEATURES

47

Joystick Jury This month's hot new games taken to trial and tested to death by the boys born with joysticks in their hands.



64

Sorderon's Shadow Beyond with more graphics, more characters and more adventure. There's just so much in it.

PROGRAMMING

28

Game Plan Write the game of your dreams! Check out the chart to see how it's done. . .

33

It's Compile Time *Colt* and *Mcode III* versus *Blast* — Basic compilers grow up!

69

The Grid Face the fear and fury in our latest 100 per cent machine-coded arcade game!



14

GAMES EXTRA

GO FOR GOLD 20
YS High Scorers... can you beat 'em?
SPECTRUM ADVENTURES 58
 It's a Spain in the ass! *Terrormolinos* and *Adrian Mole* plus adventure help and hope!
HACK FREE ZONE..... 80
 More uncensored solutions to your favourite games.

COMPETITION



It's **FAB** 55
 YS to the rescue with your chance to win a copy of *Thunderbirds*!

REGULARS

FRONTLINES..... 3
 It's all there — news, gossip, Virgin and Ferguson compo results plus *From The Hip*, *Microdrivin'*, *Hard Facts* and *Hacking Away*!
FORUM 23
 From the lunatic to the laid-back, your letters keep on coming!
BACK ISSUES 74
INPUT/OUTPUT 75
 Free ads for your Speccy swops and sells.
BINDERS 76
 Stay clean, stay together!
SUBSCRIPTIONS 79
 Get it while it's hot!

CONTACT

01-631 1433

EDITOR

Kevin Cox

PUBLISHER

Stephen England

SUBSCRIPTION ENQUIRIES

Suzie Matthews

01-580 0504/631 1433

ADVERTISEMENT

ENQUIRIES

David Baskerville, Neil Dyson

01-636 2416

YS HELPLINE

Peter Shaw

(YS Helpline enquiries between 10am-1pm and 2-5pm, Wednesdays and Fridays only!)

Your Spectrum, Sportscene Specialist Press, 14 Rathbone Place, London W1P 1DE.



55,126



Dragged back for another term, Eric continues his one-man fight against the Education system. All his old adversaries are there, plus escapees from the Biology room and, even worse, girls! Lucky he stocked up on stink bombs over the holidays!

Back to Skool (48K Spectrum) — £6.95
Skooldaze (48K Spectrum & CBM64) — £6.95
Available from all good computer shops
or direct from:

MICROSPHERE

Microsphere Computer Services Ltd.,
72, Rosebery Road, London N10 2LA.

FROM THE H/P



Brring-brring, brring-brring! There goes the helpline again — look, you're gonna have to excuse me... Mmmm, thought so. That was yet another call about the *Sprite High, No Limit* program that appeared in the October ish. One measly misprint and my life is in tatters. We said that you only needed 16 bytes to save the Designer Code when it should've read 164. An' as if that wasn't bad enough, the problem spilled over onto that month's Digi'Tape. The mag was used as a reference when the tape was mastered, so the Designer Code has only 16 bytes on the tape. Oops!

For you, there are two ways out of the situation. You can either type in the remainder of the Designer Code to fill in the gap or buy issue 20 of Digi'Tape where they'll be a working version. For me, there is only one way out... farewell cruel world!

Oh OK, you talked me out of it. (Drat! Ed). Or at least Pete Mackin from Thruxton has with his query about Hex loaders. He's looking for a quick'n'easy way of sussing out a hex number's decimal equivalent. What he doesn't want is a long program that'll force him to mess about in machine code. Well, Pete, the method I've come up with is quite sneaky — it uses the unusual Speccy feature of numeric variable evaluation from within a string. Now in hex, instead of going from 9 to 10, you move from 9 to A — but A still has the decimal value of 10. The letters that come after, follow a similar pattern until they reach F, and that's 15. Now as hex is base 16, the next hex number after F is 10 and that represents 16. So, the second column of a hex

number is in 16s rather than tens. Are you still with me? Right type in this short routine that'll evaluate any single byte hex number (anything from 00-FF). To keep it short, it hasn't got any error trapping and it ain't exactly what you'd call user-friendly — but it works, and I reckon it's exactly what Pete's looking for:

```
10 INPUT AS
20 LET A=10: LET B=11:
LET C=12: LET D=13: LET
E=14: LET F=15
30 LET N=VAL AS(2)+
(16*VAL (AS(1)))
40 PRINT AS;"=";N
```

Oh, and one more thing — you must remember when you're using this routine that Caps Lock should be on.

And from one neat use of Basic to another. Craig Thompson from Brighton is looking for a routine that'll allow him to 'input' on any part of the screen. I'll go along with that, Craig — I've always reckoned that entering data at the bottom of the screen is boring, plus it's pretty cheapskate.

Right, I expect you're just waiting for me to launch into a string of POKES. Just shows how wrong you can be. POKES are all very well, but as you know (probably from first-hand experience), they have a nasty habit of working irrationally. So, just to be different, here's a method that doesn't need the memory modifiers:

```
INPUT AT 22,00: AT 10,10:
"ENTER DATA"; AS
```

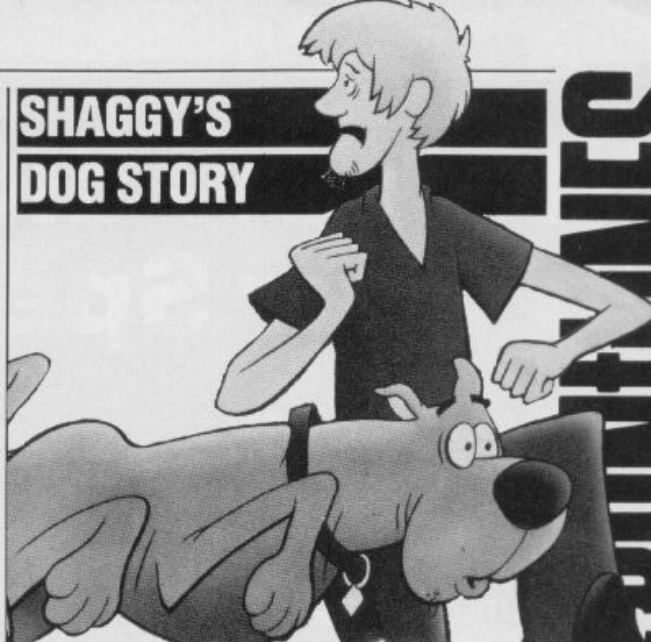
There's no great mystery about how this works. As you can't normally enter data through anything but the lower screen channel — those two lines at the bottom of the screen — the easiest way round the problem is to extend those two lines to twenty-four. Then you can input where you please. Now that *is* clever!

That's my lot for this month, so I'll be getting back to my cold coffee!

Catch you on the phones.

Troubleshootin' Pete
Pete's phone lines are open Wednesdays and Fridays only. You can phone him on 01-636 2416 anytime between 10am-1pm and 2pm-5pm.

SHAGGY'S DOG STORY



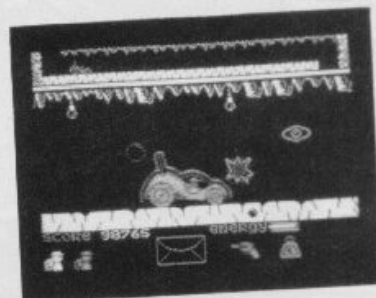
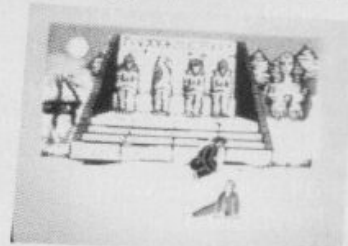
Remember Scooby Doo by Doooby Doo, that cuddly canine of Hanna Barbera (*Who she? Ed*) cartoon fame? Well he's back with a vengeance to star in his very own computer game, *Scooby Doo in the Castle Mystery*.

Elite describes the game as "the first every computer cartoon". It features those daredevil detectives Velma, Daphne and Fred, the evil Mrs McUrloch and that creepy coward, Shaggy. There's also a special guest appearance by Sam Shark of Jaws fame.

Elite reckons they've started a new craze in computer games (hope that's not a shaggy dog story) and Sales Director Steve Wilcox says, "the best comparison we can draw is with laser disk games."

If you wanna sniff out more details give Elite a buzz on 0922 55852.

Aah-so! Honourable System 3 Software has jumped on the honourable bandwagon and gone for a ride round the world. The game is the new and almost original *International Karate*. So, for an exploding fistful of £6.50, you can travel to exotic places, meet interesting people and beat them up...



Eye eye, what's goin' on 'ere then? It's a shot from a new game from a new company... and it looks like fun! Christian Urquhart (really) ex of Ocean and Gremlin Graphics has joined Mike Smith of Alphabatim, and this is their first offering, *Robot Messiah*. It'll be out this Christmas with a price tag of £7.95 and that, as they say, is all we know!

DAYLIGHT ROBINRY

Someone's taking the mickey! A new adventure game from Silversoft called *Robin of Sherlock* is due for release in November — and it's not all it appears to be, funnily enough. It's a multi-quest parody that falls somewhere between Melbourne House's and Adventure International's — and aims to have you falling about with laughter.

If you want to find out what's next on Silversoft's spoof list give 'em a ring on 01-985 5614. The Hampstead Hobbit?

across the pleasant grass to the east, the easy hollow where he slept was visible.

At this point, Robin noticed partly Friar Gorbosmetnik

Oh However, Robin couldn't go in that direction.

Oh However, Robin couldn't go in that direction.

The immense Friar passed his fist venison-burger into the huge orifice that he obtained was his mouth.

Loud rumbling preceded a monstrous explosion....

"Bang!"

Watson your screen? Hood of thought it's Robin?

Add a new dimension to your Spectrum

SPD1 Disk & Printer Interface

- NEW — SNAPSHOT feature copies practically all tape based SOFTWARE direct to Disk.
- Uses standard BBC type Drives and Printers.
- Simple commands such as SAVE★"name"
- FREE Disk full of UTILITIES and HELP files.

68FX2 Professional Keyboard

A rugged high-quality printed keyboard with 68 full travel keys, full space bar, numeric and cursor pads and many individual keys.

LMT Products offer professional quality and ease of use at a price you can afford.

Imagine having almost a MEGABYTE of storage on floppy disks, using FULL SIZE Daisy or Dot Matrix printers all coupled with a REAL Keyboard, making Computing a pleasure.

£89.95

inc. VAT
inc. P & P

SPECIAL OFFER

Both products are separate but for a combined price of **£125** you have **BOTH** - **SAVING £15!**

£49.95

inc. VAT
inc. P & P

I would like to ORDER/receive information on...

- ☐ Combined Keyboard/Interface PACK @ **£125.00 inc. VAT**
- ☐ SPD1 Disk & Printer Interface @ **£89.95 inc. VAT**
- ☐ 68FX2 Professional Keyboard @ **£49.95 inc. VAT**
- ☐ LMT Disk Drives and Printers

Name _____

Address _____

P/Code _____

☐ I enclose cheque/postal order ☐ charge my Access/Visa

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Please allow up to 28 days for delivery



Your Spectrum's best friend!

LMT Computers Limited
South Street Commercial Centre
Bishop's Stortford, Herts CM23 3AL
PHONE 0279 506801/54437

FOR THE CHOP

These three pale-green people are the luckless winners of the Virgin 'Spot-the-difference-between-the-helicopters' competition. As appropriate punishment for being such clever-clogs Simon Kinder, Keith Fenton and Thomas Greenbank were flung around the skies above London in a real chopper, enabling them to comprehensively spot-the-difference between up and down, ill and well, and alive and dead.

Keith, 27, from Sleaford in Lincolnshire, had some idea of what to expect having flown in a helicopter on a TA training exercise, but he acknowledged 'this would be different'. Too right, a teensy little four-seater aerial bicycle on just about the windiest day of '85 — no wonder Simon (an ashen-faced 12 year-old from 'Uddersfield) kept tight-lipped, but Thomas — also 12 — seemed to



And here comes a chopper to chop off your ...

wish he'd stayed home in Haslingfield, Cambridgeshire as he cheerfully admitted to being 'a bit shaky'.

Everybody took last pictures of each other for next-of-kin, the pilot had a last-minute read of the Owners' Instruction Manual, then it was brown paper bags all round and off into the strato-thunderus. How

thoughtful it was of Virgin Games to have treated 'em all to a slap-up lunch just before take-off, though we're sorry YS can't help out with the dry-cleaning bills chaps...

We bet you can hardly wait for the 'Spot-the-difference-between two Great White sharks' competition!

IT'S GRRRRREAT!

Gremlin Monty Mole Graphics has snapped up the license for the new adventure role-playing books, *The Way of The Tiger*.

Apparently, Gremlin wasn't the only software house with its eye on the tiger but authors Mark Smith and Jamie Thompson finally succumbed.

For those of you not in the know about *The Way of the Tiger*, the books follow the toils of Avenger, a Ninja warrior, in his constant battle against the forces of evil (*I know the feeling. Ed*).

If you want a few more clues phone the Gremlins on (0742) 753423.



ONE STEP BEYOND

This is gonna be some Christmas for the Speccy! Latest to confess what it's up to is Beyond Software.

Enigma Force is the sequel to *Shadowfire*. It's not Zoff-en that you get the chance to carry on after you've completed a game but now you can join a four man Enigma team in a fight against the tyrant of a warring planet. *Enigma Force* carries a £9.95 tag.

Bounces, at £9.95, is a martial arts game that gives the player the choice of eight characters — funny ol' name for a karate game!

Finally, we have received a secret dossier on the new *Spy vs Spy* game. It takes place on a deserted volcanic island inhabited only by that famous pair of two-tone undercover agents.

The man who can reveal the rest of Beyond's secrets is Victor Wheeler on 01-353 2320.

PAPER DATA

Advanced Z80 Machine Code Programming

by William Nitschke
Interface Publications/£12.95



There are Z80 books and there are Z80 books. And when it comes to Interface Publications there are even more Z80 books. Even as the public is drowning in the deluge of Z80 books, Interface has thrown in another one to observe the Archimedes bath-tub-effect to the marketplace.

In fact, Interface has been churning out Z80 books since the ZX80 warmed its first egg on its heatsink. Talking of which, William Nitschke must have started on his rather unoriginal task about the same time Uncle Clive reasoned that a home computer for under a ton would probably buy nice digs in Cambridge. For this book is not just out-dated — it's positively archaic. Most of the examples deal with the TRS80 model 1 and the short-lived Laser 200 (cor, I bet Nitschke was one of the few that bought one!) The somewhat more successful Spectrum is mentioned once or twice but not in detail.

This book does have some useful information in it but it's also got a lot of noddy stuff as well. Take the section on writing commercial games — I'd be embarrassed to see 2D and 3D mazes in block graphics in the pages of YS let alone sitting on dealers' shelves. For the foolhardy, you can buy this book from most WHSmiths or even send a £12.95 cheque to Interface at 9-11 Kensington High Street, London W8. But if you really want to know about Advanced Z80 machine language, you'd be better off waiting until it's serialised on the back of your cornflakes packet!



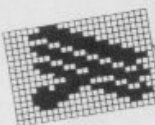
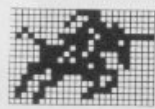
Tony Samuels

FRONTLINES

RIGHT SPRITE

Remember the Ferguson Sprite Compo from issue 18? The standard of the entries was so high that running battles were fought over which should be the overall winner and carry off a Ferguson Monitor Colour TV. Everyone had their favourites but someone had to be art broken. So, after the scuffles had died down A Burrows of Crewe came out the winner with his portrayal of the editor. What d'ya mean it's an Indian elephant? Can't say I can see the difference.

Coming up close behind were the charger from G P Craig of Dundee, Alex Revesz from Holland for his amazing Roger Willis look-alike, and finally C Powell from Hemel Hempstead for his high-flyer, the tri-plane. Ferguson cassette recorders are on their way to you all.



The sprites is right!

hacking away

It's just not *Fairlight*... well, not any more it isn't as **Chris Wood** presents more hundred percent hacks and guaranteed no-joke POKES.

Let's be modest and not admit that we're going to start with a crack-hack. Remember the *Fairlight* review last month? You may have noticed that **Dave Nicholls** did not give any POKES for the game. To spare his blushes, cracking *Fairlight* is not a trivial task. The actual protection isn't that hard but the tactic is to wear you out long before you make it — there's a total of 140 stages of decryption from you hitting LOAD to the game starting!

First it decrypts itself 20 times just to turbo-load the second turbo-loader which then decrypts itself before loading the actual game. As the routines are cumulative, it should be impossible to pop in any

POKES as the game loads. Enter **ZZKJ** (whose full name is so long we had to leave it out last month even though he supplied the *Gyron* stuff) and the impossible is a short program away. Run **ZZ**'s program and you'll get infinite lives, the ability to carry as much as you like, five barrels and the ability to open any previously locked doors!

If you don't want all of these options then just miss out the relevant DATA lines, being careful not to omit line 400. When you run it, you will not see the *Fairlight* loading screen although its attributes will load and the program will run as normal. Remember you saw it first in *YS*!

Next please! Here's a

short and sweet one from **Martin Barrio** of Wales. Type this in, wind the tape past the first loader and then enter **RUN** and press **PLAY** to give you infinite lives in *Phoenix*.

10 CLEAR 24500: LOAD "p2" CODE 24532
20 POKE 29375,0: LOAD "p3" CODE: RANDOMIZE USR 30105

Which reminds me — if you send in single POKES, and it's not immediately obvious how to get them in, please please provide a small program to do the work. I mean, some people have sent in single POKES for *Alien 8* and *Knightlore*! You might like to see your name in print but the people who try them are going to think you're a right Anorak (see *YS* issue 18, page 15) when they don't work. End of soapbox spot.

Meanwhile if you enjoyed looking at the unused sprites in *Jet Set Willy* using the little program in issue 16, **Christian Keane** of Liverpool suggests you try some of these numbers instead of the 512: 300,350,10,170.

Jumping Jack is our next victim courtesy of **Hakan Strom** from Sweden. For infinite lives run the following program and then delete it by typing 10 'Enter' and 20 'Enter':

10 FOR f=23296 TO 23311:
READ a: POKE f,a: NEXT f
20 DATA 175,1,141,117,
2,3,2,3,2,62,24,3,2,195,
66,111

MERGE in the first program on the *Jumping Jack* tape and then enter:

POKE 26034,0: POKE 26035,0: RANDOMIZE USR 26030

Start the tape again to load and run the game.

Simon Grice from Chorley has mastered the facts of life — well at least he's sussed the POKES for the *Birds and the Bees*. MERGE in the Basic loader and insert the following POKES before the USR command and then RUN it:

POKE 37852, lives
POKE 37664, start screen number-2
POKE 37088, number of

flowers to visit*5

Keg Davies from Lancashire has supplied a set of POKES for *Glug Glug* and *Empire Strikes Back*. For *Glug Glug*, MERGE in the Basic loader, add POKE 23316,201 before the PRINT USR and run it. The game will load and stop; you can enter any of the POKES below and use RANDOMIZE USR 34349 to start playing:

POKE 33430, lives (from 1 to 11)
POKE 34139,0 (infinite lives)
POKE 31288,0 (unstoppable bullets)
POKE 31482,0 (permadeath for nasties)

And for *Empire*, wind past the first loader on the tape and run this one instead:

10 CLEAR 23999: LOAD ""
CODE: POKE 23309,251:
POKE 23310,201: LOAD ""
CODE: RANDOMIZE USR 23296

This will load the game and then stop. Enter POKE 53322,0 and RANDOMIZE USR 28500 to start playing. When you hit Fire on the moons level, you'll find the screen sticks on red and you just keep getting that energy...

If you don't feel up to POKEing and you play Micro-Gen's *Herbert's Dummy Run*, you're in for a treat... oops cheat! Pop into the room with the ropes to the left of the starting room and make sure Herb is facing left. Hold down the keys 'C', 'H', 'E', 'A' and 'T' (wonder why they picked those keys?) and you can watch the magic happen. You've now got infinite Herberts.

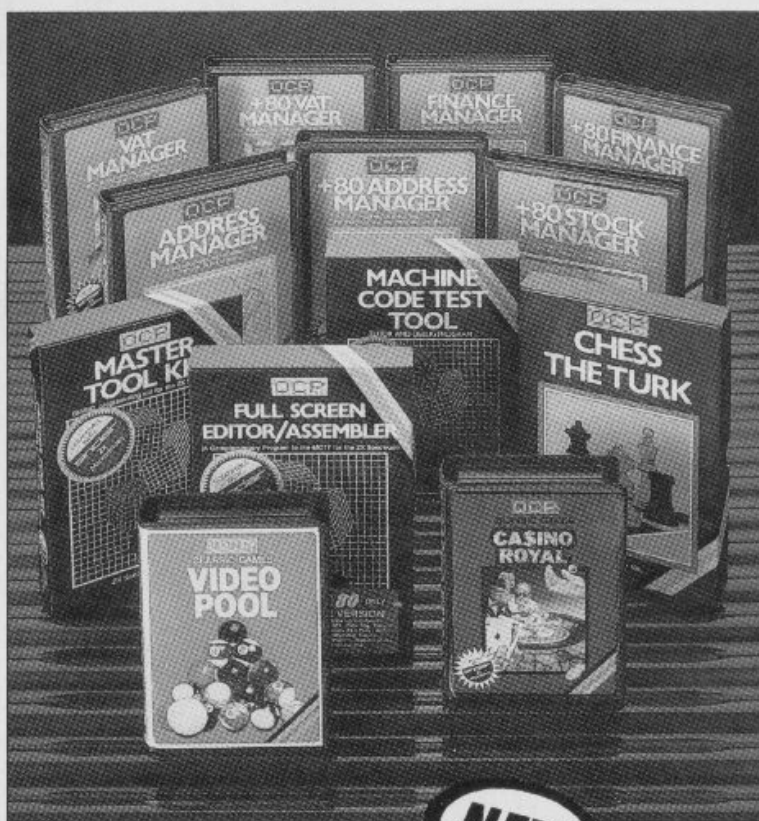
Talking of infinite, the viability POKE for *Gyron*, given last month is much more viable if you POKE 29952 and not 299552! Maybe I need a POKE for infinite accuracy...

Finally, a desperate plea from **R Hollinson** of West Yorkshire for any POKES for *Quicksilver's Glass*, I'd dig them up myself but I haven't had a chance to buy the game yet — is anyone out there ahead of me? Send you hacks, however humble, to Hacking Away, *YS*, 14 Rathbone Place, London W1P 1DE.

```
1 REM FAIRLIGHT POKEING PROG
10 LET T=0: FOR N=18000 TO 181
75: READ A: LET T=T+A: POKE N,A:
NEXT N: READ A: IF T<>A THEN P
RINT "CHECKSUM ERROR": STOP
20 FOR N=20000 TO 1E9: READ A:
IF A<999 THEN POKE N,A: NEXT N
30 RANDOMIZE USR 18000
100 DATA 221,33,203,92,17,93,5,
62,255,55,205,86,5,48,241,6
110 DATA 20,33,130,94,243,49,0,
91,205,195,70,33,86,96,17,21
120 DATA 209,1,153,1,237,176,33
,40,209,17,40,145,1,19,1,237
130 DATA 176,235,54,201,6,9,38,
145,17,186,70,26,111,203,182,19
140 DATA 16,249,205,40,145,33,1
74,210,6,120,62,56,50,176,92,205
150 DATA 195,70,62,195,50,198,2
20,33,181,70,34,199,220,62,55,50
160 DATA 233,218,195,223,218,23
7,176,195,32,78,141,197,200,221
170 DATA 224,229,232,235,247,19
7,229,62,32,237,177,182,242,197,
70,35,209,237
180 DATA 82,235,66,75,17,246,70
,237,176,229,235,54,237,35,54,95
190 DATA 35,54,201,205,238,70,5
0,239,70,225,193,16,214,201,62
200 DATA 58,61,61,230,127,237,7
9,184,146,147,129,129,236,244,22
5,247,208,22741
320 DATA 175,50,232,241: REM
Infinite Lives
330 DATA 62,24,50,110,245: REM
No More Weight Limit
340 DATA 62,24,50,23,248: REM
No More Locked Doors
400 DATA 201,999: REM Data End
Marker
```


Are You Taking Your Spectrum Seriously?

Your Sinclair Spectrum is a powerful computer, not just a games console. Oxford Computer Publishing unleash that power to make your Spectrum useful and help you perform important tasks. The Manager series of business programs has thousands of satisfied customers over the last three years. Your Spectrum can do jobs normally associated with business computers many times the price. The Utilities were written to create our own application software. They are offered to you



as proven reliable programs that have stood the test of our own usage and become industry standards. The classical games are realistic simulations of proven widely played "real" games.

See your local dealer or order direct by indicating the items required, by ticking boxes, complete the coupon and return the advertisement. Alternatively, phone the OCP Hotline on (0753) 888866, stating your Access or Barclaycard Number.

BUSINESS PROGRAMS

ADDRESS MANAGER

A professional address, filing and retrieval system, with full screen editing. Stores up to 350 addresses on cassette and up to 6000 addresses on floppy disk. (In separate files) 32 column format - £8.95 ☐ 80 column format - £19.95 ☐ **NEW** K-DOS tape/disk cassette - £29.95 ☐ SP-DOS floppy disk - £29.95 ☐

FINANCE MANAGER

Stores and reviews practically all business and domestic accounts. Completely menu driven for ease of use. Stores up to 250 names on cassette and up to 6000 on floppy disk. (In separate files) 32 column format - £8.95 ☐ 80 column format - £19.95 ☐ **NEW** K-DOS tape/disk cassette - £29.95 ☐ SP-DOS floppy disk - £29.95 ☐

STOCK MANAGER

Features full invoicing, sales totals, price lists and re-order requirements and comprehensive Master File with full breakdown of stock and VAT. Stores up to 600 product lines on cassette and up to 6000 on floppy disk. 80 column format - £19.95 ☐ **NEW** K-DOS tape/disk cassette - £29.95 ☐ SP-DOS floppy disk - £29.95 ☐

VAT MANAGER

Will check gross and nett values of a period's sales plus exempt totals and up to 8 classes of transaction e.g. standard rate, import/export etc. Calculates VAT paid and received and hence the nett tax payable/receivable. 32 column format - £8.95 ☐ 80 column format - £19.95 ☐ **NEW** K-DOS tape/disk cassette - £29.95 ☐ SP-DOS floppy disk - £29.95 ☐

WORD MANAGER

This word processor has been designed for "user friendliness". The following features should particularly appeal to users of the "Tasword II" program, with which it is text compatible. The software includes an address filing supplement with screen editing. Extra features include:

- ★ Simple "single keystroke" insertion facility.
 - ★ The cursor can be moved on to start a new paragraph by a single keystroke. TAB key also available.
 - ★ The program works with cassette tape, Sinclair Microdrive, Opus and other disk systems.
 - ★ Texts can be printed out on any line length up to 128 characters.
 - ★ Text blocks of any length can be transposed, copied or deleted.
 - ★ The OCP program can print out text while another is being written or edited.
- The Word Manager - £12.95 ☐
Disk Versions - £19.95 ☐

UTILITIES

MASTER TOOL KIT

This versatile program gives you a re-number feature, string - search, a real time clock, a graphics generator and alarm plus many other features that'll change your Spectrum into a 'full spec. machine'. Master Tool Kit - £9.95 ☐

FULL SCREEN EDITOR/ASSEMBLER

An essential tool for writing Machine Code whether you're a beginner or an expert. Includes full screen input, comprehensive documentation, sophisticated expression

NEW

evaluator, SNAKE demonstration mode, extra micro drive facility etc. It also drives 32 and 80 column printer interfaces from the same cassette.

Full Screen Editor/Assembler - £12.95 ☐ **NEW** K-DOS tape/disk cassette - £29.95 ☐ SP-DOS floppy disk - £29.95 ☐

MACHINE CODE TEST TOOL

Test and Display Machine Code instructions as they're written. This versatile program can co-reside in your Spectrum with the Full Screen Editor/Assembler to provide a complete Machine Code environment. Features Hex: Decimal conversion routine, character generator, etc. etc. Machine Code Test Tool - £9.95 ☐

GAMES

CHESS-THE-TURK

The ultimate chess challenge. 6 levels of play, 'Blitz' chess, printer output, plus real time clock and alarm. Chess-the-Turk - £5.95 ☐

CASINO ROYAL

Two way program featuring Roulette and Pontoon. You're allocated money to win - or lose - a fortune. Plug in Microspeech adds realism and both games are fully explained through a comprehensive on-screen menu. Casino Royal - £5.95 ☐

VIDEO POOL

All the fun and challenge of pool at your fingertips. 1 or 2 people play using joysticks or keyboard. Excellent graphics, sound and colour add to the game's reality. Video Pool - £5.95 (Not Microdrive compatible) ☐

Please send your order to:
Oxford Computer Publishing Limited
77a Packhorse Road
Gerrards Cross Buck. SL9 8PQ



If you would like a copy of our full colour detailed catalogue - please tick box. ☐

Name

Address

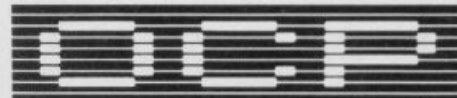
Amount payable £

Please make cheques/postal orders payable to OCP Ltd

Cheque/PO Number

Access/Barclaycard number (please delete)

Signature



Simply The Best

Wafadrive, Opus and other media versions of our programs will be available in the near future. Contact us for further information on 0753 888866.

We'll take you bey

QUICKSHOT II AUTO RAPID-FIRE JOYSTICK

SPECTRUM INTERFACE



ond the Spectrum.

SPECTRUM UPGRADE KIT

TURBO INTERFACE

Four great new add-ons from Ram, Number One in everything for the Spectrum...

TURBO INTERFACE - NEW LOW PRICE

Our unique Turbo Interface outperforms any Spectrum interface - it works with ROM cartridges, 2 standard joysticks, and there's a full expansion bus at the rear. The Turbo supports Kempston, Protek and Interface 2 software and loads from a cassette - or instantly from a ROM cartridge. It really makes the most of the Quickshot II's fast action, and with its unique power safety device and a new Reset button, it's even more amazing value at just £18.50.

QUICKSHOT II AUTO RAPID-FIRE JOYSTICK

The famous Quickshot II is the top games joystick, with a sleek trigger fire button for quick reactions, an auto fire switch for continuous shooting and a new, improved grip. Revolutionary built-in stabilising suction cups mean a sure, firm grip - a snip at £9.95.

SPECTRUM INTERFACE

Boost the power of your Spectrum, or Spectrum +. This Kempston-compatible interface gets the most from your games - electrify your enemies with real power and lightning-fast reactions right under your fingertips. Costs just £9.95.

SPECTRUM UPGRADE KIT

If you've a 16K Spectrum micro, this handy and inexpensive add-in kit boosts the RAM memory to a powerful 48K, so you can run the latest and greatest software, the most exciting games around - and expand your own programming possibilities! Only £21.95.

Where can you get your hands on Ram's amazing Spectrum add-ons? You can see them at branches of Boots, Menzies, Spectrum Group computer centres, and good computer stores everywhere. Or return the coupon below.

To: Ram Electronics (Fleet) Ltd (Dept YS), Unit 8, Redfields Industrial Park, Redfield Lane, Church Crookham, Aldershot, Hants GU13 0RE. Credit Card hot line: 0252 850085. (Access & Visa).

Please send me

_____ Spectrum Turbo Interface(s) at £18.50

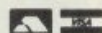
_____ Quickshot II Joystick(s) at £9.95.

_____ Spectrum Interface(s) at £9.95.

_____ Spectrum Upgrade Kit(s) at £21.95.
(Please state issue 2 ☐ or 3 ☐)

+ £1 per order P + P (£3 Overseas) **TOTAL £**

☐ I enclose cheque/postal order ☐ charge my Access/Visa



Expiry Date ____/____/____

Name _____

Address _____

Postcode _____

Telephone _____

24 Hour despatch for credit cards and postal orders (7 days for cheques.)
All products are fully compatible with the Spectrum, Spectrum + and Sinclair Microdrives.

Ram Electronics (Fleet) Ltd (Dept YS), Unit 8, Redfields Industrial Park, Redfield Lane, Church Crookham, Aldershot, Hants GU13 0RE. Tel: 0252 850085.



Trade and export enquiries welcome

CREATE ELECTRONIC ART ON YOUR OWN TV SCREEN WITH THE SPECTRUM DOODLER!

Camrods Graphic Design, Cambridge



Software designed in conjunction
with Sinclair Research

**Draw straight on to
your screen!**

The Spectrum Doodler is a lightpen that enables you to draw straight on to your own tv or monitor screen. Pen reaction is instant and requires no programming knowledge. Software is displayed on 'pull-down' menus with icon symbols so that you can easily select the feature you require by simply pressing the pen against the screen.

**16 colour palette with
flashing option!**

Using a palette of sixteen colours you can choose the line thickness most suitable for your work.

14 options including text!

Besides line thickness, there are modes to enable you to create instant squares, circles and triangles. You can fill in areas with colour

**Store your work on
cassette or microdrive!**



The Doodler Software allows you to save complete or incomplete pictures for rework or for use with your own programs at a later date.

Auto trim feature!

The pen has a trim feature that automatically sets the pen's accuracy to the tv or monitor screen you are using.

Robustly made, fun to use!

The lightpen is robust and comes complete with software on cassette which can be duplicated on to microdrive cassette. There is an instruction manual that's simple and easy to understand and an interface box for connection to your Spectrum computer. You can even write your own software for the Doodler if you wish.

To get your own Spectrum Doodler just send a cheque or postal order for £29.90 with the completed coupon. Free post and packing in UK only.

I enclose a cheque/postal order for E _____
(includes P+P) for my Spectrum Doodler(s). Allow 28
days for delivery. Full refund if not completely satisfied.

Name _____

Address _____

Postcode _____

FE Electronics
163 Huntingdon Road, Cambridge CB3 0DH

SPECTRUM
Doodler
LIGHTPEN

Rabbit tales ... air-raising experiences ... shaggy dog stories ... Volcanic eruptions ... prize-winning elephants ... new Spectrums for old ...
Elementary my dear Robin — it's all in Frontlines ...

YOUR NEW SPECTRUM

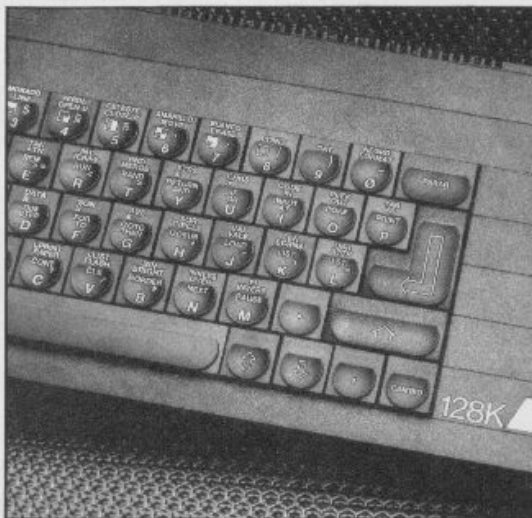
As we predicted a couple of issues back, the new 128K Spectrum has been launched this side of Christmas but on the other side of the Channel — in Spain. The surprise appearance came at the Sonimag exhibition in Barcelona at the end of September. The new machine has been released by Investronica, Sinclair's Spanish distributors, who were closely involved in its development.

At first sight, the 128 looks very like the Spectrum+, with the same keyboard we've come to know and curse! Underneath though there are a few changes. The microphone and ear sockets have been shifted round from the back to the left

hand side. And there sitting next to them is a RS232 socket. Now, at the back, you'll find a built in RGB socket for connecting the computer straight to a colour monitor.

But the big surprise is the separate calculator keypad attached by a lead to the computer. There can be few people who would've predicted its appearance with the new machine — and perhaps not many more who'll find a good use for it!

So, when will the 128 make its appearance over here? Sinclair Research is only saying that it won't be this year. But then again, its very existence has been denied right up until its appearance. Mind you, there are still an awful



The 128K Speccy ... in the UK soon?

lot of 48K Spectrum+'s sitting around waiting for Santa to sack 'em up. And now for all those other burning questions about the 128. Is it 100 per cent software

compatible? Is it faster than the 48K Speccy? Do you need an Interface 1? Is the new three channel sound chip inside? To find out, turn to page 14 and read

how Max Phillips overcame the temptations of the Sangria and Spanish sun to bring you the first full hands-on review of the Speccy 128.

Hare's Virgin rabbiting on about its latest triumph — the resurrected Rabbit Software. Virgin rabbits? Wot a mixamatoxis (sounds pretty hare-brained to us)! The first game to hop your way is The Great Fire of London at only £3.99 — warren offer! (Ha ha very bunny. Ed)

NEW YOUR SPECTRUM

You've read about the new Spectrum, now read about the new *Your Spectrum*. Your favourite magazine (Yes, this one — what did you think? Ed) is changing. From next month you'll find more of everything that's made *YS* so successful. For you, there'll be more pages of editorial — almost double the number that you're used to. There'll be more games reviews, more programming, more of just about everything, in fact. (And if you're really lucky there may even be more Ed's comments! Ed). Plus there'll be games maps, cartoons and a few surprises thrown in. For us, there'll be late nights, working all weekend, sore fingers from all the extra typing. (And probably a cut in wages to pay for the extra pages if you don't stop moaning! Ed)...

And just so you don't miss us on the shelves next month, there'll be a game cassette stuck slap bang on the front cover

of the new look *YS*. That's right, a free demo version of *Rasputin* which promises to be the hottest game this Chrissie. How can you turn down a chance like that?

The big question, of course, is why we're changing a magazine that's as close to perfection as you can possibly get. OK, who's the wise guy who said it's 'cos we're all big heads! Well, it's all down to you — or it is if you filled in the readers' survey in issue 17. The great cry that came out was for more of everything — and that's just what you're gonna get! An awful lot of you got the Ed worried by saying that you wanted to see him sacked but there ain't a hope in hell of that happening — not, we might add, that we'd want it, of course, and anyone who spreads rumours about street parties and the rest of us going on month long hols, is telling whoppers, honest... sir. (Glad to hear it. Ed)

And now the moment you've all been waiting for — the winner of the Sinclair pocket TV for the best suggestion. A slight hitch occurred 'cos every time we asked the Ed to choose one, he kept coming up with the creepy crawlers who said they'd double his salary. (Well, I thought it was a very sensible suggestion! Ed). In the end we plumped for Michael Sellar of Edinburgh who said that if he was the Editor he'd make the mag bigger both in pages and content.

So sensible was his suggestion, in fact, that we're going ahead with it from the next issue. So, from the January issue make sure you look out for a bigger, better *YS*. You'll find full details of all the changes further on.

Oh, and we nearly forgot. There's one rather special change we haven't mentioned yet — the new look *YS* will be called... Well, turn those pages fast!



FRONTLINES

GERM WARFARE

Pour yourself a cup of Domestos and settle down for an evening with *Gerry the Germ*. He's the cute little killer who features in Firebird's new game of that name. Your task is to guide Gerry round all the squidgy bits inside a human body with the final goal of killing his host. But don't expect your knowledge of biology to see you through — these are some mighty interesting intestines. Gerry has to row a boat across the bladder, he takes a train

from the pancreas (*Saints alive! Ed*), and the kidneys are set in a lavatory. The emphasis in *Gerry the Germ* is very much on fun and fantasy — there are no high scores and no time limits.

Gerry is one of four new games from Firebird due for release at the end of November that come into a new category — Hot games. The other three in this initial Gang of Four are *Rasputin*, an amazing Ultimate-like 3D arcade adventure (*Of which much more later! Ed*), *Runestone*, which made a brief appearance once before from Games Workshop and *Costa Capers*, in the tradition of *Technician Ted*. They'll all cost £7.95 and you'll soon spot the Hot boxes 'cos they're red.

For more red hot news from Firebird phone Phil Pratt on 01-379 6755.



Spend a day on the bleach with *Gerry the Germ*.

OPERATION CARETAKER...

Feel like bashing your head against a brick wall when your copy of *Jet Set Willy II* has failed to load for the umpteenth time? Well bash no longer 'cos Global Software claims to have the answer.

Global's new package, *Operation Caretaker* promises to solve all your problems — apart from a pounding headache. In case you haven't already guessed, it's an azimuth head alignment system. And for those of you that don't know, azimuth is just a posh way of referring to the position of the head in your cassette recorder.

The ideal head position for reliable loading and saving is at right angles to the tape and an azimuth alignment system lets you set the heads as close to this as possible.

Operation Caretaker contains a cleaning and demagnetising tape, a

small screwdriver and of course a natty little piece of code. The program works by listening to a pre-recorded signal on the tape. It already knows exactly how the signal should sound, so a few calculations are all that's needed to determine whether the tape is running at the correct speed, or if the clarity of the signal is good enough for a successful LOAD.

Using both graphics and text, the screen shows the tape speed and the quality of the signal — if it's not giving a good reading you'll need to adjust the azimuth with the screwdriver provided until the readings

improve. All hi-tech stuff!

Programs like *Operation Caretaker* are a relatively new idea though Speccy users have been adjusting their azimuths for years.

In fact it's so simple, even the Ed could do it! All you need to do is listen to your loading signal and twiddle with the azimuth screw until the signal improves. But having used the 'twiddle method' myself for some time, I must admit that I found *Operation Caretaker* consistently more reliable.

The only doubt I have about *Operation Caretaker* is the cost. £9.95 isn't particularly expensive but it's the sort of program you're only going to need now and then. So, unless you have more trouble than most, the best thing to do is persuade your local computer club to buy one so it can be loaned to members as the need arises. Alternatively, keep twiddling!

Tony Samuels

hard facts

Hardware hiccups are a hassle — write to **Stephen Adams** and he'll do his best to come up with a cure . . .

Let's kick off with a common printer problem. Paulo Felix of Portugal wants to know how to use his Brother HR5 with his Interface 1 using the lead supplied. This is simple enough — just link pins 5, 6 and 8 together inside the plug and then it'll work. Perhaps Sinclair should think about including such info with its interfaces.

For some time Chris Price of Huntingdon has been seeing black . . . thick black bars on his TV screen to be precise! It turns out the Ferranti ULA chip had risen from its socket so that only about half of the 40 pins were making good contact. Chris secured his firmly in place with sellotape and all is now fine. The moral? Go gently when you're connecting and disconnecting your add-ons.

David Savage also has a TV problem. When he connects his issue 2 Speccy to his spanking new Toshiba colour set, the glorious technicolour fades through a sickly green to boring old monochrome. This can be fixed by opening up your Speccy (wave bye-byes to your warranty) and adjusting a capacitor to bring back the colour. The capacitor is a brass screw with a plastic disc round it — the one to twiddle is the one nearest the front of the board. Issue 3 owners shouldn't need to try this — the improved ULA adjusts the colour all by itself.

David also has a dicky Symbol Shift key and wants to repair it. The best thing to do is get a whole new keyboard underlay for a mere £2.50 from any Spectrum repair outfit.

Michael Duffy of Eccleston has a trickier situation. His Speccy won't work at all for about half an hour when he first plugs it in — it crashes continually. All I can suggest is to try pushing the ULA back into its socket (if it has one) while the power is off. If this fails, you'll have to resort to professional repairs which will cost anything from about £18 upwards. Good luck!

What do you do with a dead ZX Printer like A Munro's? You could try a gentle sweep with a kiddy's paintbrush otherwise it's back to Sinclair for a quick repair job.

Robert Foster has acquired a Carton ASCII keyboard and wants to interface it to his Speccy. Best to scrap its entire printed circuit board and rewire some (or all) of its keys Speccy-style — see the *Interface Zero* article in YS issue 5 for an appropriate diagram. Once done, connect the 13 wires to the Spectrum, eight to the address socket, five to the keyboard socket (soldered underneath) and that should do the trick. Happy typing!

Did you know some people with Spectrums don't play games? J A Kirkman uses his to run a department in Redhill Hospital. But he's got problems using the BETA interface with the Kempston 'E' electronics interface. These both use the same ROM area (8-16K) so, while they both work with Interface 1 (which uses 0-8K), they can't both be used at the same time. The only solution is to change to a non-ROM based interface — give it a try! He also says that the only way he can get his Speccy to keep going is by leaving it on. He's had his on for three years now and has had no problems! Oooh the poor power supply . . . but I suppose it keeps the electricity board happy!

And now a problem for those of you with a bit of cash around. Barry Mutton who inhabits the Isle of Sheppy can't print all those lovely £ signs using *Tasword* with his Brother printer. To resolve this, just nip into the 'Graphics definition' routine and pop in the codes to produce a £ sign. If you need more than four, define one character as the first four and a second as the last four. Then use the graphic character(s) in your text instead of the £ sign. You won't see £ on the screen but it will print okay. You can save this mod to tape by saving *Tasword* again using the 'I' option on the menu.

That rounds off this month's look at hardware heartaches. If you've got any problems of your own, write to me, Stephen Adams, at Hard Facts, *Your Spectrum*, 14 Rathbone Place, London W1P 1DE and I'll see what I can do.

CHRISTMAS BINGE

Ocean software is behind a Chrissy compilation tape featuring some classic best sellers from Ocean, Ultimate, US Gold and Software Projects. Called *They Sold A Million*, the tape will

cost £9.95.

The twin-tape pack will feature *Beach Head*, *Daley Thompson's Decathlon*, *Sabre Wulf* and, you guessed it, *Jet Set Willy*! So if you haven't already got the set, it's going to be

great value.

It'll be in the shops by the end of November — just in time to get it on your Christmas list. Oh, and if Santa is reading this he can get further details from Ocean's PR on 061-980 3488.

HOW LOW CAN YOU GET?

Now you all know the Alphacom 32 don't you? It's the ZX

printer's old rival — the one that's fully compatible but offers

improved quality and a speed of 80 characters a second. So what's it doing back in *Frontlines* then? Dean Electronics has just slashed its price to a measly £29.95 including your first roll of paper. But the offer's on only while stocks last, so if you want one move fast! (0344) 885661 are the digits to dial...



Going cheap but don't give it the bird!

WRONG END OF THE STICK

Let's tell you a tale with a moral to it. Think back to *Frontlines* a couple of issues ago. Do you remember the story about Vulcan Electronics and the great deal they were doing on their Gunshot joysticks? Guess who got the wrong end of the stick then? OK, we admit we shot ourselves in the foot on this one! We should've said that the Gunshot and interface package was priced from £16.95 — not £10.95. Still a fair old bargain, you have to admit.

So, what did Vulcan do? Force *Frontlines* into a locked room with a Gunshot and one

bullet? Interface us to the mains? Nope, *Frontlines* lives on. And what's more Vulcan has kindly agreed to cover up for our blunder. The good news for you is that all the *YS* readers who sent off cheques for the measly amount of £10.95 during the month the mag was out,

will receive their Gunshots and Interfaces. The good news for us is that Vulcan isn't knocking the difference off our salaries.

And the moral of this story? (*Never trust a story in Frontlines? Ed*). Nope, if we tell you to go for something, you go for it!



Spock spots illogical price offer.

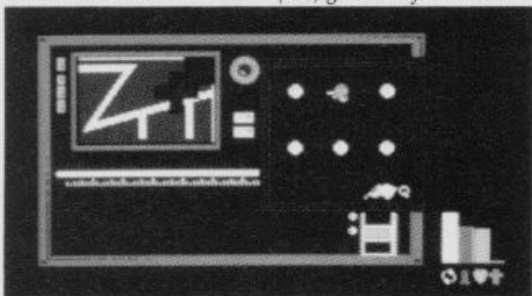
FRANKS VERY MUCH!

Reelaaax! And find out if you've entered the pleasure dome in one of the smooth Frankie sweatshirts that Ocean offered to *YS* readers. The ten new sartorial sophisticates chosen at random from the

thousands of entries are Jonathan Stangroom of Stratford-on-Avon, Gordon Robertson of Dalkeith, Kirsti Jeggo of St Albans, Matthew Lacroix of Halesworth, Troubleshootin' Pete of (Oi, get out of this list.

I've told you, you're not having a sweatshirt and that's final! Ed), John Roberts of Chesterfield, C Welsh of Glasgow, Anita Seeger of Rushden, David Toby of Winchelsea, Robert Tilling of Broom and David O'Shaughnessy of Warrington. Hey, no sweat!

And if you cast your minds back to the compo you'll remember we asked you who the lead singer of Frankie Goes To Hollywood was. The answer, as you all knew, was Frank Sinatra (*Surely some mistake! Ed*).



First the game — now the T-shirt!

microdrivin'

Have you experienced the joys and heartaches of owning a Microdrive? Andy Pennell has and he's here to sort out your problems and share hints, tips and handy routines...

Okay, okay, you win! So many of you have written in about my *Running Repairs* program in *YS* issue 8 and its sequel *Patching up the 'drives* that I've just got to start by sorting it out. The good news for those of you who gave up typing it in or don't have such a collector's item as issue 8, the complete program will shortly be made available by digi'Tape. Don't order it yet 'cos it's not ready — just keep watching this space for an announcement soon.

If you did have a bash at typing in the assembly listing, you may have discovered a slight problem — a number of EQU statements were omitted as follows:

EVALBC 061E, CHKEND 05B7, D_STR1 5CD6, N-STR1 5CDA, T_STR1 5CDC, DRIVE 83FB, OPENM 1B29, WRBUF 123D and WRBIT 1878.

Some of these addresses vary according to which Interface 1 ROM you have but the program takes care of this with its own look-up tables.

J. Ballard was among those who spotted the missing EQU's. He also asked a few poignant questions: What filename is given to a blanked sector so he can delete it, and what are the two checksums for? Easy enough — a blanked sector is given the strange filename CHRS O+CHRS 1+CHRS 2+... and so on up to CHRS 9. As its name starts with CHRS 0, the file won't show up in a CAT but believe me, it's there. The first checksum corresponds to DESCHK and will show up possible corruption of the filename section of a sector. The second checksum is DCHK and will show up errors in the actual data area of a sector.

Hardware is not really my forte but Microdrives will be Microdrives and a lot of you seem to have bother with them. Typical is Patrick Kane who gets the syntax error '?' in valid Interface 1 commands as well as other spurious error reports. This is the Interface 1 ROM failing to page in when it should. The Interface 1 commands are then fed to the Spectrum's normal ROM which flags them as errors.

Patrick lists the various solutions he's tried, none of which work all the time. One thing he hasn't tried is cleaning his Speccy's edge connector (use a clean pencil eraser) — I know from personal experience that this often works! Charles Buszard wrote in to point out that a quick clean can also cure spurious 'Microdrive not present' errors. Incidentally, Sinclair says there is nothing wrong with Patrick's interface!

C. Oswin also has a connection problem — he wants to place one drive on top of the other, as his desk is too short to take them side-by-side, but he can't get a suitable cable. Sinclair used to supply a connecting cable that was about six inches long but most users have a cable half this length. It seems that the connecting cables should be as short as possible to prevent interference problems and I have my doubts about the long extension leads that some companies sell. My advice is to do things the proper way — use a short cable to the Speccy and the double-connectors between the drives. Sorry Mr Oswin but I respectfully suggest you buy a short piece of wood and some nails!

Finally a sob story from *YS* hack Max Phillips and his *Droid Wars* program in next issue. Guess who saved his development work repeatedly onto the same cartridge? Guess whose Speccy had a fit and formatted the tape for him? Moral — always make back-ups as you work on to two tapes! Max now uses a save routine that saves on to two drives, saves on to cassette, saves across the network, blows an EPROM and punches a paper tape connected to the RS232!

That's it for another month. Don't forget that if you've got any hints and tips, handy routines or nasty problems with the Microdrive or Interface 1 this is the place to air them. Write to Microdrivin', *YS*, 14 Rathbone Place, London W1P 1DE.

Most people have heard of, and by now seen pictures of, the new 128K Speccy. But very few have ever used one. Sinclair flatly denies that there are machines in the UK (most of the design and testing work must have been done over the phone) so I packed up a YS survival kit (including a bunch of tapes, an Interface 1 and Microdrive) and set off for one of the world's shortest breaks in sunny Spain. My mission? To penetrate the top secret and heavily armed Investronica factory in Madrid.

The Spanish connection is easy to follow. Investronica is Sinclair's Spanish distributor and will soon be manufacturing its own Spectrum+s. The 128K Speccy is its idea — designed specifically to sell in Spain and Mexico. But a lot of the work on the new machine has been done by Sinclair's Metalab and there are odd machines holed up in English software houses working on 128K software. No one knows when an English version might appear, if it will at all — though I'll bet my last peseta it won't be this year. The machine I used at Investronica's research lab wasn't even a finished Spanish machine so there's little reason to suspect that an English 128 will be anything like this...

The 128 looks very different in the pictures but it turns out to be a familiar friend — a Spectrum+ case and keyboard with '128' tippexed on the top and a huge chunk of gun metal bolted on the right hand side. It's a real heatsink and when they say 'heat' they mean heat — it's painful to the touch. There's also a separate numeric keypad which plugs into the front right of the unit. Other things have changed too; the MIC and EAR ports have been moved to the left hand side, next to the reset trigger and a combined RS232 and MIDI port using one of those QL-style phone jacks.

Round the back, there's an RGB port for a proper colour monitor. Investronica's machines were totin' BMC's QL monitor producing a display like you've never seen before. The colours are dazzling, rock steady and pin sharp. Try and stipple this and you won't get far! It's a con though — the QL needs a much higher resolution monitor than a Speccy and it's unlikely you'll bolt something this good onto yours. Investronica is also trying to figure a way to get a colour composite video signal onto the same plug. This'll let you use an El Cheapo quality monochrome screen for programming and word processing and just go for colour when you need to on a TV set.

The acid problem with the 128 is compatibility with existing software — the Spectrum's design leaves nothing for you to play around with. And most programs stretch the machine to its limit — so much so that one slip and existing software just won't go on an upgraded machine. The 128 takes the tough and reliable solution even if it might be hard to get along with — it's schizophrenic.

THE SPECTRUM WITH NO NAME

The 128K Speccy hits the streets in Spain this month but we still don't know if and when we'll see it over here. Beyond the call of duty free, Max Phillips flew to Spain to try out the secret Sinclair.

Switch it on and it's a 128K Spectrum and it's not very compatible with your existing programs. Enter the command SPECTRUM and bang goes your 128K, bang goes your RS232/MIDI interface, bang goes your numeric keypad and you're staring a Spectrum+ in the face. There's no way to go back and use any of the 128K features without resetting the system — no, not even from machine code.

The advantage is that the 48K mode should be 100 per cent guaranteed, no strings, genuinely compatible with all existing programs. I say should because the machine I saw wasn't — Investronica claims that because current 128s use EPROMS (and yes, the first lucky owners will get EPROM machines) then there are timing differences that stop turbo-loading tapes working and there seem to be other odd hiccups still to sort out. Still, the brute force '48K mode' method should make perfect software compatibility possible.

The expansion connector is unchanged and most add-ons will work as before in 48K mode and possibly in 128K mode. The only hitch is with add-ons that attempt to load software into RAM during power-up or reset. Sorry, since it powers up as a 128K machine, many such add-ons will be in real trouble. This may effect ROM based games but I don't think that's going to bother anyone unduly.

The disadvantage to dual modes is that you're going to need special 128K version of programs to use the new features. Simple Basic programs work fine in both modes but anything that's remotely trick won't and that includes 99 per cent of commercial products. Still, the transition has already started and there are games being given the 128K treatment (not mentioning any names, Ocean).

128K SURPRISES

128K mode is something of a shock. It provides a proper intelligent screen editor, a calculator and a sort-of enhanced ZX Basic. Numero Uno (as

they kept saying) is that the single keypress keyword system has been junked. In 128K mode, you type out keywords letter-by-letter (sorry, no abbreviations allowed). Programs are entered and edited with a full screen editor — a bit like writing your programs with *Tasword*. You can switch back to a 'command mode' where you can enter Basic commands by pressing Cambio-Cmnd on the numeric pad (Cambio — that's Symbol Shift to you and me).

All editing really takes place using the keypad although some of the keys (like the cursor keys and delete keys) are duplicated on the main keyboard. The keypad provides — wait for it — cursor movement by character, word and line as well as jumping to the start of the previous Basic line or the end of the next. You can delete by character or by word in either direction. The editor is also pretty smart — it splits multiple statement lines up onto separate screen lines and will scroll up and down the listing as you move through it. There's no more stopping to reLIST a bit of program or hitting up arrow five times to get to the line you want. Better still, you've still got on-entry syntax checking — press Enter and the position of any mistake is highlighted. The 128 even uses a bug-shaped UDG instead of the grotty old question mark!

The Basic editor is nothing short of a dream. Any time you lose, typing out keywords in full, will quickly be saved by the time it takes to get the whole program in and working. That said, it does lack things every self-respecting screen editor should have; there's no search and replace, no copying and moving lines and so on...

Basic programs written in 128K mode (with fully typed keywords) can be loaded in 48K mode and vice-versa and will run quite happily provided they don't do anything too tricky. You can also use the extra facilities of 128K mode to write a program and then switch with SPECTRUM with your program still intact. Well, that's the



The Spanish 128 will be available as a complete set up with a superb BMC monitor and a serial dot-matrix printer.

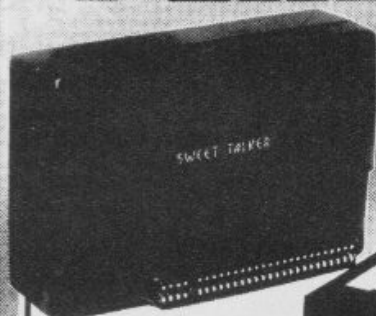


The RGB port on the rear of the machine will also provide a composite video signal.



The MIC and EAR ports are now on the left side along with the combined RS232/MIDI interface.

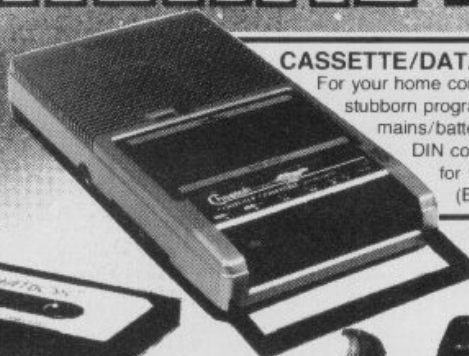
PERIPHERAL POWER



CHEETAH "SWEET TALKER"

Based on an allophone system, program any word or phrase, providing unlimited speech. Now make your Spectrum talk. Compatible with Interface I & II and Spectrum +

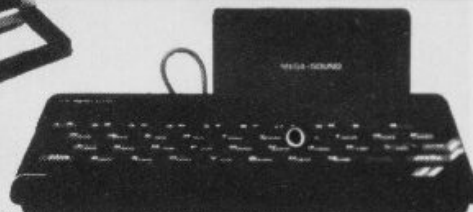
£24.95



CASSETTE/DATA RECORDER

For your home computer, will allow easy loading of even the most stubborn program. Features include single key record, mains/battery, accepts standard computer leads and 5 pin DIN connector. Also provides exceptional audio quality for fine listening.

(Batteries not included) £24.95



MEGASOUND

For 48K Spectrum and ZX Spectrum + Achieve amazing sound capabilities that your Spectrum has been lacking. Just plugs into the user port at the rear of your computer and amplifies sound through your T.V.

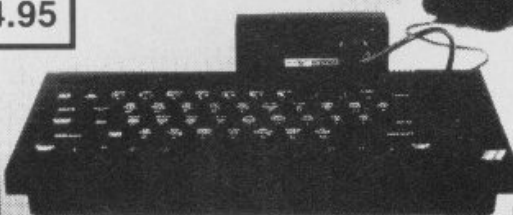
£10.95



32K RAMPACK

Upgrade your 16K ZX Spectrum now! The Cheetah 32K Rampack simply plugs into the user port at the rear of your computer and increases the memory instantly.

£39.95



SPECTRUM JOYSTICK INTERFACE

Simply plugs into the user port at the rear of the computer and accepts any Atari style joystick including Quickshot and Kempston. Comes without rear edge connector at

£11.50

or with connector which allows other peripherals to be stacked up at

£12.75

56 WAY EXTENSION CONNECTOR

Cheetah's 6' long extension cable enables Spectrum peripherals to be distanced from your computer

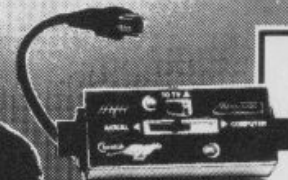
£7.95



AERIAL SPLITTER

Cheetah's neat splitter unit complete with self adhesive pad allows you to keep your T.V. and computer aerial leads plugged in without disturbing the picture

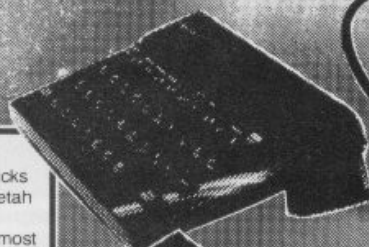
£2.25



R.A.T.

Conventional joysticks are dead! The Cheetah Remote Action Transmitter is the most sophisticated computer controller available! Infra red transmission - so there are no leads trailing across the living room. Touch control, extremely fast, can be used with Cheetah RAT/ Kempston compatible software. Complete with receiver / interface.

£29.95



HI-STAK FEET

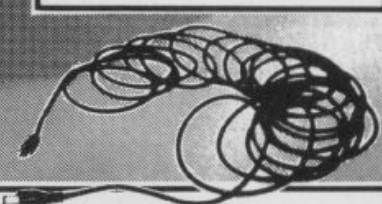
These instantly applied stick on feet for your ZX 81, Spectrum, New Brain, VIC, TRS etc. tilt the computer and make your keys easier to see and more enjoyable to use, allowing smoother programming.

£2.99

EXTRA LONG AERIAL LEAD

Over 15' long. Our super lead will allow you to sit back away from your T.V. and enable you to play games in the comfort of your armchair.

£1.50



All Cheetah Peripherals have rear edge connectors for compatibility with all Sinclair accessories.

Prices include VAT, postage & packing.
Delivery normally 14 days.
Export orders at no extra cost.
Dealer enquiries welcome.

Cheetah, products available from branches of
John Menzies WHSMITH Rumbelows
WOOLWORTH Spectrum dealers
and all good computer stores.



DEPT YS

Cheetah Marketing Ltd, Dept YS, 24 Ray Street,
London EC1R 3DJ. Tel: 01-833 4909
Telex: 8954958

Try beating our SpecDrum!



Spec Drum

Digital Drum System
for the Spectrum

£29.95

- 8 DIGITALLY RECORDED REAL DRUM SOUNDS
- SIMPLE TO USE — UP AND RUNNING IN ONLY MINUTES
- A TRUE DIGITAL DRUM MACHINE
- 'REAL TIME' OR ON-SCREEN PROGRAMMING
- COMPLETE WITH SOFTWARE
- EXTRA SOUNDS CAN BE LOADED FROM TAPE
- CREATIVE, EDUCATIONAL AND FUN
- THE MOST EXCITING PERIPHERAL EVER DEVELOPED
- DYNAMIC FILING SYSTEM — STORE OVER 1000 PROGRAMMED RYTHMS
- TAPE SYNC FACILITY
- SONGS CAN BE SAVED ON TAPE
- POLYPHONIC
- COMPREHENSIVE MANUAL
- JUST PLUG INTO YOUR HI FI



1 WILLOWBROOK SCIENCE PARK, CRICKHOWELL ROAD, ST. MELLONS, CARDIFF
TELEPHONE: CARDIFF (0222) 777337 TELEX: 497455
(Export enquiries — contact Cheetah direct)

theory — I couldn't even get the demo tape to load in 128K mode. The odds are in your favour if you want to move your machine code programs across as well — provided your routines aren't too big, don't rely on the standard Spectrum ROM or step all over any of the new interface and bank-switching gear!

Once you're in command mode — you use the E command to go back to editing your program — the keypad acts as a four function calculator. It seems to use ZX Basic for its arithmetic routines and Investronica claims that it has an enormous number of calculator memories (probably Basic variables) even if there was no-one around who knew how to work them!

The other extra application is the ability to use the screen editor as a text editor. You just type, for example, E AS and, yes, you get to edit AS. A couple of the keypad functions change here — instead of start and end of previous and next Basic statements, you can scroll up and down by screenfuls. The editor works in insert mode or otype mode or can be set to automatically indent text — the left margin sticks wherever the cursor was when you entered S/A mode. Quite what you use this for I'm not sure. You

can also train the editor to wordwrap so that words don't get split at the ends of lines.

Although most big machines have a text editor as standard, it seems a bit out of place on the Speccy. It's not a word processor as it doesn't offer half the facilities you need and can't format the text for printing. But it could come in handy for creating data files or source code for programs in other languages and so on. Since you can specify the variable to edit, you can keep several text 'files' and programs in memory and use the calculator all at once.

128K mode Basic is good ol' ZX Basic with extensions for sound and for handling the extra memory. There's also talk that it will feature handy extras such as RENUM and DELETE but we'll have to wait and see.

Sound is very changed — for a start there's a hole where the tiny little speaker should go. Sound is now produced (in both 48K and 128K modes) through the TV speaker or through a Hi-Fi or cassette recorder connected to the MIC socket. So all existing programs are suddenly a lot noisier and you've got volume control. This means that everything from simple BEEP commands to complex sound

programs such as Tony Samuels *Samsynth* in YS 19 will all work a lot better!

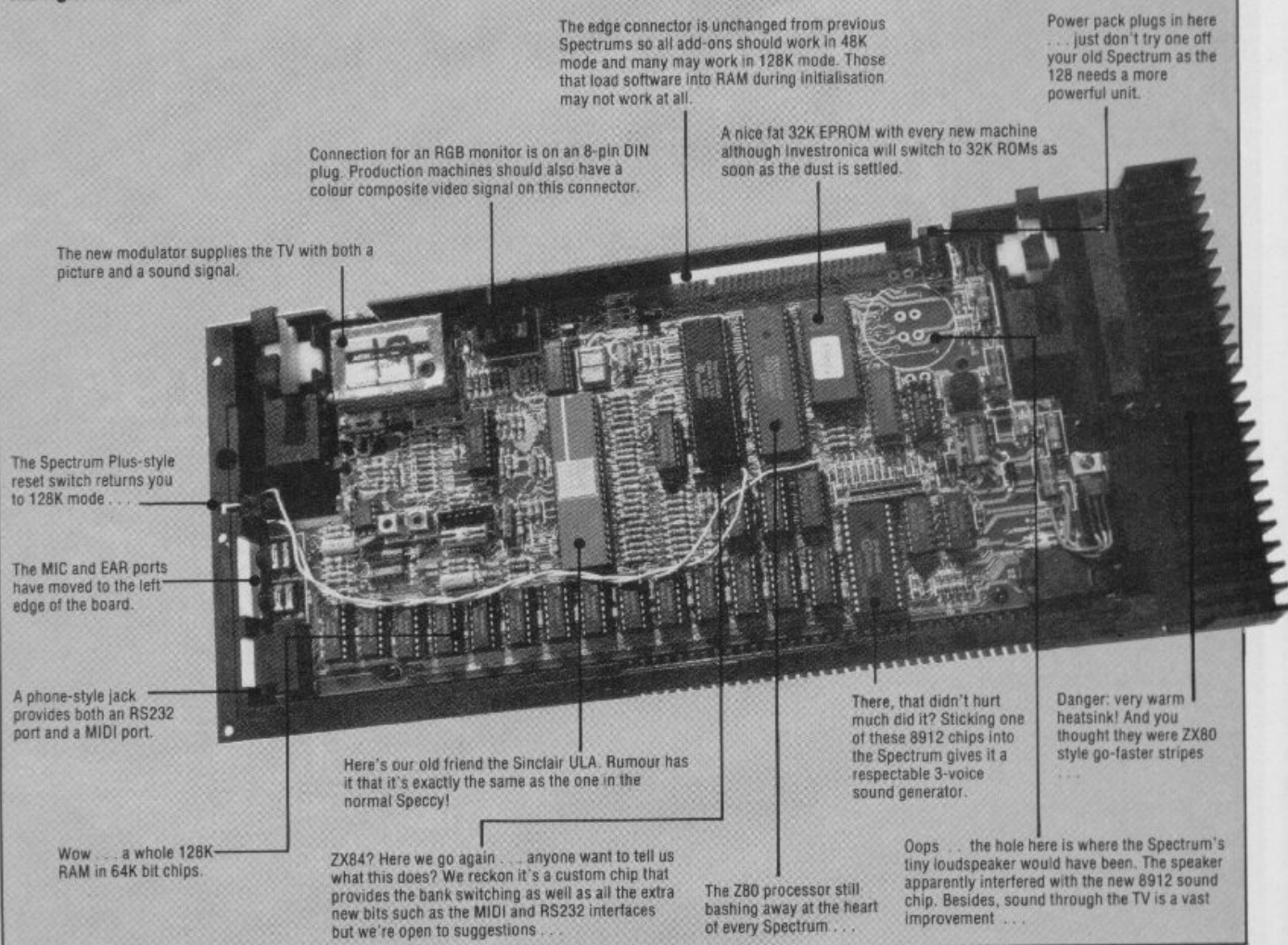
In 128 mode, the beeper is banished forever — there's one of those jolly 8912 chips which provides three separate voices for chords, pure sound and white noise and limited envelope control. This allows you to do passable impersonations of BBC Micros and Commodore 64s although 128 Basic doesn't appear to provide complete control of the chip.

SUPER SOUNDS

The new sound command is PLAY followed by one or more strings containing a music program in single letter instructions and numbers. For example Y sets the type of sound, O sets the octave and so on. You can embed comments inside PLAY strings to make the otherwise cryptic strings more readable. PLAY can also be used with the MIDI interface . . . this is three spare pins on the RS232 port that let the 128 talk to all sorts of musical instruments, synthsisers and so on. The interface supports up to eight voices rather than the three on the built-in sound chip. In theory, programs that are written for the 8912 chip will work straightaway on

128 WIDE OPEN . . .

Here's your first glimpse of the guts of a 128 — sorry about the warranty Investronical! The extra portion of chips makes the board so hot that the heavy metal heatsink on the right is essential . . .



anything plugged into the MIDI interface but, again, the 128 I tried refused to co-operate.

Sound has to be one of the 128's radical improvements. Although Speccy games lead the world, their sound always has to be taken with a pinch of imagination. Even a simple 128 mode conversion can include 8912 support and the transformation will be dramatic. The best thing I saw a 128 do was the machine sitting next to mine and it did it for the entire time I was in the building. Hooked to a fancy Casio organ and in turn to a Hi-Fi, it ran through a superb rendition of five popular tunes repeatedly. And it did it without reaching for its microdrive — all five tunes were loaded into memory and switched between automatically. It's an English demo program so expect to hear of it soon...

Investronica stalled on the exact details of the bank-switched memory system — as it did on the bulk of technical details. Its reason is that things might be changing dramatically — they sure are in for a busy month! The basic principles are 128K RAM divided up into 16K pages, any four of which can appear at any position in the Z80's 64K addressing space. There's 32K ROM on board (EPROMS on early machines) divided into 16K for the original Spectrum ROM and 16K for the 128K mode ROM. One source suggests that either the top or bottom half of the ROM is paged into the first 16K of the Z80's address space. However, Investronica detailed a much more sophisticated and versatile idea — on power-up, reset or entering SPECTRUM, the appropriate 16K of code is copied from ROM into a 16K RAM page and that page is then switched into 0-16K of the memory map.

This first page of memory is then, apparently, write-protected so that it appears to be ROM. If this turns out to be the case, it should be possible to pull all sorts of lunatic stunts such as altering ZX Basic and then switching to 48K mode. If the software control is there, you should also be able to dispense with the ROM altogether and run pure 64K programs. What a shame video memory still starts at location 16384 — you still can't persuade a Speccy to run the standard CP/M operating system without extra hardware. Rats!

In 48K mode, three RAM pages are switched in above the page pretending to be the 16K ROM. Who cares which pages they are as once they're in, the banking is disabled and you can't switch to any of the other pages. There's nothing a program can do, however wayward, to get back to 128K mode.

In 128K mode, three pages are switched in to give you a normal 48K system but the remaining 64K (four pages) are available by the bank-switching mechanism. This gives you around 104K free for Basic programs

and their data and a maximum of around 120K for pure machine code. Remember that the system variables and screen area are still going to steal around 8K of the space.

RAM DISK

The extra memory appears to be supported from Basic by the rather crude solution of a RAM disk — using the commands LOAD! and SAVE! So long programs have to be split into chunks and called from the RAM disk as needed. Note that this is non-standard syntax in terms of Interface 1 commands — you'd expect some new channels but, of course, not every 128 owner will have an Interface 1 and there isn't room to put some or all of the Interface 1 stuff in the 16K ROM in the machine. However, it should be possible to do your own bank-switching using IN, OUT, PEEK and POKE if you need greater control. Machine code programs can, of course, make the entire 104K (or 120K if the ROM really can be replaced with RAM) appears as one continuous chunk.

The 128's RS232 port is the same as the Interface 1's port — Investronica says it's pin compatible but since the pins are a different shape, you'll need a new cable anyway! It's a shame that it's not an enhanced version of the port as anyone who's tried it will know that you can die trying to make it do full-duplex (transmit and receive data at the same time). This makes it fine for printers and micro-to-micro links but modems will still be a pain in the neck. If you've got an Interface 1 attached, the built-in RS232 remains what Investronica calls 'the primary device'. Quite how your programs address the Interface 1 RS232 or how current programs will react to the new port remains to be seen...

As for pricing, Investronica sells old 48K Spectrums for 27000 pesetas (around £122) and Spectrum+s for 36000 pesetas (£164). It's price of 50000 pesetas for the new 128K machine works out at £230 over here which is probably no guide at all.

So how good is the 128? The extra memory and improved sound opens up all sorts of possibilities for new software. But the 128 is a bit messy since it doesn't incorporate or build-on the facilities provided by the Interface 1. Neither does it (apparently) provide any serious enhancements to the ageing ZX Basic other than a bare minimum of support for the new hardware features.

It will be interesting to see how the machine changes when it makes it to an English version. Certainly, I could think of things I'd rather have than a simple (and rather slow) text editor. And who needs a four-function calculator when all you need to do is stick the keyword PRINT before the calculations? OK Sinclair, we're interested and we know you can do it... why are we waiting?

SPECCY SPEX

Here's how the Spanish 128K Spectrum looks at the moment. Be warned, all details subject to change on production and UK versions!

PROCESSOR

Z80A, 3.5 Mhz.

MEMORY

128K RAM in 16K pages.
32K ROM, 16K original Spectrum Rom for 48K mode, 16K for new 128K mode.

VIDEO

As Spectrum.

KEYBOARD

As Spectrum with extra Extended mode/Symbol-shift keys for Spanish characters. Separate numeric keypad for use in 128K mode. Provides calculator and screen editing keys.

SOUND

8912 sound chip, 3 voices, pure sound and white noise. New PLAY command provides control from Basic. Sound is played through TV — there is no internal speaker.

BUILT-IN SOFTWARE

ZX Basic, Text Editor, Calculator, Basic screen editor.

ZX BASIC

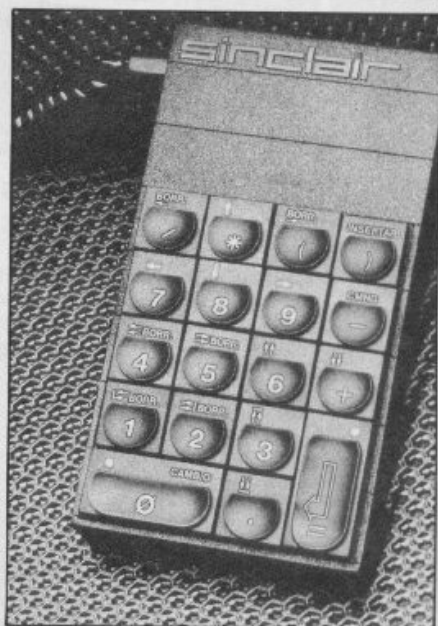
As Spectrum in 48K mode. In 128K mode, keywords must be typed in full and there are extensions for Ram disk drive (LOAD!, SAVE!, CAT!) and PLAY.

INTERFACES

RS232, MIDI music interface, RGB monitor, Composite Video monitor, MIC, EAR and expansion connector as Spectrum.

PRICE

50000 pesetas in Spain.
UK price £180?



The keypad is standard and provides editing keys and a calculator.

Evesham Micros

THE UTILITY SPECIALISTS

MAKE THE MOST OF YOUR MICRODRIVE WITH INTERFACE III

THE IMPOSSIBLE HAS BEEN DONE

Yes it's true this fantastic new peripheral will transfer **every program** available on to microdrive. **Yes every one.** Yet, believe it or not, it is so **easy to use** that we are training our pet cat (Clive) to use it. **Any-one** capable of loading and saving a BASIC program can transfer **really awkward** programs to microdrive.

Just look at these features...

- Consists of hardware and software.
- Makes a "snapshot" of any stage of a program. (Saved as a screen 1)
- Transfers all programs available on to microdrive.
- Transfer can be actuated at any stage allowing "customised" versions.
- Very, very, easy to use. (If Clive can do it we're sure you can.)
- All programs reLOAD and RUN once transferred.

WARNING: Unlike competitive products, transferred programs run independently of the utility and occupy the correct amount of cartridge space for the program. (This means you can fit two large programs on one cartridge.)

IF YOU HAVE A MICRODRIVE YOU MUST HAVE INTERFACE III

ONLY £39.95 inc. P&P

SIMPLY AMAZING

Trade and distributor enquiries invited, U.K. and overseas.

The software can be supplied on cassette for tape users.

This product is in a class of its own. Designed by DRAYSOFT.

DOUBLER

HAVING PROBLEMS BACKING UP THE LATEST LOADING TECHNIQUES?

DOUBLER
Will solve ALL your problems

THE tape backup "device".

After **spectacular success** on the CBM 64 and by public demand we introduced **Doubler** for the Spectrum. Now we have released **Doubler Mk.II**, which is professionally cased and has greater tolerance to the varying types of cassette decks in use.

It includes **hardware and software**. This superb "device" allows you to make backup copies of software with **all types of loader** regardless of length and speed. (Includes pulsing headers and different baud rates.) In fact our tests have **proved** "Doubler" is capable of copying with **100% success**.

Requires access to **two** cassette decks. The software allows you to save a **brand new machine copy** onto one cassette deck while loading from the other. **Fast and easy to use.** They said it couldn't be done.

ONLY £14.95

PATENT APPLIED FOR

Customers who have the Mk.I Doubler may return it along with £4.95 for the new version.

All prices include P&P and VAT. Send cheque, Postal Order or Credit Card No. Credit Card order accepted by phone. Callers welcome. Wide range of goods stocked. Trade enquiries welcome. European orders send price as advertised. Outside Europe £2.00 for airmail. Mail order to Evesham Shop please.

EVESHAM MICROS
BRIDGE STREET, EVESHAM,
WORCS., WR11 4RY.
Tel: 0386 41989

MICRO CENTRE
1756 PERSHORE ROAD,
COTTERIDGE, BIRMINGHAM.
Tel: 021-458 4564



Ready, steady ... Go! Are you in on the great race to find the YS Champ — the Greatest Gamesplayer Of The Year?! Make your break, and be our Gold Medallist!

Where are all you ace gamers? It's about time you took up our great challenge and let us know what high-scores are all about!

Take a look at this month's impressive line-up of high-scorers. If you can equal these fabulous figures, then let us know right away! Remember, we can spot a hacked, or hyped score blindfold, so no cheating!

If you're our top-hot-shot of the month, we'll be asking you for your gamesplaying tips... and giving you a bundle of software in return. But even if you're not a monthly winner, you could still collect three free pieces of software if you're picked out of the Ed's hat — just like *Stuart Rice* of Upminster. So get that coupon sent off now!

YS GO FOR GOLD

My top 5 all-time greats are:

- 1
- 2
- 3
- 4
- 5

My top scores are*:

- 1
- 2
- 3
- 4
- 5

The next games I'm gonna rush out and buy are:

- 1
- 2
- 3
- 4
- 5

If you're going for gold, stick your mugshot here

*You don't have to fill it all in but make sure you specify the level of difficulty for your scores.

Make sure you send us a black and white photo of yourself if you've filled in your high scores.

I'm going for gold! My name is:

.....
Address

.....
Postcode

Now ask an independent witness to sign the coupon

Independent Witness

Name

Address

Postcode

Complete this coupon and send it to Go For Gold, Your Spectrum, 14 Rathbone Place, London W1P 1DE.

ALL-TIME-TOP-TEN

Peter Dawson
1890025Mark Brown
1512000Graham
Conner
1500175

1

BRUCE LEE
US GOLD

6

Lars Lindholm
99%Ludde Borgne
99%Stuart Rice
99%

2

ATIC ATAC
ULTIMATE

2

John Marriot
2032375Ian Rogerson
682025João Peixoto
405815

3

SPY HUNTER
BALLY/MIDWAY

9

Craig Boddy
1314865David Bass
1202403Mark Stopes
1053570

3

DALEY THOMPSON'S
DECATHLON
OCEAN

4

Colm Kernan
21-0Darren
Stephens
25-5Richard Brown
21-6

5

MATCH DAY
OCEAN

1

Peter Dawson
\$870000Alan Maber
\$310900Paul Golder
97,100

5

GHOSTBUSTERS
ACTIVISION

6

George Forsyth
28918Scott
Donaldson
3106Ludde Borgne
913

7

STARION
MELBOURNE HOUSE

RE-ENTRY

Claudie Jeffries
100 itemsJohn Kitts
91 itemsDavid
Ferguson
54 items

NEW

JET SET WILLY II
SOFTWARE PROJECTS

8

John Hudspeth
100%Antonio Gil
97%Lars Lindholm
85%

9

KNIGHTLORE
ULTIMATE

4

Paul Tutty
with Ric & Titch
475984Craig Boddy
470693Scott
Donaldson
465871

NEW

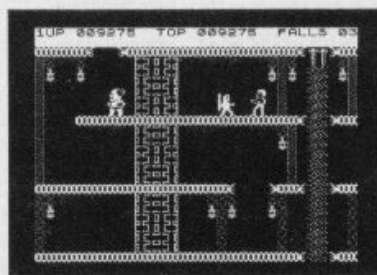
HYPERSPORTS
KONAMI/OCEAN

10

YS GOLD MEDALLIST



Name: Peter Dawson
Town: Yale, Nr Bristol
Age: 13½
School: King Edmunds
Hobbies: Computers!
Fave Game: Bruce Lee,
what d'you think?
Fave Music: All the latest
hits



Peter Dawson on Bruce Lee

If you want my advice thwack everything that moves — the more violent you are the better. This ain't a game for the faint-hearted!

You've got to collect all the lanterns in the first three rooms before you can proceed. Then go to the middle room and look for the exit.

You'll be attacked by the Ninja throughout the game, though they're a bit wimpy. The Green Yamo is a completely different kettle of karate — so keep out of his way.

To get your own back on the enemy, let them take their flying kicks at you, then double back and go-a-chopping in their direction. It'll take three blows to knock out the Green Yamo but only two to finish off a Ninja.

When you eventually reach the wizard, avoid his eyes — the fireballs he sends out are lethal. Talk about looking daggers!

NOW YOU CAN EXPLOIT SPECTRUM GRAPHICS TO THE ULTIMATE.

With the Graphics Suite from Print 'n' Plotter.

If you're interested in producing great graphics with your Spectrum, then these programs are designed with *you* in mind.

And you *don't* have to be an expert. Even with no programming knowledge the programs will enable you to produce fantastic graphics to use in every piece of software you write.

Or you can use them just for the fun of producing computer art.

Each of the programs are inter-active and together they form the most accomplished graphics toolkit you will find on the market today.

But you can also use each of them separately, as each are self-contained and cover a specific area of graphics programming.

With Print 'n' Plotter's 'GRAPHICS SUITE', everything is made so simple you won't believe it.

Just a few of the things you can do...

PAINTPLUS (GRAPHICS SUITE 1)

If you want to produce fantastic screen graphics or UDG's on your Spectrum, then you will find PAINTPLUS not only a complete graphics toolkit... but also the simplest to use at every level.

Facilities include: DRAW, PLOT, ARC, CIRCLE, FILL IN SOLID OR PATTERNS, FILL IN OVER MODE, DRAW RADIALLY, ARC RADIALLY, ENLARGE TO EDIT, PAPER WASH, BOX DRAW and so on...

As well as drawing, PAINTPLUS has a tremendous UDG section. It also has UDG "grabbing" from screen as well as full facilities for defining, saving and loading UDG sets.

The Organiser section of the program enables you to automatically store multiple screen graphics or multiple UDG banks.

PAINTPLUS comes with a demo of screens, animation and alternative character sets, plus a copy of Print 'n' Plotter PICTURE BOOK - 100 pages of instructions, hints, tips, listings and related graphics information.

SCREEN MACHINE (GRAPHICS SUITE 2)

SCREEN MACHINE is the graphics manipulator.

Use it when you want to take your graphics and turn them into professional machine coded data for use in BASIC or M/Code programs.

For instance:

SCREEN MACHINE will compress the memory consumption of your graphics to cram even more into the computer's memory -

As well as memory compression, SCREEN MACHINE allows you to put your graphics through a series of highly-sophisticated graphics manipulations.

These include ENLARGE, REDUCE, RELOCATE TO OTHER PARTS OF THE SCREEN, STEP AND REPEAT, BLEND SCREENS TOGETHER, RECOLOUR SELECTIVELY OR GLOBALLY, FLIP SCREEN, etc.

And SCREEN MACHINE also has a dedicated Text Compiler - ideal for anyone who uses lots of text for instructions or menus on screen.

SCREEN MACHINE also comes with a copy of PICTURE BOOK and a demo that's so good you can't believe it.

ART-O-MATIC (GRAPHICS SUITE 3)

Ever wanted to produce screen graphics for Adventure Games, Educational, Training, or Scientific programs and run out of memory because the graphics handling consumed too much memory?

If so, you need ART-O-MATIC, Print 'n' Plotter's great new graphics compiler.

With ART-O-MATIC you can draw, define and store an incredible number of screens or parts of screen in your programs as compiled instant machine code which is usable from BASIC or M/C.

The exact amount of compression possible depends on your graphics, but up to 99% is possible and an average of 85%-90% is usual.

ART-O-MATIC is a complete graphics drawing program, so you can produce your works of art and compile at the same time.

The instruction book and demo that comes with the program show you *everything* you need to know about cramming great graphics into your Spectrum.

SPRITE MACHINE (GRAPHICS SUITE 4)

There have been a number of programs called Sprite Generators. Most of these are self-contained and not a great deal of use to people who want to use Sprites in their own programs.

SPRITE MACHINE is different. This program was written with *you* in mind - whether you are a professional, amateur or beginner.

There's never been a simpler Sprite program to use. All you have to do is draw your Sprite and then choose from a fantastic range of options to get it doing what *you* want.

You can: animate your Sprites, choose any direction and starting position, adjust speed, adjust height, choose running time, decide on edge actions such as bounce, wraparound, reflect or stop, make intelligent decisions like strike and collision actions, colour your Sprites or take colour from the screen, trace or non-trace, etc.

The program comes complete with a cursor-operated Sprite drawing board and catalogue/store function.

Instruction booklet and demo are included with the program.

Now *you* can have professional Sprites in every program you write.



ORDER NOW OR ASK YOUR LOCAL COMPUTER SHOP!

Send to: Dept YS Print 'n' Plotter Products Ltd.
19 Borough High Street, London SE1 9SE
Credit Card phone orders: 01-403 3622.

Please send me the following:

.....Paintplus @ £9.95Screen Machine @ £8.25

.....Art-O-Matic @ £8.25Sprite Machine @ £9.95

☐ I enclose remittance in full

☐ Please bill my Access/Barclaycard/Visa No.

☐ I enclose 17p stamp for details of products.

Name _____

Address _____



Prices include post & packing for U.K. delivery. Overseas orders please add 20% for additional handling and post.

**Print 'n' Plotter
Products**

SPLIT JURY

I was casually looking through the game reviews in ish 19, choosing which hyper-brilliant new software to buy when horror of horrors, heavens to merkatroyd — they weren't there! What you may ask? The ratings were there, the reviews were there and even a picture of the screens. Not only that, the prices were there as well. But the joystick jury, with all their skill and talent (crawl), forgot to include those little boxes with the all important hit 'n' misses. Well spotted, eh? How about a Trainspotter Award?

And bring back hits 'n' misses!

**Chris Lee
Hull**

Call yourself a trainspotter? Pheweee — you couldn't spot the 9.25 to King's Cross if you were strapped to the track. We did say that we were dropping the hits and misses. But if you want them back or you want anything else added let us know. How do the rest of you feel? Ed.

SHOP SOILED

How's this for a great scam? Next time you go into a shop with a Speccy on display and you want to show off your programming skills, try this little program.

1 PRINT "Your Message":
POKE 23692,100: POKE
23613,82: GOTO 0 then
press Enter. Now type POKE
23756,0 then enter and run
that. And what's the result?
That's right, a forever scrolling
message that can only be
erased by pulling the plug. Tee
hee!

Just so you know how it
works as well, the first POKE
is for infinite scroll, the second
disables the Caps Shift/Break
Command and the third
returns the line to 0.

**Chris Barker
Peterborough**

*And we all know the message
you're going to print — "YS is
...". You can fill in the
appropriate phrase here,
provided of course, that it
starts with the word mega! Ed.*

STUFF 'N' NONSENSE

Okay you dirty rats! Listen up
and listen good! Y'see, I'm
sorta new to this stuff (very
new) and I'm wondering if you
would (crawl, crawl) start a
column for new hackers like
me who don't know how to
break into games. I've
collected YS since issue 12 so
I don't know if you've covered

FORUM

**Sticks and stones may break Pete's phones but
your letters will never hurt him. Write away right
away to Forum, YS, 14 Rathbone Place, London
W1P 1DE and you could be the star with the
bundle of free software!**

the ground in previous issues.
I'd be grateful if you'd let me
know where I can find out
how to go about putting in the
POKES. By the way, while I'm
here would you (grovel,
grovel) tell me where I can
obtain issue 14 as I missed it.
**Steven Robertson
Dundee**

*You're obviously so new to
'stuff' that you've never
noticed our fab YS back issues
page. You'll find there not
only issue 14 but some of the
articles on hacking you want.
Now go off and have a look —
and hurry up about it, you're
holding up the whole of
Forum.... Right, can we carry
on now? Ed.*

TAPE TROUBLE

I'm writing in to complain
about the quality of Speccy
tapes. I've just bought
Hunchback II — one side
doesn't load and the other side
only just loads.

Some tapes are so bad that
they wreck your recorder and
the rest of your tapes.
Something should be done
about this.

**Tim Doulton
Horsham, East Sussex**

*This is a complaint that we
seem to be hearing more and
more of. Let us know if you
too have noticed a remarkable
drop in tape quality and we'll
take it up with the software
houses. Troubleshootin' Pete.*

WILLY NILLY

Always ready to accept a
challenge, I thought I'd have a
bash at the one you set in ish
18. Yes, it's *JSWII* time! Well,
being a genius as well as very
clever (And nearly as modest
as yours truly! Ed), I very
soon came up with da goods.
The following line when added
to the mega-brill hacking
program in YS will remove the
infinite death syndrome at the
touch of a button (0 to be
precise!). This is extremely
useful when you're playing the
game with just the infinite lives
POKES.

170 DATA 33, 62, 229, 34,
208, 122, 33, 219, 254, 34,

210, 122, 33, 31, 56, 34, 212,
122, 33, 1, 52, 34, 214, 122

If you should get stuck in
the wall after using this you'll
have to teleport out.

Finally, to make a long story
even longer, I found these
POKES using Mickmon, a
superb, brill, mega (We get the
idea. Ed) Disassembler/
Monitor. When the bugs have
been steam ironed out then I
just might send you a copy!
**Michael West
Bingley**

*Get those bugs out and send it
in. Then we can all go back to
hacking JSWII. What am I
saying? Troubleshootin' Pete.*

SITUATION NOT VACANT

I would like to apply for the
Ed's job as he obviously
doesn't have a clue of how to
do it himself.

I know you think that
nobody reads Input/Output
but there are a few of us
weirdos around. In YS 19
Input/Output seems to have
developed a serious stutter
and repeated five of your free
ads.

I just thought I would let
you know of this indiscretion
and pick up a Trainspotter
Award (and the job!)

Mark J Weirdo jnr OBE.

**Full time genius and
president of the 'Hugo is a
weird name' society.**

*You wouldn't last two minutes
in this place. If you think
you're weird you want to meet
the Ed — or rather you don't!
Now that's what I call weird!
Count yourself lucky he's let
you off without a Trainspotter
Award. Troubleshootin' Pete.*

SKOL DAZE

Is Troubleshootin' Pete totally
thick and unco-ordinated or
does he just do a good
impression. (You should see
his James Cagney. Ed)

I am, of course, referring to
YS 19 your feature on *Frankie
Goes To Hollywood*. First, he
proves he doesn't know his
left from his right — he says
you stick out your right arm
when walking but it's the left

arm.

As if this wasn't enough he
has the nerve to get his
spelling wrong — Murder,
Mystery and Suspence.
Suspence? What kind of
spelling is this for a reviewer?
Didn't he go to school at all?

**Steven Duke
Newcastle-upon-Tyne**

*Lok her Ill hav yu no tht i wnt
to a v gd skool — Eaton az it
appns an im a vry gud spellar.
Troubleshootin' Pit.*

COMPUTER CRAZY

Can you please send me any
information on the effects that
computers are having on our
health and how they affect
society — or perhaps some
addresses where I could obtain
information of this type. I
need this for my social studies
project on Computers and
Society at Hind Leys
Community College.

**Daniel Murray
Loughborough, Leics**

*Here at the Castle Rathbone
funny farm for computer
related disorders we're all far
too normal to know anything
about this. Look I told you,
not tonight Josephine... sorry
about that. But, we've got
some pretty sick readers who
are dying to help you — just
drop us a line here. Now I
must go and put on that nice
jacket with the arms at the
back! Ed.*

FOR THE CHOP

Just lately, I've been playing
*The Way of the Exploding
Fist*. Well, after hours of
non-stop playing and countless
almost fatal injuries, I found
myself confronted by the
elusive Tenth Dan himself. He
sprang at me and within a
couple of seconds I was biting
the dust. As you can imagine,
I was more than a little bit
upset by his unnecessary
display of contempt towards
me. So, I sprang back and beat
him up with a few tricks of my
own. As he went down for the
second time, I expected a
'Congratulations' message but
to my shock and horror
another Tenth Dan appeared.
Not one to be beaten easily, I
fought back the tears and as
anger overcame dismay I
started to beat up man after
man. Each time a man went
down, up came another one.
When I reached the score of
188,500 points, nature called
and I just had to pull the plug.

So, here I was sitting in
front of my Speccy, staring
blankly at the small white dot
at the centre of my telly screen
when it struck me! "Ouch", I
cried! "It's about time the
boffins at YS heard about

O'LEVELS

not just revision but also tuition
for the spectrum 48k

Mathematics 8 programs TOTAL 150k	fractions, square roots, decimals, logarithms, areas, sets, accuracy, bases, interest, volumes, indices, standard form, modulus, number sets, pie charts, histograms, simultaneous equations, bar charts, averages, probability, algebraic laws, quadratics, matrices, vectors, transformational geometry, trigonometry, differentiation, integration, factors, angles.
Physics 7 programs TOTAL 140k	reflection, wavelength and frequency, refraction, lenses, the eye and its defects, diffraction, colour, magnetism, motors, Ohm's law, amps, volts, series, parallel, electronics, heat, gas laws, energy forms, specific heat, kinetic energy, half-life, atomic structure, radiation, isotopes, Newton's laws.
Biology 6 programs TOTAL 120k	plant and animal cells, genetics, inheritance, reproduction in man, sexual and asexual reproduction, flowering plants, photosynthesis, amoeba, transpiration, transport, bacteria food chains, diet, alimentary canal, respiration, excretion eye, skin, nervous system, ecosystem, food cycles, fungi earthworm, amphibians, birds, mammals, response.
Computer Studies 7 programs TOTAL 140k	data collection, coding, storage, processing, presentation, validation, d.p. systems, privacy, security, hardware, I/O devices, software, low and high level languages, machine-code, assemblers, interpreters, compilers, errors in programming, aids to debugging, microcode, machine organisation.
Chemistry 8 programs TOTAL 150	Matter states, action of heat and electricity, reaction with air, water, acids, alkalis, halogens, oxygen, sulphur, nitrogen, phosphorus, carbon, hydrogen, alkali metals, alkaline earth metals, transition metals, organic chemistry, atoms, formulae, molar mass, equations, ions, periodic table, bonding, gases, metal extraction, polymers, fertilizers.
French 8 programs TOTAL 160k	Regular and irregular verbs, reflexives, indicative, subjunctive, passive, infinitive, agreement, pronouns, definite, indefinite and relative articles, single and compound nouns, adjectives and their forms, adverb phrases, comparatives and superlatives, conjunctions, prepositions, idioms, measurements.
Electronics 8 programs TOTAL 150k	Energy and its sources, power distribution, s.m.f., p.d., charge, current, power, r.m.s. values, resistors, series and parallel, capacitors, time constants, inductors, transformers, resonance, microphones, loudspeakers, heat and light sensitive devices, diodes, transistors, logic circuits, multivibrators, meters, CRO, amplifier, feedback.

each subject only £5.00 inc. p/p
GCE TUTORING

quality educational software

HILLSIDE, KIRSTEAD, NORWICH, NORFOLK NR16 1EB

please send me:

my name and address:

my computer is:

I enclose a cheque P.O. for £
made payable to G.C.E. Tutoring

THE GREATEST SALE EVER

SOFTWARE

ROM CARTRIDGES
JESS, PSSST, COOKIE, PLANETOIDS,
CHETPA, BACKGAMMON
.....£3.00 each or 4 for £10.00
ANDROID ONE.....£1.95
ANDROID TWO.....£1.95
T.L.L.....£2.95
CYCLONE.....£2.95 or 4 for £7.50
KENTILLA.....£1.95
BRAXX BLUFF.....£1.95
SUBTERRANEAN
STRYKER.....£2.45 or 3 for £5.00
STOP THE EXPRESS.....£2.45
RUNES OF ZENDOS.....£2.45
BACKPACKERS GUIDE.....£2.95
GYRON.....£6.95
VALHALLA.....£2.95
PSYTRON.....£2.95
DOOMDARK'S REVENGE.....£4.95
EUREKAI!.....£3.50
CODE NAME MATT.....£7.00
TASWORD II.....£5.00
SCRABBLE.....£6.60
Plus all the latest titles. Just send us your
order with £1.50 off the RRP and we will
send you the goods.

PERIPHERALS:
OK LIGHT PEN.....£17.95
QUICK SHOT II JOYSTICKS.....£7.95
SINGLE PORT INTERFACE.....£7.95
CURRAH SPEECH &
SOUND SYNTH.....£19.95
DK'TRONICS KEYBOARDS.....£27.95

Ring us for a quote on any item not listed

PACK 1. BEYOND BASIC, FORTH, PRINT
UTILITIES, SMALL BUSINESS ACCOUNTS,
CATTEL IQ TEST.....£10.95

PACK 2. SET OF FIVE SINCLAIR LEARN
TO READ SERIES.....£5.95

PACK 3. VU CALC, VU FILE, VU 3D £5.95

PACK 4. SHIP OF DOOM, PLANET OF
DEATH, ESPIONAGE ISLAND, INCA
CURSE, EMBASSY ASSAULT,
TRANSYLVANIAN TOWER.....£5.95

PACK 5. ALPHABET GAMES, SPEECH
MARKS, CASTLE SPELLERIOUS, THE
APOSTROPHE, CAPITAL LETTERS, EARLY
PUNCTUATION.....£5.95

P&P 60p for any Software order, £1.50 for Keyboard + Printer, 60p for Peripherals.
Overseas 75p per tape or £2.50 per pack

PACK 7. SMALL BUSINESS ACCOUNTS,
COLLECTORS PACK, CLUB RECORD
CONTROLLER.....£5.95

PACK 9. SPACE RAIDERS, TRAXX,
PLANETOIDS, HUNGRY HORACE & THE
SPIDERS, INVINCIBLE ISLAND.....£5.95

PACK 11. CATERPILLA SPACE RAIDER,
SPECTRUM SAFARI, HALLS OF THE
THURES, INVASION OF THE BODY
SNATCHERS, DUNGEON MASTER.....£5.95

PACK 12. JASWORD 2, TOUCH AND GO,
SKRABBLE, RETURN OF THE JEDI, CHESS,
VU B.D.....£9.50

PACK 13. SPECTRUM SAFARI, WINGED
WARLORDS, CATERPILLER, LEAFPROG,
OTHELLO, GERMAN IS FUN.....£5.95

PACK 14. TIME TUNNELS, FIVE DICE, PSI
GAMES, MANTRIP SHIP, SPACE REC,
COSMIC DEBRIS.....£5.95

PACK 15. JIG SAW, DIMENSION
DESTRUCTORS, REFLECTIONS,
SPECTRUM CHESS, 3D QUARTACUBE,
READ RACERS.....£5.95

PACK 16. COSMIC CRUISER, BC BILL,
PEDRO, ZOOM, ZIP ZAP,
ALCHEMIST.....£4.95

PACK 17. HORACE GOES SKIING,
CHEQUERED FLAG, CHESS, MAKE A CHIP,
SURVIVAL, SCRABBLE.....£4.95

PACK 18. SPELLBOUND (BEYOND),
SPACE STATION ZEBRA, TIME TUNNELS,
FIVE DICE, DEVILS OF THE DEEP,
TRANSYLVANIAN TOWER.....£5.95

PACK 19. DOOMDARK'S REVENGE
(BEYOND), PSYTRON (BEYOND),
VALHALLA (LEGEND).....£8.95

PACK 20. ALL LOTHORIAN TITLES, INC.
DREADNOUGHTS, PANZER ATTACK, RED
BARON, PARAS.....£5.95

PACK 21. LOTHLORIAN ACTION GAMES,
INC. BILLYBONG, TWO GUN TURTLE,
MICRO MOUSE, BEETLEMANIA, BEDLAM
BLASTER, GRID PATROL.....£5.95

PACK 22. SPORTS PACK INC. SNOOKER,
ON THE OCHE (DARTS), OLYMPICS, ST.
ANDREWS GOLF, DERBY DAY, WORLD
CUP FOOTBALL.....£5.95

6 MIDGATE, PETERBOROUGH, CAMBS PE1 1TN.
Telephone: (0733) 49696

For Your AUTUMN SAVERS SPECTRUM/PLUS

QuickShot™ II

INCLUDING INTERFACE
PLUGS STRAIGHT INTO SPECTRUM/PLUS

ONLY **£15.99** POST FREE

- TOP + TRIGGER FIRE BUTTON
- AUTO FIRE MODE
- KEMPSTON COMPATIBLE
- STABILIZING SUCTION CUPS
- SPECTRUM OR PLUS • UNBEATABLE OFFER

SEND FOR INSTANT DESPATCH



PRICE BREAKTHROUGH

SWITCHABLE

JOYSTICK

INTERFACE

ONLY **£12.99** POST FREE

- ALL THREE SYSTEMS AT THE FLICK OF A SWITCH
- 'KEMPSTON' - 'CURSOR' - 'INTERFACE II'
- ACCEPTS ANY 9 PIN JOYSTICK - INCLUDING RAPID FIRE MODELS • SPECIAL OFFER!!

Buy with QUICKSHOT II complete for only **£19.99**
SEND NOW



Now you can create Superb Graphics easily with

the New **Lightwriter**

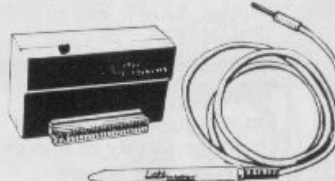
ONLY

£16.99

POST FREE

Lightpen comes
complete with

Interface & Software



- Just plug in the Datal Lightwriter and draw circles, squares, rectangles, make superb hand drawings, paint, fill, erase, choose inks, paper, colours.
- Save your results into memory (48K) and use in animation or save onto tape to use in your own games.
- All functions selected from screen menu with the lightpen.
- Unbeatable value. • Nothing more to buy.

SEND NOW AVAILABLE FOR IMMEDIATE DELIVERY

Digital Sound Sampling Technology.

NOW Available
on your **Spectrum**

Complete unit and Software

£49.99 POST FREE



- Digital Sound Sampling has only previously been available for large micros and costing at least 10 times the amount.
- The Sound Sampler allows you to record 'Digitally' any sound into memory and instantly replay it at any pitch, forwards, backwards, ascending scale, compressed, expanded, with echo, and easily looped etc.
- Supplied complete with Software package to facilitate the above operations, plus on screen 'Voice Prints'.
- Frequency Fluting.
- With on screen keyboard + drum kit a whole symphony could be produced from a single Sample Sound.
- This is a professional unit featuring R to D to ADC converters as used in Digital equipment now sweeping the music world.
- Although the unit is not a toy, giving truly astounding results for the musically inclined, we have incorporated a games interface to allow you to use Sound Sampling in your own games etc., so the Sound Sampler would be of interest to everyone.



HOW ABOUT
WITH
SOUND?

**UNBEATABLE
OFFERS!!**

WHILE
POST FREE STOCKS LAST



Games Ace features:
KEMPSTON COMPATIBLE • JOYSTICK INTERFACE
ACCEPTS ANY 9 PIN JOYSTICK INCLUDING RAPID
FIRE MODELS
PLUS DELIVERS THE SOUND FROM YOUR
GAMES THROUGH TV SPEAKER. (Fully controllable)

ONLY **£10.99** or complete with QuickShot II
only **£17.99**

Turbo Ace features:
ALL THREE SYSTEMS AT THE FLICK OF A SWITCH
KEMPSTON • CURSOR • INTERFACE II • ACCEPTS
ANY 9 PIN JOYSTICK • INCLUDING RAPID FIRE
MODELS • ON SCREEN SOUND AS 'GAMES ACE'

ONLY **£15.99** or complete with QuickShot II
only **£22.99**

GUARANTEED SAME DAY
DESPATCH ON ALL ORDERS
TRADE ENQUIRIES WELCOME

24 HR CREDIT
CARD LINE

**DATAL
ELECTRONICS**

UNIT 8, FENTON INDUSTRIAL ESTATE,
DEWSBURY ROAD, FENTON,
STOKE-ON-TRENT
TEL: 0782 273815

this". So, frantically typing, I churned out this letter, stuck it in an envelope and sealed it and then made my mum post it — I was suffering from Total Game Stress, so I couldn't go!

By the way, if anyone out there can beat my score, I would very much *not* like to hear from them!

Andrew Hunter, the next Bruce Lee
Battersea, London

All I can suggest Bruce is that you very much don't turn to Go For Gold or your nasty attack of Total Game Stress could prove fatal. Ed.

PICTURE THIS

Whilst reading my September YS, my eye was taken by the offer you ran on the Picturesque Editor/Assembler. Can't be bad I thought, so I popped a cheque for the necessary and a copy of the news item in the post. This was on Thursday morning. It's now Saturday and guess what's just dropped through my letterbox. Yep, you've got it — or rather I've got it, my copy of Picturesque's Editor/Assembler.

Congrats to Picturesque for a speedy and efficient service and to put the icing on the cake I got my cheque back as

per the offer. Needless to say I have now sent off for the Monitor — at £1 off!

J A Snagg
Whitley Bay, Tyne 'n' Wear

Aah, if only all letters were like this. Let's hear it for happy contented YS readers and put an end to all this moaning and griping. What d'you mean, no chance? Oh, OK let's get on with the grumbling! Ed.

SAVAGE BEAST

I really have had it up to here with all those namby pambies whining on and on about Sinclair Research and how they're now on to their twentieth Spectrum (due to arrive within twenty-eight days from Uncle Clive) because the other nineteen either went up in smoke or went into a permanent state of sulk.

Well, I ask you, is it really Sinclair's fault? No, it certainly is not. The problem is too much pampering. The only language a computer understands these days is violence — a quick punch in the PCB. If my Speccy dared to report tape loading error or some such like, it knows that it would get a swift jerk of the choke chain, and pronto. The

same goes for microdrives: I only have the one but the slightest little nibble on a cartridge and he'd be connected up to the mains before you could say Jack Flash. (Jack Flaaaagh! Ed.)

Anyway, I can't spend all day gossiping, I have a litter of light pens to house train.

Ian Williamson

Bradford, West Yorkshire
PS Tell that Shaw person to wake up for a minute and tell me how to do fancy border patterns (stripes and so on) and it had better be in Basic or I'll be round with the choke chain.

OK, pal — think you can frighten me with the promise of the old choke chain, eh? I've been threatened by devils who'd have you for breakfast (Me f'rinstance! Ed). Stick this up your user port:

10 BORDER 0: BORDER 0:
BORDER 1: BORDER 2:
BORDER 3: BORDER 4:
BORDER 0: PAUSE 1: GO
TO 10

Troubleshootin' Pete.

ARE YOU SHAW?

How dare you mock G A D Shaw in YS 19 when he wrote in about a number of new games. You're wrong and I should know — I recently bought a copy of *Manic Mooner* in my local off-licence. (That figures! Ed)

Also on the stand of budget-price software were the following games. At first, I thought they were a joke too, but after seeing them on a friend's computer, I was convinced. The games were called *Daley Thompson's Supervest*, *Underpants*, *Lampshade*, and *Sober Wilf* (Koko's cousin).

I believe that the firms producing the games are trying to 'fool' the public into thinking they're buying reputable games — and although the games are OK, it's still a con!

Sam H Waghar
Barnsley, South Yorks

A con, eh? S'pose you'd know, Sam. Funny how you live just down the road from G A D Shaw. Stranger still how your name just happens to be an anagram of Graham Shaw. All coincidence, eh? Plul teh toher oen, ist gto blels no. (anag.) De.

ON THE DOLE

Beep, beep. I claim my trainspotter award. I was scanning your Road Runner

road map of (fabaroonee) *Highway Encounter* when it suddenly hit me in the central reservation (ouch!) that there was summit missing.

Approximately one hundred beady one eyed meanies missing to be exact. (One hundred and forty-eight to be exactly exact actually! Ed)

Just 'cos your art dept couldn't squeeze in all the screens of Zone 0, a hundred meanies were made redundant. It's all jolly unfair to beady one eyed, easy to zap meanies.

Steve Thrashmore Thurlow Debenham, Suffolk

I couldn't agree with you more, Steve. And what makes it worse is that the poor devils ain't got arms, so they can't sign on! Ed.

JERRY BUILT GAMES

Whilst reading the review of *Dambusters* in your brilliant mag, I noticed a new German secret weapon! The single engined Me110?!

Perhaps the American writers should watch a few more films in which Yankee stars like Burt Lancaster win the war single handed. So, how's about a *Trainspotter* Award then?

Christopher Lewis
Port Talbot, W. Glamorgan

*I don't really think you deserve a *Trainspotter* Award. How about a *Planespotter* certificate instead? Ed.*

LITTLE PLEADER

To the Legal Department of YS. Case: Frank Bruno's Boxing. Judge Presiding: Very Honourable Kevin Cox.

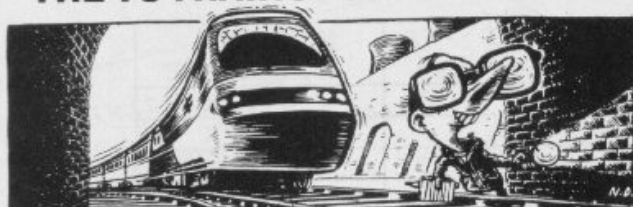
Prosecution: Me. Defendant: Roger Willis. Crime: Awful review of fab computer game.

In YS 18, Mr. Willis, did you or did you not say that the crowd went frantic when he was "left out for the count"? Our evidence definitely proves that no crowd celebrations took place or ever will take place as it is not a feature of the game. The prosecution moves therefore that Willis should serve no less than six months in Rathbone Prison camp.

The prosecution rests on your decision.

Dennis Carroll, Howwood, Renfrewshire.
I think I'll retire to consider my decision (About time too! TP). Maybe Roger needs a holiday. Come to think of it, maybe he is on holiday! Ed.

THE YS TRAINSPOTTER AWARD



What I want to know is what has happened to the *Your Speccy* so-called *MEGA* game reviewers? Has Dougie Bern gone soft? Maybe he needs a holiday? (I doubt it! Ed) What am I wittering about I hear you cry? Well, I hearby claim the YS Trainspotter Award for this month, year, decade, century, millenium and the week after. So there. (Oh so that's it... c'mon out with it! Ed) You see I was flicking through wonderful why-ess (Whyindeed? Ed) when I came to *Way of the Exploding Fist*. You will see that it says (and I quote) "You've got to be good to get this far" and if you look closely at the picture, you'll see it's in demo mode. Answer that Mister Ed! **David 'Eagle eyes' Hosier**
Christchurch, Dorset

P.S. I enclose 1p towards TP's salary and 2p for the Ed.

(This creeping gets less subtle everyday. Ed).

P.P.S. If this letter is not printed I will demand my money back or you will be forced (I've got a big brother you know) to play JSW for three months.

Hey... don't push it you. Dodgie's got his own big brother and the pair of them are into real karate never mind Fist! Besides, I think the brainblotter's done rather well getting to the demo mode all by himself...

*As for doubling TP's monthly income — shame on you! Don't you know that wealth corrupts the young? So, yeah, alright, mumble-grumble, I s'pose you can have your *Trainspotter* certificate. But just for a month mind you — we can't get everything right for the next 12000 issues. Ed.*

With Built-In Editor!

**FREE!
HOME
TRIAL**

PEKER ASSEMBLER PLUG-IN ROM CARTRIDGE

convert your Spectrum into a
purpose built Editor/Assembler

Instantly!

- * NO LOADING - cartridge simply plugs into user port
- * Assembles ALL Z80 commands including those not listed
- * BREAK-POINT facility for debugging - lists values of registers
- * 30 EDITING COMMANDS - e.g. block copy, move, delete & print
- * Built-in Centronics printer software
- * Built in "HELP" facility
- * More memory available
- * Save, Load, Verify, Merge & Print PART or FULL programs
- * Operates as a word processor
- * Built-in "real time" clock
- * AND MUCH MORE!

Look at the table below and compare the PEKER Assembler Cartridge with other popular assemblers available.

MAKE	ASSEMBLY * TIME (secs)	LOADING TIME (secs)	MEMORY AVAILABLE
PEKER	3	NIL	41.6K
DK TRONICS	155	70	33.7K
O.C.P.	15	88	28K
ZEUS	3	60	33.5K

* Assembly times taken on identical 5K programmes.

FREE HOME TRIAL

We at PEKER are so confident of this product that we are offering a 14 day FREE HOME TRIAL.

Simply complete and return the attached order form and return it to us with a cheque for £14.95/£17.95*. Your cheque will NOT be cashed until 14 days after the goods have been despatched to you. If you are not completely delighted with the PEKER Assembler Cartridge simply return it to us within the 14 day period and we will return YOUR cheque.

* Normal price £24.95

Introductory offer price £17.95

or £14.95 if ordered with the Z80 course (see facing page)

TO ORDER SEE COUPON ON FACING PAGE.

**COMING SOON!
CENTRONICS INTERFACE**



LEARN MACHINE CODE THE EASY WAY WITH

Tel: (0493) 853099

PEKER!

**INTRODUCTORY
OFFER!**

- * BASIC equivalents to machine code commands.
- * Written solely for Spectrum 48K & "+".
- * No obligation to complete the course.
- * Fully documented example programs.
- * Fully documented 12 part course.
- * Telephone "HELPLINE" service.
- * Order as and when you please.
- * High success rate.

SPECIAL INTRODUCTORY OFFERS

- (1) Ordering the first six lessons entitles you to select any three items at the reduced price PLUS one item FREE (Assembler Cartridge cannot be selected as free item).
- (2) Ordering the first three lessons entitles you to select any two items at the reduced price.
- (3) Ordering the first lesson only entitles you to order one item at the reduced price.

SEE HOW MUCH YOU CAN SAVE!

Toolkit	£6.95	£1.99
Disassembler	£6.95	£1.99
Fast Load/Save	£9.95	£3.95
Assembler Cassette	£9.95	£3.95
Assembler Cartridge	£24.95	£14.95
Character Generator/Animator	£9.95	£3.95
Screen Planner Pad	£4.95	75p
Graphic Planner Pad	£4.95	75p
Program Planner Pad	£4.95	75p

NOTE: YOU ARE UNDER NO OBLIGATION TO ORDER EXTRA ITEMS

Please send me the following:

- ☐ The first six lessons at £28.50 (inc P&P) plus the items listed below @ £
- ☐ The first three lessons at £14.47 (inc P&P) plus the items listed below @ £
- ☐ The first lesson at £4.95 (inc P&P) plus the item listed below @ £
- ☐ The Assembler Cartridge only @ £

NAME _____ AGE _____

ADDRESS _____

DATE _____

The items I wish to claim are as follows:

£ / £

I enclose cheque/postal order for £ made payable to PEKER COMPUTERS LIMITED.
POST TO: PEKER COMPUTERS LTD, FREEPOST, Great Yarmouth, Norfolk, NR30 3BR (no stamp required)

Game Plan

Worse things happen to Dougie Bern than writing for Your Spectrum — you see he's also a professional programmer when we let him have the time off. Now you can learn how he tackles the difficult task of translating his ideas for games into reality. And who knows, perhaps you'll end up writing for YS!

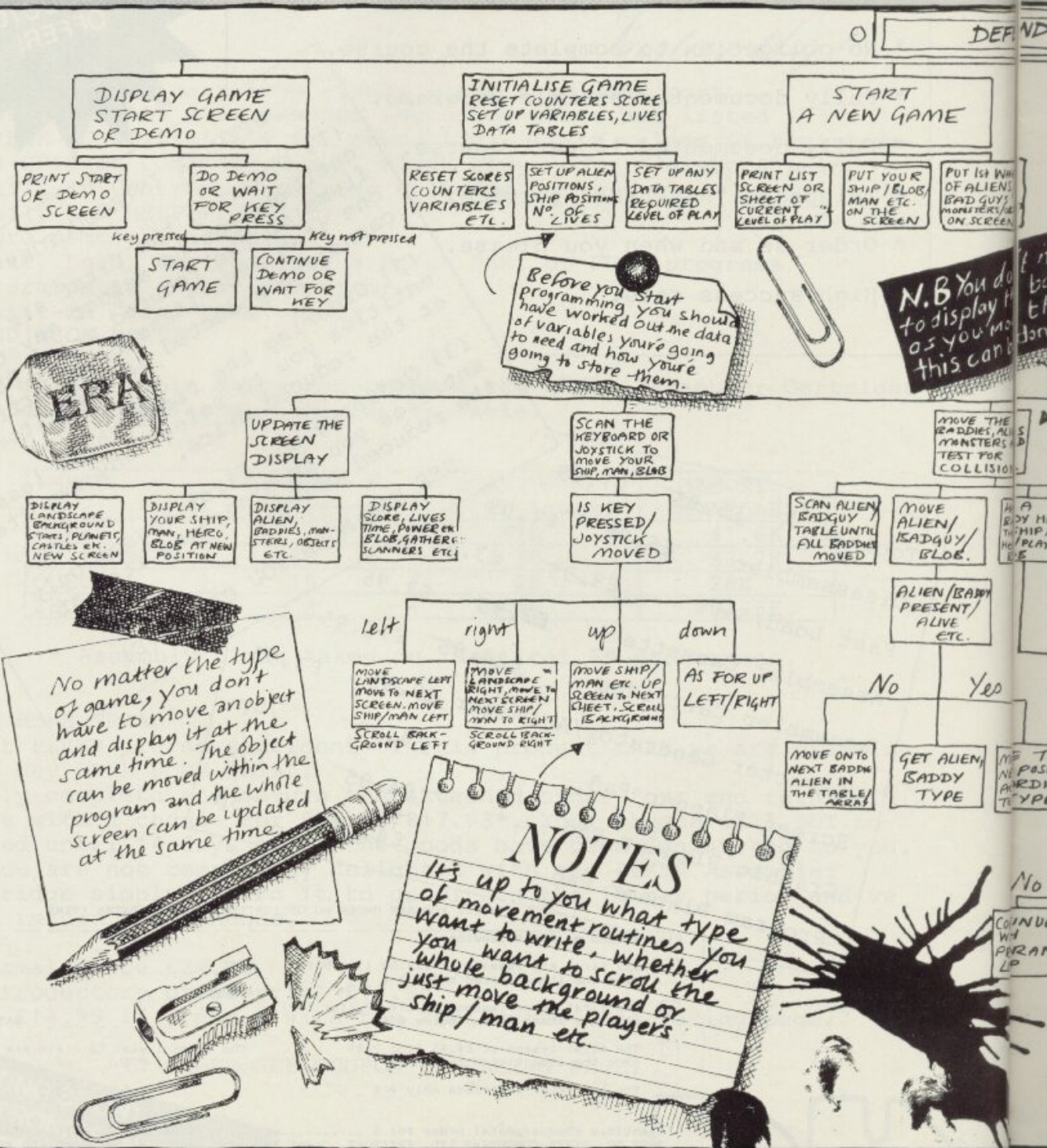
What's that you say? You've got the most mega-amazing idea for a new game, eh? It's all about this evil tyrant who wants to take over the galaxy and you're the only one who can stop him and all you've got is your

ZX2000 Mk III interstellar spacefighter and it's got these brain-bogglin' 3D graphics and it'll sell simply squillions of copies and, and, and...

Hang on a sec! You haven't written it yet

and you never will unless you get your act together. If you've had a crack at it before, you'll know how easy it is to get yourself into a right ol' muddle — and end up not knowing your arrays from your elbow! So, let's take a look at how the professionals tackle the task.

The first job is to get back to that evil tyrant and your great idea for the game. And once you're happy with the scenario, stick to it — write it down in meticulous detail with an exact description of the game and the point of the whole thing. Now we come to the point where a lot of programmers really come a cropper. They get itchy fingers and insist on sitting down at the Speccy and writing code before the program's been clearly defined and thought through. Halfway into it, they find that the program's got a fundamental design fault and there's nothing they can do but start again from scratch. Serves 'em right, I say!



It's a trap that can easily be avoided if you follow the first principles of structured programming. And before you turn the page in terror at those words, let me say that structured programming is not some incredibly mysterious method of writing code but just the opposite, in fact. Instead of writing your game all at once and ending up with the programming equivalent of a plate of spaghetti, you just break it down into a series of subroutines that link together. Every time you want to add to the program, you can just write a new subroutine and tack it on by calling it from one of the other routines. It's a bit like getting an architect in to design a house for you. If you give the job straight to a builder, you'd be well advised to look for alternative accommodation!

FROM THE TOP

Now the chart below is the programmer's version of an architect's plans. It's called a

top-down chart and is the best way of visually representing the structure of a program — far better than a conventional flow-chart. The one here is for a version of that golden oldie *Defender* but the principles remain the same for any game.

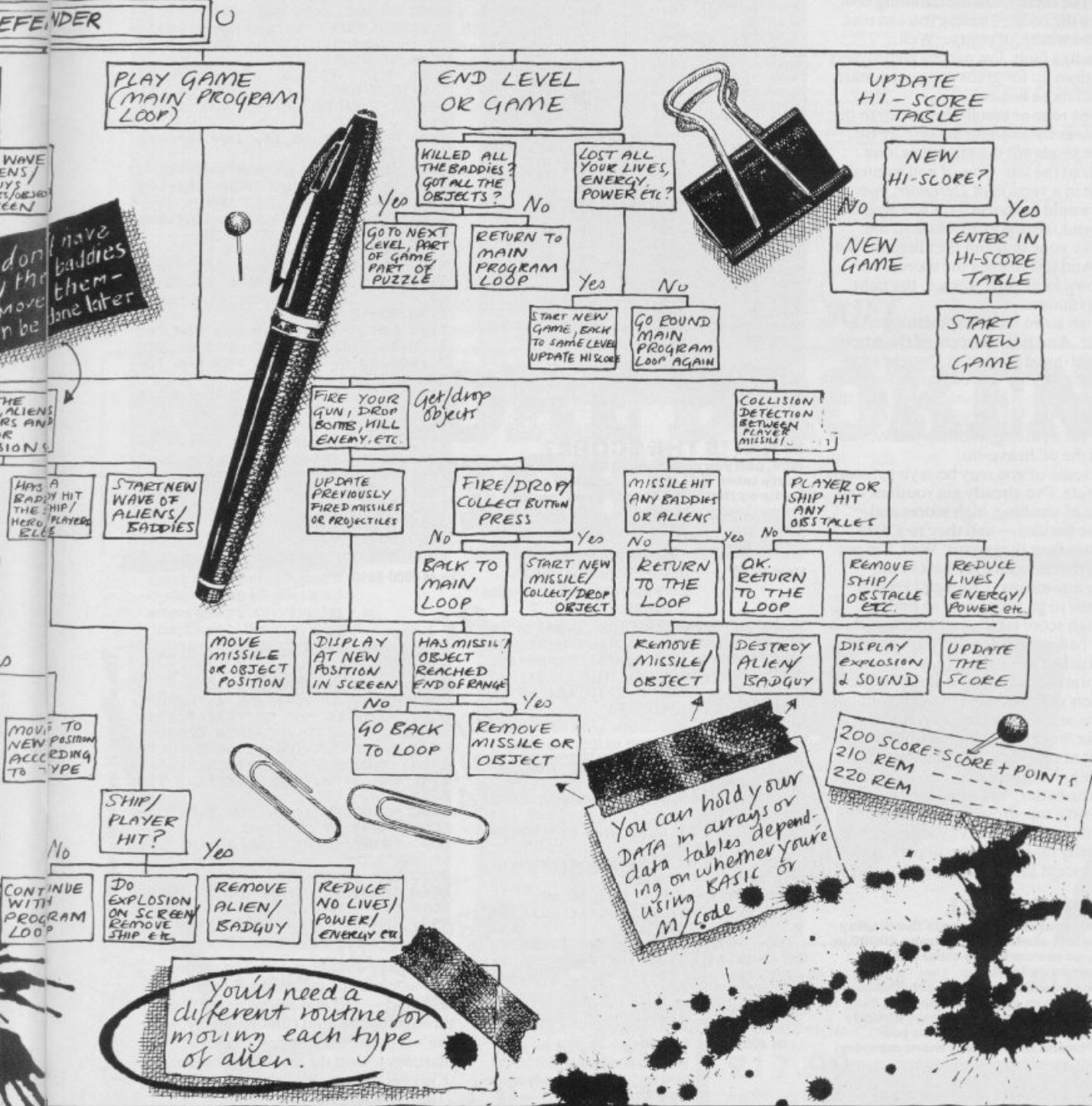
So, how do you try this method? Well, if you're really green at the game, it may be an idea to try out the chart below by writing your own version of *Defender*. Make a copy of the chart on to a ginormous poster-sized piece of paper, leaving all the boxes empty. Now start filling 'em with your subroutines. And don't think you've got to write everything from scratch — you can pick up some good quality code that's fallen off the back of a program listing! High score tables and scrolling routines are the place to start — just identify where you need them and slot them into place on your chart. Once you've collected or written all the chunks of code you need, then's the time to sit down at the

keyboard and fit the pieces together.

And it's all much the same for any game — base your chart on the one below. Keep subdividing each box into smaller and smaller sections of code until you reach a level where you feel confident that you can write the required subroutine. Course, you'll still come across tricky routines, in which case you can resort to the more conventional flowchart, but do it on a separate sheet of paper.

Once you've started using this approach, you'll be amazed at how quickly it becomes second nature. Look through all the programs that appear in *YS* and you'll soon be able to separate the 'professionals' from the throw-it-up-into-the-air-and-see-where-it-falls brigade.

So, there you have it, a condensed guide to writing megagames. All you need now is that brilliant idea and I'll see you in the Bahamas!



PLAN OF ACTION

Now that you've planned out how you're going to approach writing that megagame, it's time to tackle the code. To give you a head start, Tony 'Slim' Samuels has come up with some small routines that'll slot straight into your top-down chart.

So, you've drawn your chart, broken down the separate steps that'll lead to your stardom but there's still the daunting task of writing the code — unless you can nick it from elsewhere, of course. Well, generous to a fault, I'm putting some of my own routines up for grabs so you can start ticking off those boxes.

The first routine scrolls the screen to the left. It works by scrolling the display file, that's the pixels not the attributes, one character to the left. Now, if you wanted to include it in a version of *Defender*, your best bet would be to use it for scrolling the background, after you've taken all the sprites like your ship and the aliens off the screen. And just to even the score, I've also thrown in its twin brother, the right scrolling routine.

The high score table is something of a knockout. And it'll take care of the whole of the right-hand section of Dougie's top-down chart. With it you can enter your name in the spin-round selector or into the chart itself. Plus, if your score is too pathetic for a placing, it'll suss that out and give you the ol' heave-ho.

Now, some of you may be saying, hang on a minute, I've already got routines that take care of scrolling, high scores and much else besides — and they're a darn sight better than these ones. Well, I'm not claiming that mine are the best in the world by any means — though I reckon you'd have to go a long way to find a neater high score table — all I want to do is start the ball rolling. If you've got a little routine tucked away that you've never seen in print before, send it in. Let other YS readers get some benefit from your brilliance, and if they reckon you're not so hot, make 'em prove it by sending in a better bit of programming that'll do the same thing. Just remember the shorter the routine the better — just enough to fit into one box on a top-down chart. Programming is one activity where good things really do come in small packages — well, all except for me, of course!

ROCK'N'SCROLL

Here's the routine that scrolls the display file to the left. It starts at address 40000 in decimal, so remember to clear enough room in memory for it.

The second routine does exactly the same as the one above apart from moving the display file to the right. It follows directly on from the left scroll routine so you shouldn't need to clear any more memory.

```
9C40 0010 0010 0000 40000
9C40 210040 0020 LBCRL LD HL,16384
9C43 55 0030 LD D,L
```

```
9C44 3E00 0040 LD A,192
9C46 061F 0050 NEXTL LD B,31
9C48 23 0060 NXTGR INC HL
9C49 5E 0070 LD E,(HL)
9C4A 2B 0080 DEC HL
9C4B 73 0090 LD (HL),E
9C4C 23 0100 INC HL
9C4D 10F9 0110 DJNZ NXTGR
9C4F 72 0120 LD (HL),D
9C50 23 0130 INC HL
9C51 3D 0140 DEC A
9C52 C2469C 0150 JP NZ,NEXTL
9C55 C9 0160 RET
9C56 21FF57 0170 RSCRL LD HL,22527
9C59 1600 0180 LD D,0
9C5B 3E00 0190 LD A,192
9C5D 061F 0200 NEXTL LD B,31
9C5F 2B 0210 NEXTC DEC HL
9C60 5E 0220 LD E,(HL)
9C61 23 0230 INC HL
9C62 73 0240 LD (HL),E
9C63 2B 0250 DEC HL
9C64 10F9 0260 DJNZ NEXTC
9C66 72 0270 LD (HL),D
9C67 2B 0280 DEC HL
9C68 3D 0290 DEC A
9C69 C25B9C 0300 JP NZ,NEXTL
9C6C C9 0310 RET
0320 END
NEXTC 9C5F NEXTL 9C5D RSCRL 9C56
NXTGR 9C4B NEXTL 9C46 LSCRL 9C40
# SE0A
```

WHAT'S THE SCORE?

Well, can you come up with a better high score table than this — or think of any features that I've left out? Send 'em in!

```
10 REM
20 REM *SET UP HI-SCORE TABLE*
30 REM
```

Lines 10-40

This section sets up the high score table and functions needed for operation.

```
40 LET S$=" 1ST 2ND 3RD 4TH 5T
H 6TH 7TH 8TH 9TH 10TH 11TH 12TH 13T
H 14TH 15TH": LET W$="ABCDEFGHIJKL
MNOPQRSTUVWXYZ .": DIM I(15): DI
M H$(15,4): FOR F=1 TO 15: LET H
$(F)="-YS-": NEXT F
100 REM
```

Lines 100-200 This prints up the table itself

```
120 REM *PRINT HI-SCORE TABLE*
130 REM
140 INK 0: PAPER 0: BORDER 0: C
LS
150 PRINT AT 0,6: INK 4: "TODAYS
HIGH SCORES"
160 PRINT AT 3,3: INK 5: "RANK
NAME SCORE"
170 LET C=1: FOR F=5 TO 19
180 LET I7=7: LET I6=6: LET I2=
2
190: PRINT AT F,3: INK I7: S$(C
TO C+3): AT F,13: INK I6: H$(F-4):
AT F,23: INK I2: I(F-4): LET C=C+
4: NEXT F
200 PAUSE 0
400 REM
```

Lines 400-430

No game involved? Well, you'll have to remedy that. But for the time being enter your own score anyway

```
410 REM *PLAY THE GAME*
420 REM
430 CLS : INPUT "AS YOU CAN NOT
ACTUALLY PLAY THEGAME,ENTER A S
CORE OF YOUR OWN CHOICE": C
6910 REM
```

Lines 6910-7200 If your score is successful, then this is the section that'll accept your name. You didn't make it? Shame, but at least you see the Tough Luck routine.

```
6911 REM *IS SCORE HIGH ENOUGH*
*FOR THE TABLE*
```

```
6912 REM
6990 IF C=0 OR C<=I(15) THEN GO
TO B030
7000 REM
7010 REM *ENTER NAME*
7020 REM
7030 LET EX=0: FOR A=1 TO 14: IF
C>I(A) THEN GO TO 7050
7040 NEXT A
7050 LET LE=A: PAPER 0: BORDER 0
: CLS : INK 4: PRINT AT 1,0: "WE
LL DONE, YOU HAVE PLAYED THE
```

```
GAME SO WELL, YOU ARE NOW""
ELIGIBLE FOR THE "15*((A-1)*4+1
TO (A-1)*4+4): AT 7,1: "RANK IN TO
DAYS HI-SCORE TABLE."
7060 PRINT AT 9,0: INK 2: "SELECT
LETTERS WITH I01 AND I01: AT 11
,0: "KEYS, ENTER LETTER WITH I01 K
EY."
```

```
7070 PRINT AT 16,14: INK 6: "AAAA
"
```

```
7080 FOR A=1 TO 4: LET W=1
7090 IF INKEY$="q" THEN LET W=W
+1: IF W>28 THEN LET W=1
7100 IF INKEY$="a" THEN LET W=W
-1: IF W<1 THEN LET W=28
7110 FOR F=1 TO 7: NEXT F
7120 PRINT AT 16,13+A: INK 7: W$(
W): IF INKEY$="m" THEN GO TO 71
40
```

```
7130 GO TO 7090
```

```
7140 LET H$(15,A)=W$(W): FOR F=2
0 TO 30 STEP 2: BEEP .002,F: BEE
P .002,30-F: NEXT F: FOR F=0 TO
30: NEXT F: NEXT A
```

```
7150 PRINT AT 16,14: INK 5: OVER
1: " : LET I(15)=C
```

```
7160 FOR F=1 TO 14
```

```
7170 IF I(F)<I(F+1) THEN LET V=
I(F): LET I(F)=I(F+1): LET I(F+1
)=V: LET V$=H$(F): LET H$(F)=H$(
F+1): LET H$(F+1)=V$: GO TO 7160
```

```
7180 NEXT F
```

```
7190 IF EX=1 THEN GO TO 100
```

```
7200 GO TO 9999
```

```
B000 REM
```

Lines 8000-8090 It's not the winning that counts but playing the game. Phooey — get out there and give it another go or you'll end up here again!

```
B010 REM *PRINT HARD LUCK ETC*
B020 REM
```

```
B030 PAPER 0: BORDER 0: CLS
```

```
B040 PRINT AT 1,1: INK 6: "HARD L
UCK, YOU WERE NOT QUITE": AT 3,1:
```

```
"GOOD ENOUGH TO ATTAIN A SCORE":
```

```
AT 5,3: "BETTER THAN THOSE IN TH
```

```
E": AT 7,8: "HI-SCORE TABLE": AT 1
```

```
1,4: INK 2: "BETTER LUCK NEXT TIM
```

```
E!"
```

```
B050 PRINT AT 16,8: INK 5: "YOUR
```

```
SCORE WAS": AT 18,13: C
```

```
B060 PRINT J1: AT 1,9: INK 4: "PRE
```

```
SS ANY KEY"
```

```
B070 LET A$=INKEY$
```

```
B080 IF A$<>" " THEN GO TO 9999
```

```
B090 GO TO B070
```

```
9999 INK 9: CLS : PRINT "END OF
```

```
GAME ETC": STOP
```

If you have any short useful programs that would bring everlasting benefit to mankind — and make your name famed throughout the land (unfortunately, we can't promise the princess's hand in marriage), send them to Just Routine, YS, 14 Rathbone Place, London W1P 1DE.

POOLS

SPECTRUM

WITH
PREDICTOR

PLUS

**FREE
RACING
ANALYSER**

**14,000
MATCH
DATABASE**

After three successful seasons, we know a thing or two about successful pools prediction on home computers. Things like seven powerful methods of analysing form. Like a massive database and easy data entry. Not forgetting tuning facilities to let you improve your forecasts as the season progresses. We've combined all of these and much more into the 1985/86 version of our renowned Football Pools Predictor Program. And to complete this outstanding punter's package, there is a free Racing Analyser Program to let you analyse any race using the racecard from your daily paper. Now beat that for value!

BOTH PROGRAMS
FOR ONLY

£8.99

MAYDAY
SOFTWARE

181 Portland Crescent
Stanmore, Middx. HA7 1LR

BETA BASIC 3.0

SINCLAIR USER, JAN. 85 (ABOUT RELEASE 1.8): "HAS ESTABLISHED ITSELF AS THE STANDARD EXTENDED BASIC FOR THE SPECTRUM...TURNS SINCLAIR BASIC FROM A GOOD VERSION OF THE LANGUAGE TO A FANTASTIC ONE..." NOW, WITH RELEASE 3.0, BETA BASIC BECOMES PROBABLY THE MOST POWERFUL BASIC AVAILABLE ON ANY 8-BIT MICRO!

- **PROCEDURES** - a very full implementation that lets you extend Basic easily. With parameter passing by value or by reference (including arrays), LOCAL variables, recursion, DEFAULT parameter values, and the ability to handle parameter lists of any length. No PROC keyword is needed; e.g. you can use things like: swap a,b or draw_box 10,20,5 or addup bl,sum.
- **GRAPHICS** - up to 128 WINDOWS, each with its own character size (giving 1-64 chars/line!) and attributes. ROLL and SCROLL any part of the screen by any number of pixels in any direction. Use GET to store parts of the screen, then put them back anywhere at different magnifications. Fast FILL, ALTER attributes, PLOT strings, DRAW TO a point, change scale and origin.
- **TOOLKIT** - features: Rename with block move or copy, block DELETE, search and/or change (e.g. ALTER applies TO a), 36 User-defined keys. List the variables, list a procedure, list DEF KEYS.
- **EDITOR** - lets you move the cursor around the screen 10 times faster! And you can move the cursor up and down within edited lines, AUTO, EDIT, JOIN and SPLIT commands.
- **LISTINGS** with optional automatic indentation of loops, IF, procedures etc. Works on existing programs e.g. you can choose to list:
10 FOR n=1 TO 10: PRINT n: NEXT n
as: 10 FOR n=1 TO 10
PRINT n
NEXT n
- **KEYWORDS** can all be entered by typing them in full, or by the "single entry" method, or both in the same line; e.g. the line:
10 print "hello": if x=1 then goto 100 will be recognised and listed normally.
- **Upgrades** to Release 1.8 customers: If you bought direct from us, there is no need to return your cassette - just quote the (approximate) original purchase date with your order; otherwise return your cassette and name your supplier. The upgrade price of £8.95 (£7.50 overseas) includes a new manual.
- **ARRAY** and string handling features include fast INSTRING (100,000 chars/sec) and INARRAY search functions. You can JOIN arrays together, delete, transfer and insert sections, change dimensions without data loss, LENGTH function gives dimensions. Ultra-fast array SORT - e.g. a\$(500,30) will sort in about 3 seconds!
- **MICRODRIVE** commands let you use simple forms, or exactly the same commands you normally use for tape - just enter DEFAULT =m1 or m2. Some possible Microdrive commands: SAVE "name", ERASE "name", LOAD 1, "name", SAVE 10 TO 100; "part prog", SAVE a "slicer" or just the variables, MOVE programs, CODE, arrays, MERGE auto-running programs, End-Of-File function.
- **OTHER FEATURES**, new or improved, are too many to describe: DO - LOOP structure with WHILE, UNTIL and EXIT IF; BREAK, CLEAR, CLOCK, CONTROL CODES, EDIT variables, ELSE, GET, KEYIN (programs can write themselves!), MULTI-LET, ILIIST a "slicer", ON (works with line nos, procs, etc.), ON ERROR, OVER 2, POKE strings, POP, READ LINE, TRACE, USING, DPOKE, Faster GOTOs, GOSUBs and FOR-NEXT loops.
- **26 FUNCTIONS**: AND, OR, XOR, DEC, HEX\$, BINS; fast SINE, COS, RADN; CHAR\$, NUMBER, DPEEK, EOF, FILLED, INARRAY, INSTRING, ITEM LENGTH, MEMORY\$, MEM, MOD, SCRN\$, SHIFTS, STRINGS, TIMES, USING\$.
- **Spectrum Basic compatible** - you can run existing programs! Transferable to Microdrive. Syntax check on entry. Extra error messages. Compatible with most printer interfaces (please specify). Waft-drive version available.
- **Comprehensive A5-size manual**. More than 80 pages, with many examples.
- **To show you the power of Beta Basic's procedures**, we include a FREE TURTLE GRAPHICS package!
- **Release 1.8 remains available**, at a lower price of £8.95 (£7.50 overseas). You can upgrade later to Release 3.0 for £6.95 (£7.50 overseas).
- **TRANSFORM** your Spectrum with BETA BASIC 3.0 for just £14.95 inclusive! (£15.50 overseas).

(TICK AS APPROPRIATE) PLEASE SEND ME:

- 1 BETA BASIC 3.0. PAYMENT OF £14.95 (OR £15.50 OVERSEAS) IS ENCLOSED.
- 2 BETA BASIC 3.0 UPGRADE. PAYMENT OF £6.95 (£7.50) IS ENCLOSED.
- 3 BETA BASIC 1.8. PAYMENT OF £8.95 (£9.50) IS ENCLOSED.
- 4 MORE INFORMATION ON _____, I HAVE/DO NOT HAVE RELEASE 1.8 ALREADY.

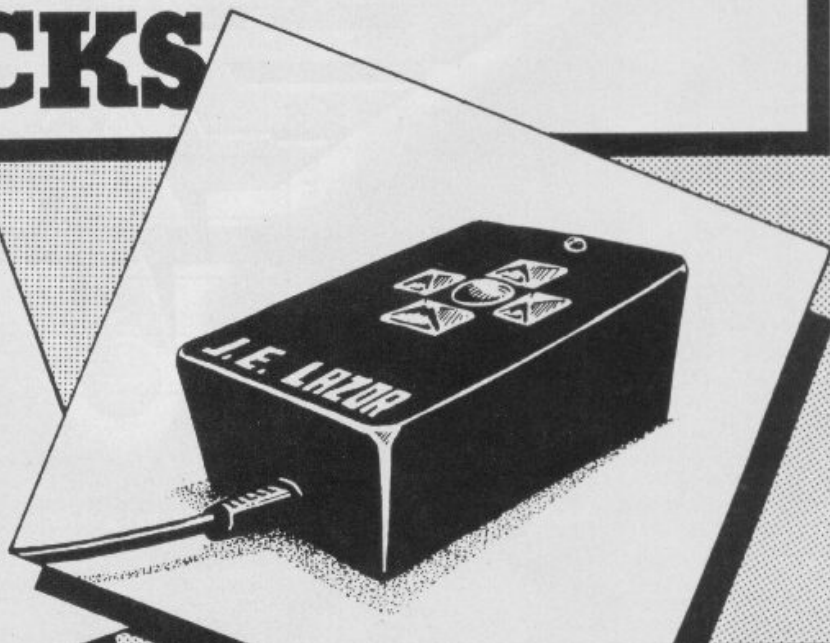
A STAMPED ADDRESSED ENVELOPE IS ENCLOSED.

**BETA
SOFT**

92 OXFORD RD.
MOSELEY
BIRMINGHAM
B13 9SQ

NO MORE BROKEN JOYSTICKS

**Change to:-
The J.E. LAZOR**
Touch Sensitive
Solid State Switching
Real Touch Control -
NOT A MEMBRANE
Faster by Far
Specially Designed
for Sports Games



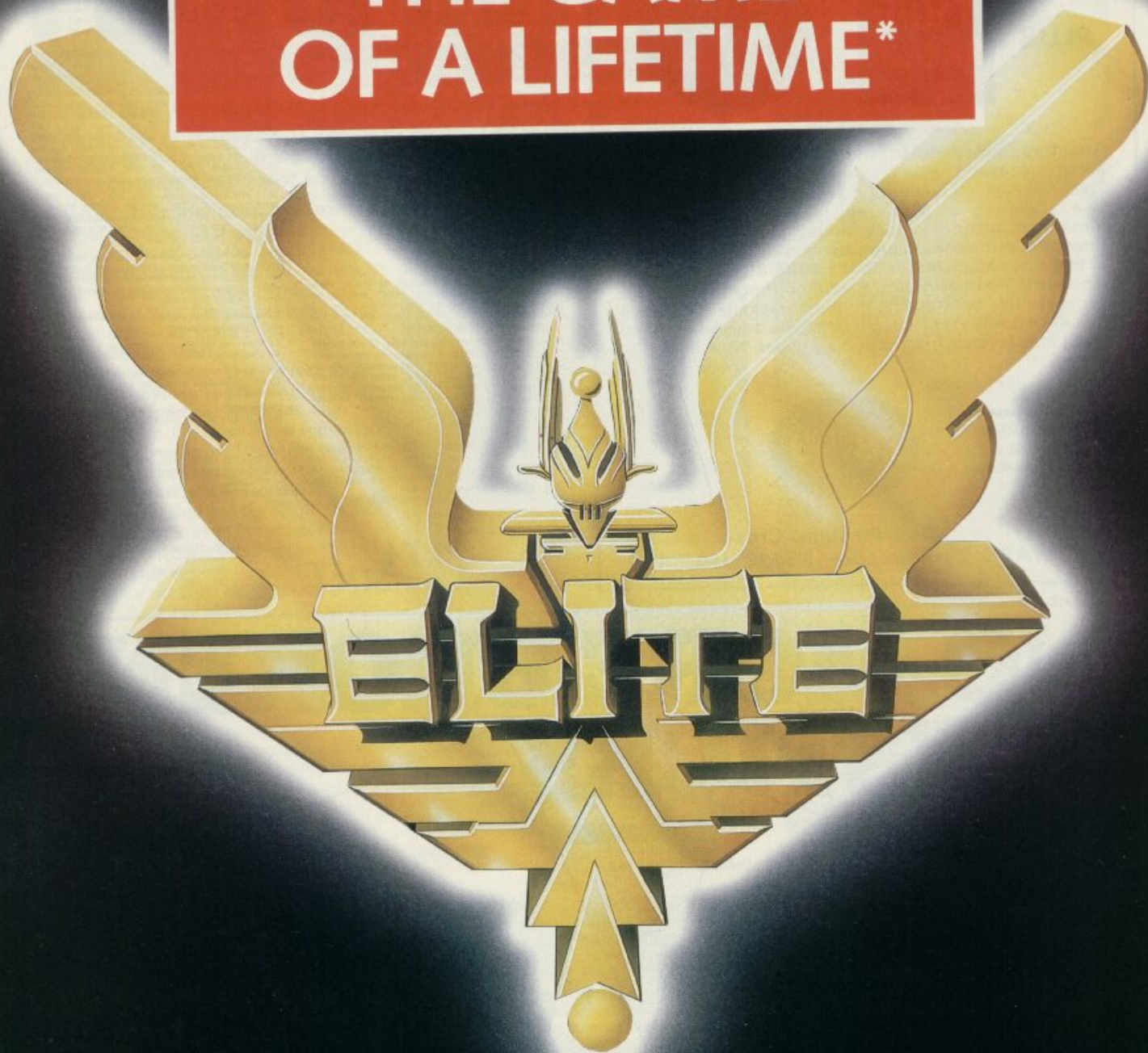
be KING
of the
HALL OF FAME

SEND TO:-

J. ENGLISH ELECTRONICS
31 Lincoln Road, Southport,
Merseyside PR8 4PR.

£17.99 plus £1.00 p & p (£3 overseas)
Allow up to 28 days delivery 12 Month Guarantee

THE GAME OF A LIFETIME*



Available for Commodore 64, Spectrum 48K and Spectrum +. Coming soon: Amstrad and MSX.



firebird

FIREBIRD SOFTWARE · WELLINGTON HOUSE
UPPER ST MARTIN'S LANE · LONDON WC2H 9DL

**GOLD
EDITION**

BETTER BIGGER FASTER

Specy Basic compilers have been no big thing but the choice is getting bigger and the packages are getting better. Dave Janda has his finger on the stopwatch...

Wow! Suddenly we've gone from Basic compilers being perverse novelties to having a choice of four or five major products. There's *Mcode I* and *II*, the new *Mcode III*, *Blast* (which we blasted in ish 19), Hisoft's new *Colt* compiler and you can still cop hold of Simon Goodwin's *ZIP* which appeared in stages in *YS* issues 3 to 6!

Extended Basics are also right trendy

at the moment. Besides our own *YS MegaBasic*, there's Betasoft's *Beta Basic* and Ocean's new *Laser Basic*. But remember these products are enhancements of ZX Basic. A compiler, on the other hand, transforms your original Basic program into machine code making it many times faster. A compiler will never write code as well as you can, so the results won't have the lightning

speed of hand-written programs. But you can create fast programs faster with a compiler and you can take all those hundreds of Basic programs you've got sitting around and inject new life into them!

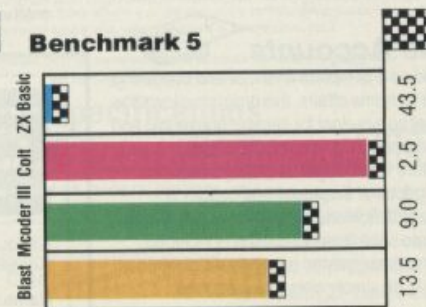
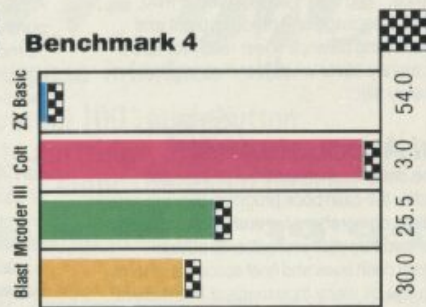
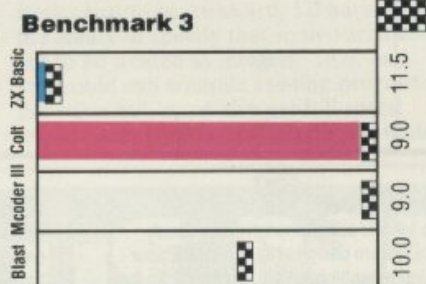
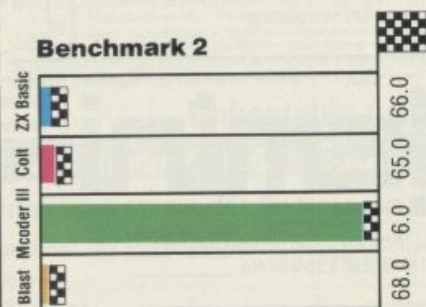
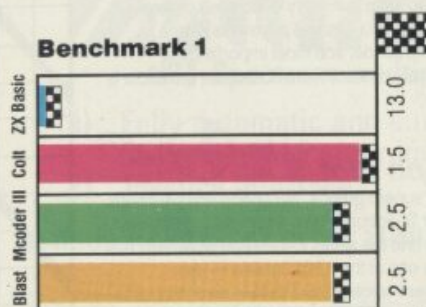
So which compiler should you go for? This is a tricky question as they all offer different facilities and have their own pros and cons. Sorry — but you're going to have to make a difficult choice and you're going to have to make it on your own. Only by working out what you personally want from a compiler will you pick the right one.

There're three major things to think about: compatibility with ZX Basic — will you have to modify existing programs to get them to compile? Can you write and test programs in ZX Basic and compile them when they're finished? Speed is obvious — do compiled programs go that much faster than ZX Basic? Do they go fast enough for the programs you're writing? And, of course, ease of use — is getting a compiled program finished, tested and working too much brain-strain to be worth the hassle?

Got your choice buds in gear? Right, let's take a look at the two latest offerings! PSS's *Mcode III* is a much matured version of *Mcode I* and *II*. It's

ON YOUR MARKS...

Here's how the three compilers tested compared with ZX Basic. The graphs show their relative performance based on whichever compiler was the fastest at each particular test. The figures at the end of each bar give the actual benchmark timing in seconds.



COMPILER BENCHMARKS

Most benchmark programs don't really do practical tests. The short program here (you don't want or need long benchmarks) does five tests which should give a more reasonable idea of how the compilers compare. The program is designed to work first time with all Specy compilers so don't buy a compiler if it can't run this — it's got problems!

```
100 PAUSE 0: CLS : FOR c=0 TO 5
: FOR b=0 TO 255: PLOT b,c: NEXT
b: NEXT c: BEEP 1,1
```

Line 100 Plot across the width of the screen six times.

```
110 PAUSE 0: CLS : FOR b=0 TO 8
7: CIRCLE 127,87,b: NEXT b: BEEP
1,1
```

Line 110 Draw 88 circles.

```
120 PAUSE 0: CLS : LET a=0
130 PLOT 0,0: DRAW 255,a: IF a<
175 THEN LET a=a+1: GO TO 130
```

Lines 120-130 Draw 176 lines.

```
140 BEEP 1,1: PAUSE 0: CLS : FO
R x=1 TO 4: PRINT AT 0,0: LET e
=1
150 PRINT x: IF e<704 THEN LE
T e=e+1: GO TO 150
```

Lines 140-150 Print four screens of numbers.

```
160 NEXT x: BEEP 1,1: PAUSE 0:
CLS : FOR x=1 TO 4: PRINT AT 0,0
: LET f=1
170 PRINT CHR$ (64+x): IF f<70
4 THEN LET f=f+1: GO TO 170
180 NEXT x: BEEP 1,1
```

Lines 160-180 Print four screens of characters.

TELL ME MORE!

<i>Mcode III</i> , £12.95	PSS	(0203) 667556
<i>Colt</i> , £12.95	Hisoft	(0582) 696421
<i>Blast</i> , £24.95	OCS	(0993) 812700



CentreSoft
presents

Office Master

With over four years experience of providing practical software solutions for business and home applications, Gemini have put together their entire range of famous titles for the Spectrum and Spectrum Plus in ONE special pack, at a VERY SPECIAL price. Whether you're a cassette or microdrive user, this super value pack contains all the serious application software you're ever likely to need for your Spectrum, from home accounts and database management to a complete professional business accounting system.

Gemini's OFFICE MASTER is here—put that computer to WORK!

- Database
- Stock Control
- Final Accounts
- Easiledger
- Mailist
- Cash Book
- Home Accounts
- Graph Plot

Each pack contains ALL 8 programs, demonstration data files, and clear and comprehensive manuals for EACH program. Gemini's previous retail price for all these programs individually was £179.60. Now they're all together in ONE COMPREHENSIVE PROGRAM PACK.

OFFICE MASTER

Tape: £15 Microdrive: £17.50
includes P&P and VAT.

Database



Use this program for storing all types of information just the way YOU want to store it. You set up a computerised 'card index' system and add records and data to the file in the format that you choose. Advanced features include sorting and searching for specific records, mathematical calculations, printer routines, data summaries, etc. If you don't have a database, you certainly should!

Mailist



This is a specially designed database for storing names and addresses, and printing out in label format. Special search routines are included for selecting only names and addresses that conform to your criteria. The famous Gemini 'Searchkey' facility is included with this program, and data entry is simplified by an on screen label painting system. Just type in those names and addresses as though you were using a typewriter!

Stock Control



One of Gemini's speciality programs, this software will take the drudgery out of keeping stock records. Enter details of part number, description, unit quantity, cost price, selling price, minimum stock level, units in stock, order quantity and supplier details. Detailed reports include totals of stock at cost and sale price, cost of bringing stock up to level specified, gross margin, understocked items, etc. Full browsing facilities to make inventory management a pleasure!

Cash Book



This is a full and comprehensive cash book accounts system designed to REPLACE your manual ledger entirely. It will take you from the 'shoebox' situation of sheaves of invoices, cheque book stubs, petty cash vouchers and bank statements etc. to a properly constituted trial balance. You may then take your FINAL - ACCOUNTS package and produce profit and loss account and balance sheet ready for audit. A REAL money saver when it comes to your accountancy bill!

Final Accounts



Using the data file on microdrive or cassette prepared by the cash book program, this software will produce comprehensive end-of-year reports ready for audit by your professional adviser. The Gemini cash book and final accounts system is now in use by many thousands of businesses and as a 'classic' professional program has been translated for a wide variety of micros. Cash - book and final accounts alone warrant the purchase of this OFFICE MASTER program pack.

Home Accounts



Designed as a complete financial and budgeting package for home affairs, this program allows the user to set up a budget for items of household and family expenditure and compare actual expenditure with budget as often as required. A running total of surpluses and deficits is available both numerically and in bar graph form. A complete bank account routine is included, together with suggested expenditure categories which may be simply altered as required.

Easiledger



Consists of invaluable routines to allow the creation of any type of financial ledger system. Its usefulness lies in its ability to produce account balances instantly for debtors and creditors together with an audit trail of all entered transactions, with dates and references. A year-to-date summary is included of sales, purchases, receipts and payments over a 12 month period, and most importantly, a completely interactive bank account database is featured.

Graph Plot



At last, superb graphs, bar charts and pie charts on your Spectrum! With a complete data entry section and the ability to load and save files, this is really one of the fun programs to use. Represent numbers and data in clear diagrams with this package, and print them out on your printer to accompany reports, budgets, etc. Very highly recommended for the office, home and school. Also includes capability to provide mathematical function plotting.

Mail
Order to:

Sole distributors to the trade: CENTRESOFT Ltd
Tel. 021 3593020

Gemini
Please send me _____ Spectrum OFFICE MASTER packs.

To: Gemini Marketing
Limited,
Gemini House,
Exmouth EX8 4RS

Cheques/POs enclosed or please debit my
Access/American Express No. _____

Name: _____

Address: _____

Signature: _____



24 HOUR CREDIT CARD HOTLINE - (0395) 265165 (4 lines)
Trade and overseas enquiries welcome.

.....FASTER

mega-advantage is that it's a floating-point compiler. Just like ZX Basic, you can manipulate fractions and decimal places. Sounds obvious? Most Speccy compilers are integer (whole number) only. This makes them fast but means that many programs need serious modifications before they will compile. Of course, floating-point compilers are slower but take a look at the benchmarks — *Mcode III* ain't half bad at all!

In the blue corner is Hisoft's *Colt* — an integer-only baby that goes like greased lightning. *Colt* also has a few enhancements up its sleeve — its so-called 'executive' command. While you're changing your programs to integer-only you might as well throw in a few of these for added vitality.

Mcode III wins the compatibility stakes hands down. PSS claims it will compile any old Basic program straightaway. Errr... sorry, but not if they use MERGE, LIST or LLIST or the Interface 1 commands; CAT, ERASE, FORMAT and MOVE. The first three are hardly likely to be a problem but it's a shame that the Interface 1 stuff isn't supported. Anyone for *Mcode IV*?

Since *Colt* can only handle integers, you're going to have to convert your programs to use just whole numbers or fake fractions using several variables or strings. Not a very pleasant task for existing programs but something you can

live with when you write new ones. However, you can run both *Colt*-compiled and normal Basic programs together and pass variables between the two. This is a bit like shutting the door after the program has colted — it's handy but it slows everything down again!

Colt does handle some floating-point in commands where it is necessary such as BEEP and CIRCLE. But there are other compatibility problems — you can only have single-dimension arrays. Unjumbling all those big tables into single-dimension arrays is a real drag!

In contrast, *Colt* is the speed-freak's friend. A FOR...NEXT loop runs about 100 times faster than normal. If you're into those silly and inaccurate little eight benchmark programs used by some megabrain mags, you'll find colted programs on average run around 50 times faster than good ol' ZX Basic. You can squeeze even more out of *Colt* if you disable its 'executive' commands — handy extras that provide error trapping, a real-time clock, windows and sprites — or if you opt to disable the Break key.

Mcode III is slowed down by its floating-point routines. FOR...NEXT loops and the like are dramatically improved as are the basic arithmetic operations +, -, / and *. But more complex maths such as COS, SIN and so on are only just faster than normal ZX Basic. Just to be awkward, I'd have liked the ability to specify that some variables are to be treated as integers. That way, you could still compile existing programs first-time but could also get full speed improvements out of programs you write

specifically to be compiled!

As for using the two, *Mcode III* is something of a shock. The 'manual' is three sides of cassette-inlay card with very little technical info. It's hardly enough to describe a game these days let alone a compiler! To compile a program, you load your original into the Speccy and then load and run the first part of the compiler. When you're prompted, you load and run the second part. This is going to wear the tape out faster than usual — which reminds me, there's no built-in way to transfer the compiler on to microdrive!

Colt is much more a professional product as far as the programmer is concerned. It has a built in routine to back itself up onto tape or microdrive and Hisoft won't object if you use colted programs in your own commercial products. It's easier to use as well. Compiled programs usually sit at locations 40000 so you can link them to ZX Basic and machine-code as you will. With the 'executive' removed, *Colt* will compile whacking great programs — up to 32K in length.

So which one do you choose? *Mcode III* doesn't exactly offer you new possibilities but it will give your existing programs a kick in the backside. If you just want a two to three times speed increase with no messing about, this has to be the one. *Colt* on the other hand is a welcome new tool for your library — converting existing programs is a drag but if you write stuff especially for it, you should be able to produce some superb programs!

ROMANTIC ROBOT

present

multiface one™

No1 Spectrum multipurpose interface with

- 1) Fully automatic and universal 100% push-button back-up of any program to cartridge, disks, wafer, tape
- 2) Joystick interface
- 3) Composite video interface



All three in one compact box at an amazing price of **£39.95!**

- * Menu-driven with prompts & one-touch commands turning a complex task into a trivial procedure:
1) Push button 2) Select function - exit/return/save/change syntax 3) Input name 4) Select destination - tape/cartridge/wafer/disk
- * Automatic intelligent 'compressed' saving for fast re-loading & economizing on space on cartridges, disks etc.
MULTIFACE saves only the relevant parts of RAM and leaves out the rest.
- * SAVE to any type of peripheral - default syntax for MICRODRIVE, WAFADRIIVE & TAPE can be changed for disk systems etc.
Transfer from one peripheral to another if both attached at the same time, or save from one to tape, swap, reload & save to the other one
- * Can be used not only for pure back-ups; you can, eg., stop any program and restart anytime later or reload study/alter/customize and then save, continue, etc. This way you can load and continue a game from where you got lost, poke infinite lives, customize programs
- * 'warm reset' - recover from a 'crashed' computer (escape from infinite loops when the keyboard is inoperative, etc.)
- * Save just a screen or leave out screen when saving a program
- * Designed to remain attached to RUN programs it saved as it is meant only for personal use in accordance with copyright laws
- * No extra software - has internal 8K EPROM & 2K RAM
- * Through extension bus for connecting other peripherals

Unbeatable value & specifications

multiface one ESSENTIAL SPECTRUM COMPANION



I enclose a cheque/PO for £..... (European orders please add £1 overseas £2)

or debit my  No 

Name..... Card expiry.....

Address.....

Please send me (tick as applicable):	MULTIFACE	£39.95 <input type="checkbox"/>
TRANS-EXPRESS cartridge	£9.95 <input type="checkbox"/>	tape (for m'drive) £ 7.95 <input type="checkbox"/>
disk (Opus Discovery)	£9.95 <input type="checkbox"/>	wafer (Rotronics) £ 9.95 <input type="checkbox"/>
MUSIC TYPEWRITER	£ 7.95 <input type="checkbox"/>	with supplement £ 9.95 <input type="checkbox"/>
WRIGGLER Spectrum tape	£4.95 <input type="checkbox"/>	or cartridge £ 6.95 <input type="checkbox"/>
WRIGGLER Amstrad tape	£ 7.95 <input type="checkbox"/>	or disk version £ 11.95 <input type="checkbox"/>

ROMANTIC ROBOT 77 Dyne Road London NW6 7DR 24 hrs  orders 0892 834783 

TRANS-EXPRESS

The software way of transferring Spectrum software. 4 utilities for m'drive, 2 for wafadriive, 2 for Opus Discovery. Invaluable for cartridge/disk maintenance & automatic transfers. Highly professional, user-friendly, versatile and comprehensive. An ingenious piece of software!

***** Features ***** Performance PCN

TOP SOFTWARE AT BOTTOM PRICE

Wiggler

'One of the best games for any machine I've seen for very long time'.
'Wiggler is a totally original game'. CRASH SMASH STAR GAME PCN
'Great game, good music, well recommended'. What Micro
'The graphics and sound are excellent and the game is totally addictive, 10/10 value & playability. 9/10 graphics & sound. C&V Games
'This is a great game' CAS Well worth buying. ZX C & Crash
'If you've any sense you'll order your copy now'. PCN 'A WINNER' PCW

!NOW FOR AMSTRAD!! SPECTRUM version at Xmas PRICE!

MUSIC TYPEWRITER

Complete Spectrum music system for writing, editing, playing, printing & storing music. Its real notation graphics and ease of use make it an ideal educational tool. Great fun to play with & a lot to offer in serious use (transposing, dot matrix printout etc.). A very professional piece of programming, easy to use, excellent screen presentation, error trapping & helpful prompts. If you're interested in music and own a computer then get it! ZX Computing

MIDI compatible with MIDI MUSICIAN package
New overlay for Spectrum - Now at Xmas price!

[illegible]

The image shows the cover of a comic book titled 'THE DAM BUSTERS'. The artwork depicts a Lancaster bomber in flight, dropping incendiary bombs on a large dam structure. A massive explosion is shown at the point of impact. The title 'THE DAM BUSTERS' is prominently displayed at the top in a bold, stylized font. The comic is shown at an angle, revealing its thickness and the edges of its pages.


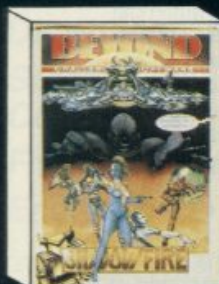
BEYOND
SCIENCE FICTION & FANTASY
UNDER WRAPS!



**FROM...
The Daily
PLANET**

**TO...
BEYOND
SOFTWARE**

Superman
£7.45



Hyper Sports
Konami
the name of the game

The comic book cover for 'Behind the Mask: Spy vs Spy' features a yellow background. At the top, the title 'BEHIND THE MASK' is in large red letters, with 'MAINTAINING THE ELEMENT' in smaller text below it. The main title 'SPY VS SPY' is in large, stylized red and black letters. Below the title, there's a central illustration of two birds, one red and one blue, in a trench. The red bird is on the left, and the blue bird is on the right. They are both wearing goggles and holding weapons. The background of the illustration is a greenish-yellow. At the bottom left, there's a small red star logo with the word 'STAR' in white. At the bottom right, there's a small illustration of a yellow vehicle or machine.

Cosmic Cruiser

EXCELLENT VALUE

THE INFORMATION

WHEEL

FOR

MOTORS


NET

PURCHASE

FOR THE GET ALREADY?

TOTAL

Star



TITLE	PRICE

[illegible]

* **Export Customers:-** We welcome orders from all parts of the world, please note the following subscription and postage rates outside UK:- Europe - Subscription £7.00, Post £2; U.S.A. and Middle East - Subscription £9, Post £3; Australia, Far East and South Africa - Subscription £12.00, Post £4. Please note that all Magazines are despatched by Air Mail postage to keep you right up to date.

IMPOSSIBLE DREAM

Phil South your mission ... should you decide to accept it ... is to penetrate US Gold's new blockbuster ... discover amazing secrets ... complete the Impossible Mission ... reveal all ... should you fail, you'll never write for YS again ... this tape will self-destruct in 5 seconds ... 5 ... 4 ... 3 ... 2 ... 1 ...

US Gold has done the impossible itself by bringing *Impossible Mission* to the Spectrum. It's been an all-time smash on the wrong sort of computer for ages. Now, at long last, the perils of special agent 4125 have come home to the Speccy including the same triffic animation, gripping graphics and brain blowing puzzles! *Impossible Mission* reaches a new level in platform games — as well as amazing acrobatics on the platforms and lifts, the skill of outwitting the killer robots, you've got to solve some truly challenging puzzles.

You play the highly-trained agent 4125 on a mission to penetrate the 32 roomed underground fortress of evil

Elvin Atombender and prevent him from turning the Earth into a cloud of expanding gas and those little glittery bits you used to get in *Star Wars*. Elvin is a mad scientist and like all good mad scientists, he's surrounded himself with death-dealing robots and concealed the passwords to the door of his lab in the machinery scattered around the different levels. You must search every nook and cranny, juggle the pieces you find and make up the punchcards that will allow you to make your unwelcome entrance into Elvin's laboratory.

Agent 4125 is a highly-trained agent of the calibre of Bond or Rambo. So

confident, fit and generally hunky that he can take on Atombender's robot hoards empty-handed — just using his daring and acrobatic skill to keep out of reach of their probing plasma beams. In fact, the only piece of equipment he actually remembered to bring with him is his trusty wrist-mounted MIA9366B microcomputer. This souped-up digital watch has a radio telephone so that you can call up the mainframe computer back at base and get it to help solve the puzzles for you.

But it's not the story line that's brilliant (although it's better than most and there's nothing I like better than a good story line). It's the way the game looks and plays. A lead I picked up suggests that the special agent's movements (running, somersaulting and landing) were 'rotoscoped' — a real person was filmed doing the actions and the sprites drawn from the frames of the film. I don't care how it was done — the results are incredible. Because the animation is so realistic, the game is simply absorbing. You really do feel for poor ol' 4125 — his fear, his thrills, his daring. Just like a movie!

Impossible Mission is going to be a firm favourite — my Speccy for one is going to get used to loading it up. Your mission, Agent Reader, is to go out and buy yourself a copy. Believe me, it's one of the easiest and most rewarding assignments you'll ever get ...

OUT OF CONTROL

Here's your handle on the game — the control panel can be called up whenever you're in the central liftshaft. It provides map and puzzle-solving facilities as well as convenience controls like a pause button ...

These two buttons let you scan the puzzle pieces you've collected so far so that you can choose which ones you want to fiddle with on the workspace. It's fiddly 'cos you can only see two at a time but what do you expect from a wrist-watch?

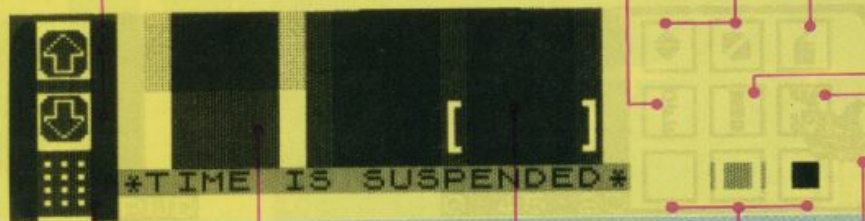
Toggle between the map and workspace by switching the wrist terminal on and off.

Flippin' heck — pushing here will flip pieces top to bottom or side to side so that you can get them to fit together.

Push here to bin the current piece — watch it if you've got an autofire joystick as you might accidentally junk puzzles you've completed!

Chucked the wrong piece away? Hit here to rescue it!

More convenient bits — this freezes the game so you can eat a KitKat in safety.



4125 phone home — press here to auto-dial the ZX81 back at HQ. It's superior processing power will help you organise the puzzle pieces and tell you if you've got enough to get a punchcard together...

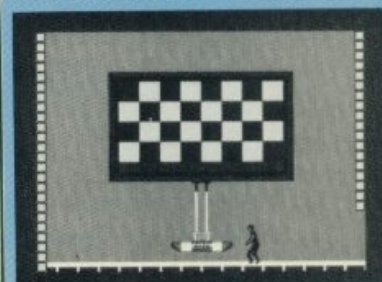
Here's the two pieces you're working on at the moment.

Use the workspace to shuffle, invert and overlap puzzle pieces until they match. The finished punchcards allow you into Atombender's lab to foil his dastardly plan. When you're not putting the pieces together, this space becomes the map window, showing the relative positions of the rooms you've visited so far.

Use these three buttons to change the colour of the current piece — for two pieces to overlap, they must be the same colour.

This fickle finger is your means of pressing the buttons on the control panel and shuffling pieces around the workspace.

MUSICAL DIVERSION



Unlike some recent games, the music room isn't a just red herring to make you lose time. Once you turn to search the device, a pattern of notes is played on the chessboard. Repeat the pattern in order from the lowest note to the highest and you'll win lift and snooze tokens...

FORT FOR THE DAY

Here's just four of the 32 rooms you'll have to explore before you can construct the punchcards needed to penetrate Atombender's lair. Searching any room properly takes precious time and dying at the hands of a robot will cost you ten minutes.

Search Me! In fact, search anything and everything! All you do is stand in front of an object and push forward. A searching window pops up with a moving line that indicates how long the search will take. Keep an eye on the bots and be ready to leggit ...

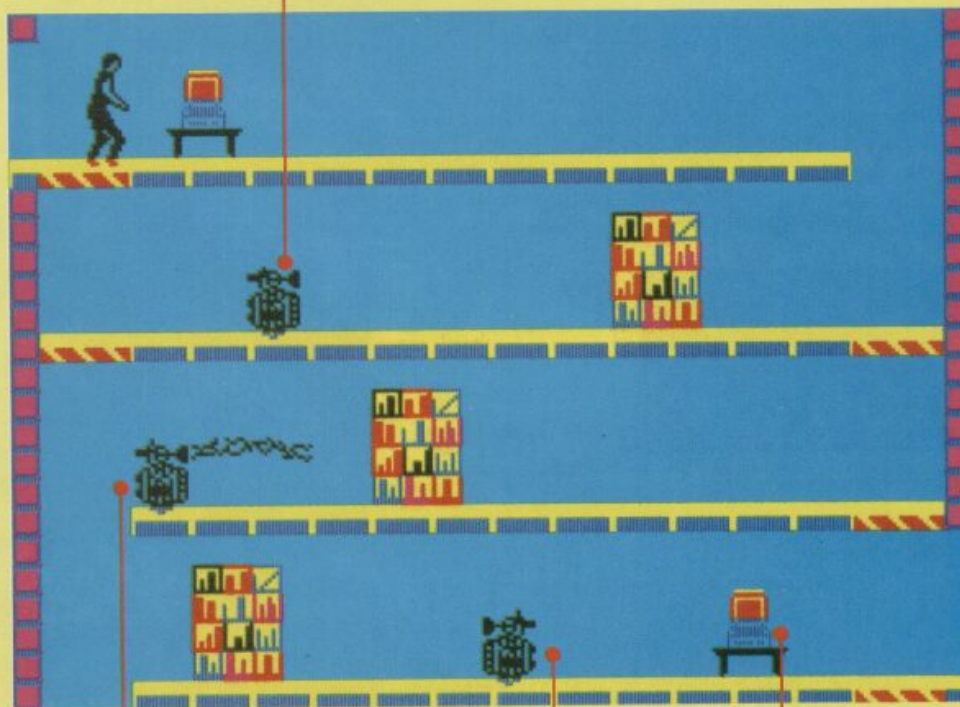
You can walk on air ... if you take a run at it and the gap is no wider than a lift platform. This can be very handy when the floor is full of holes. But be careful, it only works sometimes ... arrrrh!

Yuk ... it's a leechbot! These copy your every move no matter which platform you're on. Avoid a toasting by jumping over them but watch out — they move fast!



Is this robot asleep? No way — it's playing dead until you reach its platform at which point it'll go for you. The way to beat it is rush straight at it (honest) and at the last moment jump over it and dash for the lift before it's got time to turn around.

Energy build-up is a rare but deadly hazard. Sometimes you'll frazzle up for no apparent reason. What happens is that a timer starts when you enter a room. When it hits zero bzzzzt! One way to beat this booby-trap is to use a snooze. But hurry — they don't last long!



This type also senses your presence but fires the moment it spots you. This is a bug in the robot's software — it has to standstill to fire so if you keep out of range, you can rifle the furniture in peace.

Here's a boring sentry type robot who just trogs up and down a platform — fires a bit, moves a bit, fires a bit ... What an awful job! They don't sense you and so are easy to avoid especially if you jump them as they turn at the end of their platform.

There are two Security Terminals in most of the rooms. You can log on by pushing forward and then use any lift resets or snoozes you've acquired to reset the lifts or temporarily paralyse the robots in that room...

**WHAT'S
BETTER
THAN
YOUR
SPECTRUM?**

YOUR SINCLAIR

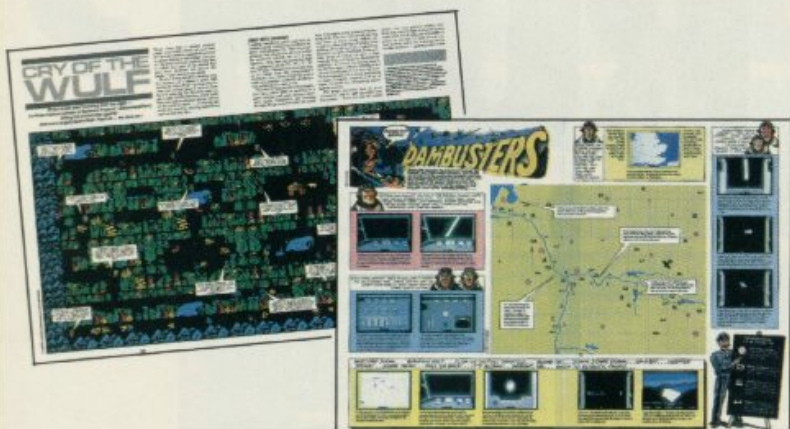
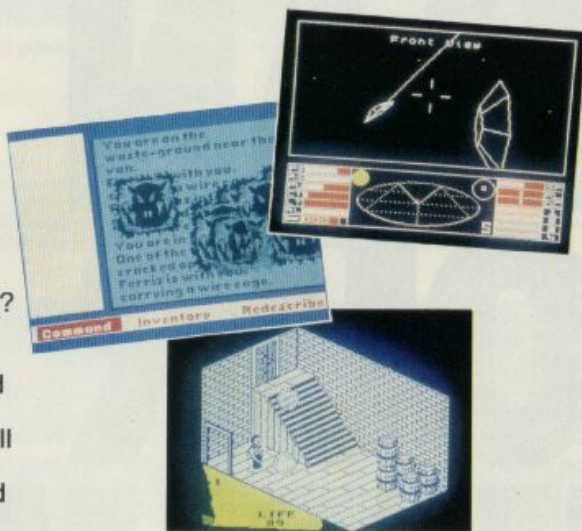


THE NEW LOOK YS WITH... MORE PAGES...

You'll find almost double the number of editorial pages in the new look YS — and all of them packed full of info and fun.

MORE GAMES...

Are you ready for more games reviews? There'll be more mighty megagames, more one pagers and more short-sharp-shockers. In fact, we'll be looking at every single game released for the Spectrum.



MORE TIPS, HINTS, MAPS...

If you're already a good player, you'll find all the info you need to turn you into one of the greats! And now there'll be more pages for you to send in the hints'n'tips that'll make your name!

YOUR SINCLAIR



**FREE
CASSETTE**
A demo
version of the
hot hit, Rasputin,
free with
Your Sinclair

**SPECTRUM HIT GAMES — BEACH
JOYSTICKS — TEN BEST TEST/D
SIX CRACKING COMPOS/SINCLAIR C**

SINCLAIR!

JANUARY 1986 ISSUE 1 95p

NEW!

COMMANDO
Reviewed In Action
The Spectrum Gets Tough

BEACH HEAD II/SCOOBY DOO/TOMAHAWK
TEST/DROID WARS — KILLER LISTING
SINCLAIR QL — COMPLETE SOFTWARE GUIDE

**FREE
8 PAGE
PULL-OUT
PROGRAM
SECTION**

MORE PROGRAMS...

Inside every issue you'll find a free eight page pull-out-and-keep program section containing games and utilities for you to type in. And they'll all be up to the highest standards you've come to expect from YS.

MORE EVERYTHING...

Yes, from next month we give you more, more, more! YS will deliver over 100 pages every month with more of our unrivalled reviews, top tips, magic maps and power programming. You know how good YS is and it's going to be a lot better!

To reflect the fantastic changes that are happening here at YS, our name is changing to *Your Sinclair*. And that means the QL and 128K Spectrum get the YS treatment too! Look out for *Your Sinclair* in its new-look cover at your newsagent. And hurry 'cos it's gonna sell out!

**YOUR SINCLAIR
BIGGER
BOLDER
BETTER
-BUY IT!
ON SALE DEC 6...**

...DEC 7

SOLD OUT?

DON'T RUN THE RISK—RUSH THIS TO YOUR NEWSAGENT NOW!

Don't Miss The New YS! The demand for the new YS is going to be enormous. Imagine it — a 100 page issue with a free games cassette on the front cover. The country could be clean out of copies within a couple of days! So, there's only one way you can be absolutely certain of getting your hands on a copy — and that's by handing this coupon to your newsagent. He'll then reserve your issue — just as soon as he's put his own to one side.

YOUR SINCLAIR

To the newsagent: please reserve me a copy of *Your Sinclair*. The first issue is on sale on December 2nd 1985 with a free game cassette on the front cover.

Name

Address

.....

..... Postcode.....

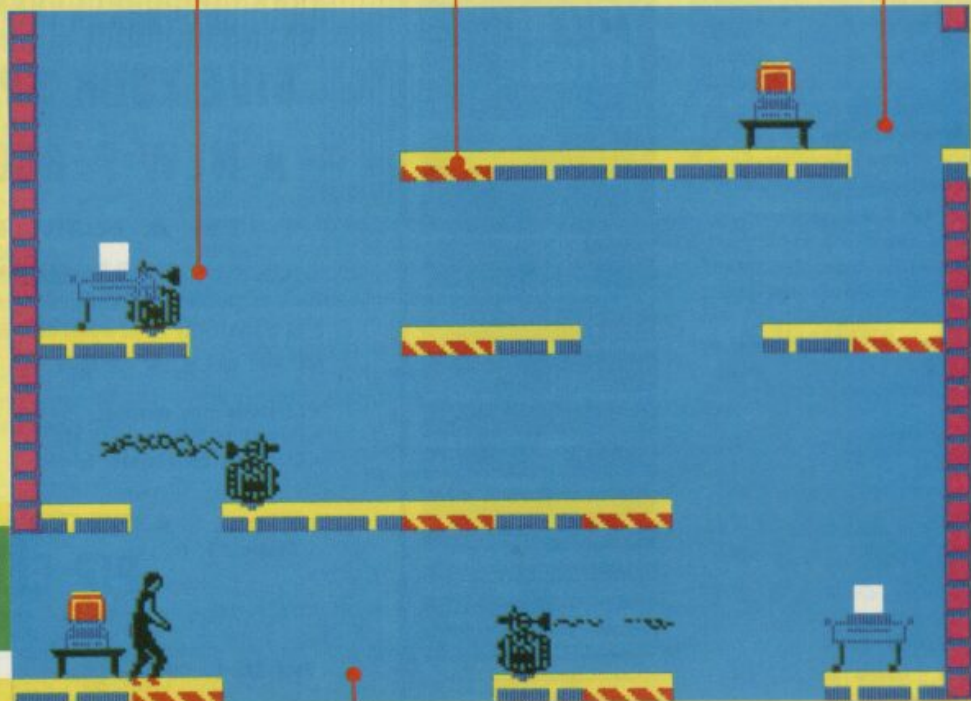
WHAT ARE FRIENDS FOR?

Now that you're certain of receiving your own copy of the new look YS, why not tell all your friends to do the same. Help wipe out that annoying habit they have of reading over your shoulder! And how else will you stop 'em borrowing your YS just for half an hour or so, honest? and then not seeing it again for weeks — or worse, pinching your copy of *Rasputin* for their own private power play? There's only one way. Make sure they fill in the form too — it's what friends are for!

Forget trainspotting — you're gonna need to be an ace robot spotter. There's eight different types and contact with any will frazz you. Unless you learn to judge which kind you're dealing with and act accordingly, you don't stand a chance.

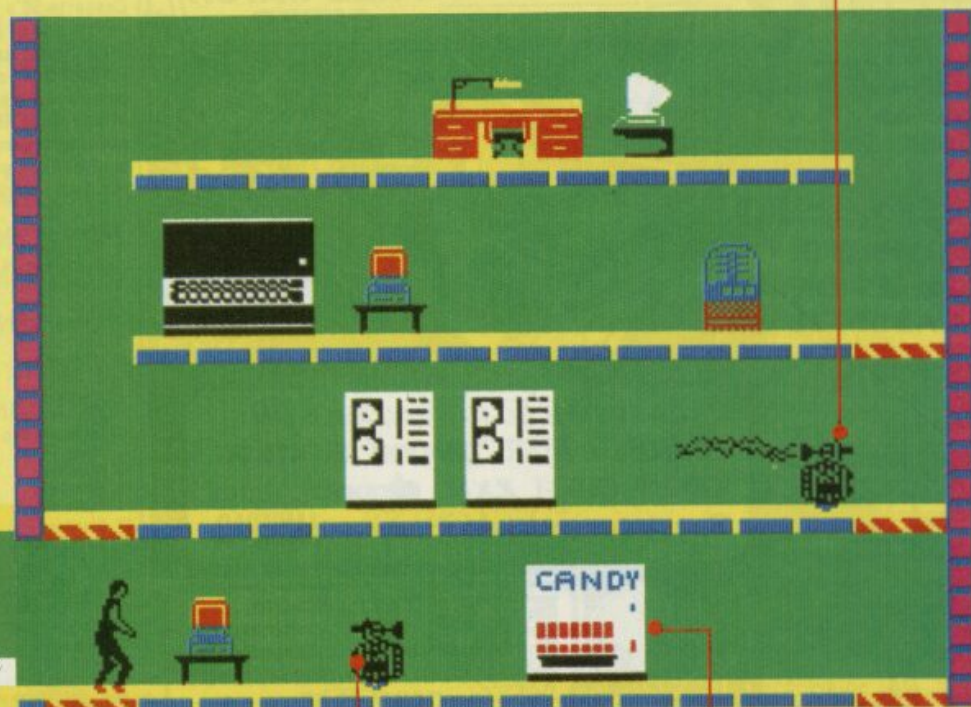
Juggling the lifts can be an interesting puzzle in itself.

Pressing Fire activates your only weapon — a dazzling somersault taking you high above deadly robots and yawning chasms. The chasms are the only things with any time to yawn in this game!



For long jumps like this one, you'll need split-second timing and a long run up. Often you'll only make it by a toe-nail. And sometimes you'll need to tread air a bit before you actually do the jump!

One of the best ways to get past a firing robot is to jump over it as it turns at the end of a platform. Then scarper before he can draw a bead on you ...



● Every time the game is reset, the arrangement of the rooms is scrambled. The furniture and platforms stay the same but the types of robot in the rooms are jumbled as are the positions of the puzzle pieces.

It gets worse ... this type follows your every move and fires at the end of their travel. They never give up so your only hope is to snooze them...

There's all sorts of furniture in Atombender's palace, from computer gear to a candy dispenser. There's even a toilet and — yes — you've got to search that too! Willy where are you when we need you?

Want to keep in touch? Use databases, electronic mail, bulletin boards, viewtext? Download the latest super software from Prestel? Now you can, with your 48K Spectrum*, a suitable modem and the DATASPECTRUM modem interface and software package from Miracle Technology.

DATASPECTRUM fits straight into the Spectrum edge connector and handles baud rates of 300/300, 1200/75 and 75/1200. Software features include Mailbox Editor, Frame Processor, Save, Print and Telesoftware Downloader.

The Dataspectrum Package, including interface, cable, cassette and full User Guide costs only £39.95 exc (£47.09 inc VAT & UK P/P). It's available now - so get in touch!

Please send me

- ☐ DATASPECTRUM packages @ £47.09 inc VAT + UK P/P.
☐ I enclose cheque/postal order
☐ charge my Access/Visa card no:

expiry date

Name

Address

Postcode

send to:

Spectrum Support 3, Miracle Technology (UK) Ltd,
 St Peters Street, Ipswich IP1 1XB.

Tel 0473-216141.

*reg'd trade marks of the companies concerned

DATA- SPECTRUM PUTS YOU IN TOUCH!

**MIRACLE
TECHNOLOGY**

GIVE YOUR SPECTRUM A NEW PERSONALITY WITH A ROM RAMMER customising ram.

2, 1K blocks, easily moved around ROM map, using 16 base addresses.
 NMI with "page in" for controlled reset.

- Customise error messages,
- Personalise loading, saving etc.
- Characters could be user defined.

price **£35.00 + 80p p+p.**
 Cheque/P.O. to.

PIP ELECTRONICS

14 BRAYSIDE ROAD,
 BURNAGE,
 MANCHESTER,
 M19 1PQ.

Send SAE for details.

« « PIP ELECTRONICS » »

cascade CASSETTE

50

**50 COMPUTER
GAMES ON
ONE CASSETTE**

YOURS FOR £9.95

including FREE Watch and Postage

FREE

**20 KEY, MULTIFUNCTION
CALCULATOR WATCH**
 with every order
 for a Cassette 50

- Normal 12 and 24 hour time mode
- Calendar mode
- Alarm mode
- Calculator mode

WORTH OVER £10



PLUS

**SPECIAL
FREE WATCH
OFFER...**

CASSETTE 50 IS AVAILABLE ON

**BBC A/B ATARI DRAGON ELECTRON
 VIC-20 ORIC-1 ZX81 Apple Atmos
 Spectrum commodore 64 AMSTRAD**

FREE calculator watch
 with every
 Cassette 50
EXPRESS DELIVERY-ORDER NOW!
ONLY £9.95

Name

Address

Post Code

Country

YS/12/85

Spectrum 16k/48k or +

'Incredibly frustrating!' - that's the verdict on Cassette 50's FROGGER. Satisfied users tell us it's one of the most challenging you'll find - it's almost as good as the arcade version! CARGO has you trying desperately to complete your helicopter mission under attack. Plus 48 other tactical, logical and adventure games featuring multi-coloured and user-defined graphics, scrolling and full use of the Spectrum sound capabilities.

- | | | |
|---------------------|----------------|-----------------------|
| 1. Muncher | 18. Ski Run | 36. Draggold |
| 2. Ski Jump | 19. Tanks | 37. Space Search |
| 3. Basketball | 20. Solar Ship | 38. Inferno |
| 4. Frogger | 21. Ten Pins | 39. Nim |
| 5. Breakout | 22. Cars | 40. Voyager |
| 6. Crusher | 23. Stomper | 41. Sketch Pad |
| 7. Startrek | 24. Pinball | 42. Blitz |
| 8. Martian Knockout | 25. Cavern | 43. Fishing Mission |
| 9. Boggles | 26. Laser | 44. Mystical Diamonds |
| 10. Alien Attack | 27. Alien | 45. Galaxy Defence |
| 11. Lunar Landing | 28. Cargo | 46. Cypher |
| 12. Maze Eater | 29. The Race | 47. Jetmobile |
| 13. Microtrap | 30. The Skull | 48. Barrel Jump |
| 14. Motorway | 31. Orbit | 49. Attacker |
| 15. Labyrinth | 32. Munch | 50. Space Mission |
| 16. Skittles | 33. Bowls | |
| 17. Race Track | 34. Raiders | |
| | 35. Field | |

Names and games may vary for each type of computer.

Postage FREE in U.K. Add £1.00 for overseas orders.
 Free watch and tape will be despatched within 14 days.

I enclose a cheque/£ made payable to
 postal order for Cascade Games Ltd

or through any Post Office by TRANSCASH (Giro No. 655 6655)
 For even faster ordering when charging to Access, Barclaycard and
 Trustcard Visa use our 24 hour service. (0423) 504663.

☐ VISA No.
☐ COMMODORE 64 ☐ ATARI ☐ ORIC 1 ☐ BBC A/B
☐ SPECTRUM ☐ VIC 20 ☐ ZX 81 ☐ APPLE
☐ AMSTRAD ☐ ATMOS ☐ DRAGON ☐ ELECTRON

Cascade Games Ltd, 13 Haywa Crescent,
 Harrogate, North Yorkshire, HG1 5BG, England.
 Telephone: (0423) 504663. Registered Number 1755554

Rasputin

Rasputin from Firebird is the game that has everything. The programmer, Paul Hibbard, describes it as a 3D platforms and Pacman style game with a strong plot and a difficulty rating that goes right off the scale. But you don't have to take his word for it — this month you can check out Nick Davies' version of the storyboard and next month you can play the game. That's right, there's a demo version free on the cover of the new-look YS!

Welcome to the world of the evil Rasputin where a battle is about to take place between the forces of light and darkness. You are a crusader, a medieval Time Lord, sent to this universe by the Powers of Light to prevent the spirit of Rasputin, the mad monk, from escaping. But Rasputin has surrounded himself with all that's most wicked in the world and you have only your sword and your

shield to protect you.

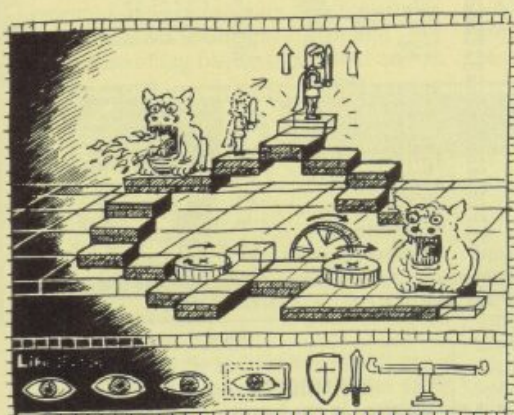
Such is the basic scenario for the game. Whether Paul Hibbard has managed to include all the details of the game exactly as they're shown here is another matter. What is certain from our preview of an unfinished version, is that this is a spectacular 3D-style arcade game that beats anything similar on both speed and style.



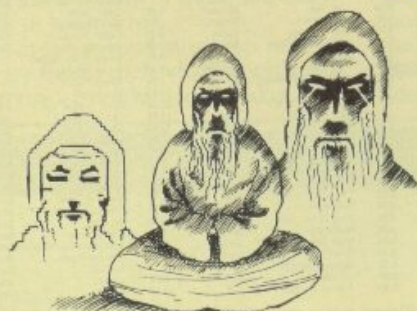
It's the caped crusader, bathing with sword and shield.



If you fall off the platform you'll fall through space until the clouds bring you up.



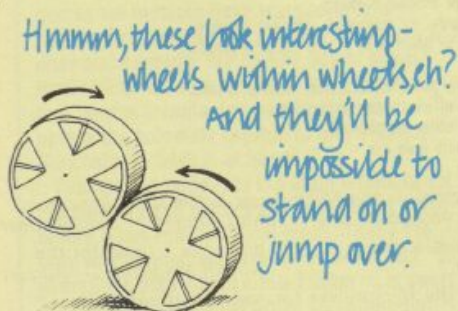
Not sure yet if any of these screens will end up looking quite like this — but it shouldn't be too far from the finished product.



It's the mad monk, himself. The spirit of Rasputin floats up casting an evil shadow over the whole game.

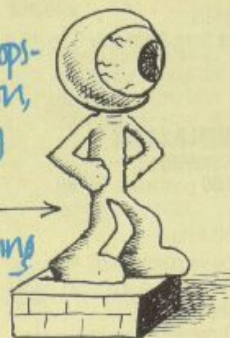


This is one game that's guaranteed not to 'dragon'! Be extra careful when passing this beastly.



Hmmm, these look interesting — wheels within wheels, eh? And they'll be impossible to stand on or jump over.

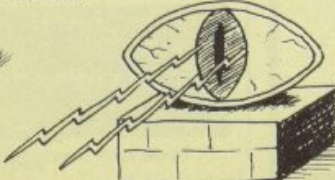
Beware the Cyclops — if they chip you, Comrade, say goodbye to more of your ever diminishing life force.



Not sure what sort of eyes will eventually end up in the game — they could even turn into killer balls, who knows?



The eyes have it — and it's not going to be very pleasant. As soon as you get within range the evil eyes turn their beams on you.



FREE, GRATIS AND FOR NOTHING!

If you can't wait to check out whether our rough draft of Rasputin matches up to the finished game — well, you're just gonna have to! But only for another month 'cos that's when you'll receive a demo version of the game FREE with the new-look YS. Whip the cassette off the cover, load it up and check to see whether we got all the details right. Then play the game!

We're not offering you Screen\$ or a version that plays itself — this is a fully working copy of a game that'll cost £7.95 in the shops. The only difference is that you'll get to play just four of the forty different rooms. The rest remains the same. You'll die at Rasputin's evil bidding just like in the real thing. You'll succumb to his evil eyes just like in the real thing. You'll burn at the touch of the dragon's breath just like in the real thing. This is the real thing — and it's free to YS readers!

GENERAL ENQUIRIES
TELEPHONE
0924-402337

THOUGHTS & CROSSES

37 MARKET STREET, HECKMONDWIKE, WEST YOKS.

24hr CREDIT CARD
ORDERS TEL:
(0924) 409753

Shop Hours 9am-5pm Mon-Sat

	Company	Price	Title	Company	Price	Title	Company	Price	Title	Company	Price	Title	Company	Price	Title	Company	Price
Ghostbusters	Activision	8.10	Decision	DK Tronics	2.75	Flame from the Dark	Long Wolf	8.95	3 Channel Sound		228						
Petali II	Activision	8.10	Golf	DK Tronics	2.50	Confrontation	Lothman	7.15	Curious Microscope		220						
Power Racer	Activision	8.10	Musica	DK Tronics	2.50	Confrontation Scen 1	Lothman	5.35	VOR BOX		223						
Space Shuttle	Activision	8.10	Musica	DK Tronics	2.50	Confrontation Scen 2	Lothman	5.35	VTK 5000 MODEM		225						
Football Manager	Activision	8.25	Personal Finance	UK Tronics	6.25	Johnny Rik	Lothman	4.95	ON TRONICS DUAL PORT INTERFACE		227						
Unbreakable Hulk	Activision	8.25	Lordal	Dartak	5.95	Panzer Attack	Lothman	5.35	RUDO INTERFACE - (new switch)		229						
Sideways	Activision	8.25	View to a Kill	Dartak	5.90	Recess	Lothman	6.25	CATAL ELECTRONICS INTERFACE		230						
Author	Activision	8.80	Dracula Case	Danic	4.00	Special Operations	Lothman	6.25	CAMBRIDGE PROGRAMMABLE		231						
Hard Hat Mack	Activision	8.80	Claudia Lyne	Daniel	4.85	The Hedge	Lothman	6.99	JOYSTICK-INTERFACE		232						
One and One	Activision	8.80	Harrier Attack	Daniel	4.85	Blackjack	Lothman	6.25	PROGRAM		233						
Sea of Wonders	Activision	8.80	Snake Uke	Daniel	5.25	Star Jack Superstar	Lothman	6.25	DK TRONICS PROGRAMMABLE		234						
Chess II	Activision	5.90	Arnulf	Elke	6.25	Golden Kid's Jump	Lothman	6.25	INTERFACE		235						
Chess Tutor	Activision	3.50	Grand National	Elke	6.25	Challenge	Lothman	6.25	QUICKSHOT & JOYSTICK		236						
Eye of the Beholder	Activision	2.50	Ultimate	Elke	6.25	Challenge	Lothman	6.25	FORMULA 1 JOYSTICK		237						
Golden Apple	Activision	2.50	Gyan	Frederic	5.90	Phoenix	Lothman	4.55	SURE SHOT JOYSTICK		238						
Invasion	Activision	2.50	Young Riders	Frederic	5.90	Phoenix	Lothman	4.55	SPECTRUM PLUS PVC COVER		239						
Mr. Wong's Loopty	Activision	2.50	Baby Driver	Frederic	5.90	Phoenix	Lothman	4.55	SPECTRUM PLUS PVC COVER		240						
Laundry	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	SAGA EMPIRE PVC COVER		241						
On the Edge	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	CURRIAN MICROSOFT		242						
Shooter	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	EXTENSION TO KEYWAY-Beacon		243						
World Cup Soccer	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	MICRODRIVE EXTENSION LEAD		244						
System 15000	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	GAMES BOARD		245						
Chucker Egg 2	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	SLOWMO Game speed controller		246						
Beet Basic 3.0	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	ON/OFF SWITCH		247						
Downside Revenge	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	SPECTRADS to CENTRONICS		248						
10th of Midnight	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	PRINTER lead		249						
Psycho	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	WAYADIVE to CENTRONICS		250						
Spy vs Spy	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	PRINTER lead		251						
Magic Miner	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	DISCOVERY 1		252						
The Castle	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	ZX EXPANSION SYSTEM - (new)		253						
Two Kingdoms Valley	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	Macrodrive Interface 1 Talway		254						
Masterfile & M1 Print	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	TwoMasterfile Air Attack Games		255						
Street Drive Snooker	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	Design		256						
Approximate	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	ZX INTERFACE 1		257						
Backgammon	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	ZX MICRODRIVE		258						
Bridge Tutor Advanced	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55	SPECTRADS DODS		259						
Bridge Tutor Beginner	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Drumsticks	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Extended Basic	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Flamingo Print Forth	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Pinball Wizard	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Superchess 3.0	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Superchess II	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Superchess III	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
ZX Reviewer	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Levinator	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Money Manager	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Only Day	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Formula One	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Highway Code	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Maple Roadblock	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Ricky Horror Show	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Stargate Secrets	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Tenacious	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
War of the Worlds	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Dungeon Master	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Half of Things	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Rummy Revenge	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Highway Code	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Men Office	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Red Arrow	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									
Flighter Pilot	Activision	2.50	Run for Gold	Frederic	5.90	Phoenix	Lothman	4.55									

All prices include postage, packing and VAT. Please order stating: 1) Program Required; 2) Amount Enclosed; 3) Name and address; 4) Type of computer.
European orders - no extra cost (VAT=Delivery). Worldwide orders - £1 extra per tape. B.F.P.O. - 13% discount.

HIRE SPECTRUM SOFTWARE

- * OVER 500 different titles available for hire including ARCADE, ADVENTURE, BUSINESS, EDUCATIONAL, etc.
- * OVER 10,000 tapes in stock. All publisher's originals.
- * LOWEST HIRE CHARGES - hire up to 3 tapes at a time, from only 63p (plus P&P and VAT) for 2 weeks hire.
- * FREE printed CATALOGUE.
- * FREE newsletter with hints, tips, reviews, etc.
- * TAPES for sale at DISCOUNT prices, (eg MANIC MINER £2.00).
- * FAST, FAST SERVICE. All tapes sent by 1st class postage.
- * HALF-PRICE OFFER - LIFE membership ONLY £3.00 (normally £6.00).
- * FREE first hire tape. (For limited period).
- * EUROPEAN MEMBERS WELCOME. (Payment in Sterling).

Have you ever been disappointed with software you've purchased? Now you can hire it first. If you like it, buy it at £1.00 off our already discounted prices. If you don't, send it back and it will only cost you the hire fee.
NSL is the best SPECTRUM library, with over 8,000 delighted members, the largest range of tapes and controlled by our computer with 22 mb hard disc.
JOIN TODAY, or, if you don't believe our claims write or phone 01-661 9240 for a catalogue, and check our competitors. We're confident you'll join NSL

NATIONAL SOFTWARE LIBRARY

42 Harefield Avenue, Cheam, Surrey SM2 7NE.

I enclose £3.00 for LIFE MEMBERSHIP. Please rush my membership kit to me. If, within 28 days, I'm not delighted with your service you'll refund my membership fee.

Name _____

Address _____

INCREDIBLE!
TRANSFER ANY PROGRAM TO MICRODRIVE CARTRIDGE
THE FULL POTENTIAL OF YOUR MICRODRIVE CAN BE
REALISED WITH THE MIRAGE MICRODRIVER
NOW WITH EVEN MORE EXCITING AND STILL ONLY £39.95

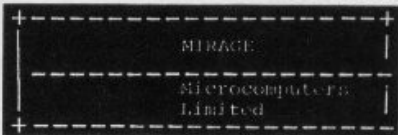
Features:
*NEW Even faster loading from cartridge.
*NEW Optional saving of screen display.
*NEW Copy function for screen dumps to ZX printer.
*NEW Dump function for program hacking.
*Consists of hardware only, no additional software required.
*Transfers any program to Microdrive in one simple operation.
*Extremely easy to use.
*Freeze any game at any point, save it, and restore it later.
*Compacts program for efficient use of cartridge.
*Through connector for other peripherals.
**"Poke" facility for infinite lives etc.
*Also saves to cassette.

"If you have a microdrive the Microdriver is the most important piece of hardware you could buy." John Lambert - Sinclair User
"Using the Mirage is a dream... this device is a must for the serious microdriver." Crash Magazine - August
"I much preferred the Microdriver for speed and ease of use." Iolo Davidson - Your Spectrum

UPGRADE SERVICE: We will upgrade your existing Microdriver. Simply return the unit to us with a cheque for £5.95 and we will fit the latest version ROM.

Note: This unit is intended for software owners to transfer programs onto microdrive cartridges for speed and ease of access. Programs saved using the Mirage Microdriver are unreadable unless the Microdriver is present.

NOW AVAILABLE FROM YOUR LOCAL COMPUTER STORE



or in case of difficulty
order directly from us
24 Bank Street
Braintree
Essex CM7 7UL
Tel: (0376) 48321
Trade and overseas enquiries welcome. Access Visa Amex

Where do you go for arcade action? Rick, Ross and Dougie are game for a graft as they tackle this month's hot new releases.



FIGHTING WARRIOR Melbourne House £7.95

Ross: Another game continuing the current trend of combats but this one is presented in a refreshingly different style. The game is set in ancient Egypt and includes scrolling backgrounds and an

assortment of mythical creatures.

You control an Egyptian warrior and your quest is to rescue a beautiful princess held captive by a power crazy Pharaoh. To do this you must fight your way past all manner of monsters and half man half animal type creatures to reach the temple where the princess is imprisoned.

The game's very like karate games in that your figure faces to the right and fights all those who cross his path. You carry what looks like a staff which can be wielded in three ways. It can be swung to strike the opponent high or low or thrust at the middle of their bodies. You can always jump or duck and move forwards or backwards.

All the creatures and your own warrior move very fluidly, behave differently and have varying strengths which makes the

game even more interesting.

Unfortunately it lacks a few finishing touches which spoils its playability. The joystick control, for example, doesn't respond to diagonals, you can't back away from the monsters without them advancing on you and the graphics repeat very rapidly. Probably because there's only four or five of them.

The animation and graphics are on the whole superb and the game's a good 'un. It did seem to lack depth and often turned into a session of trading blows, with the winner being the one with the most strength points. It'll probably be a fighting success! **8/10**

Rick: The graphics from Melbourne House are getting bigger and brighter all the time. I love it! **9/10**

Dougie: One of the best variations on the karate theme I've seen. **9/10**



DOUGIE'S RAVE OF THE MONTH

CRITICAL MASS Durell Software/£8.95

Dougie: This is the biz! *Critical Mass* is one of those all too rare games that combines some of the tried and tested methods of a golden oldie, *Asteroids*, with plenty of new and refreshing elements.

Far out (Man? Ed) in the galaxy, at the outer edge of man's expansion, a colony of humans is under attack — only this time the aliens are being very sneaky about their subterfuge.

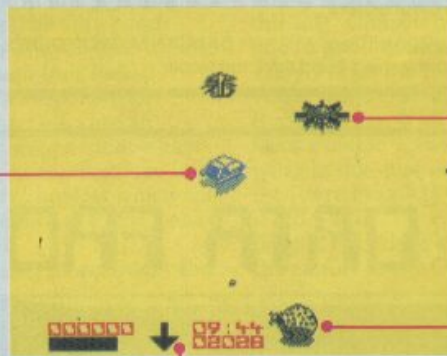
Now there's none of the old full frontal onslaught — after aeons of playing computer games we humans have learned how to handle that! No, they've sneaked in the back door and captured the colony power supply that's located on an asteroid. It's from there that they're threatening self-destruction unless the colonists capitulate immediately. Stay calm — help is at hand!

You have to penetrate the alien defences on the asteroid and disable the anti-matter plant before it can reach Critical Mass. That's the only way of ensuring that the asteroid and everything else within a few billion light years of it, doesn't disappear down an extremely large black hole.

You hover above the barren surface of the asteroid in your land skimmer — a tricky task on its own as it's a ground effect vehicle and so extremely hard to manoeuvre. Plus, you must also defend yourself against marauding alien ships, look out for rocks and watch out that you don't run over the land mines. If your ship is hit, it'll eject you just before it's blown to smithereens, so you've a chance to reach a replacement pod. But keep a sharp eye out for the Dune-style worm creatures that come wrigglin' and writhin' out of the sand on the trail of breakfast.

The graphics and playability of this game are superb, making it well worth the money. **9/10**

Your ship uses a hovercraft-style principle so it's pretty tricky to control. You have to turn the ship in the direction you want and then apply the thrust in the opposite direction!

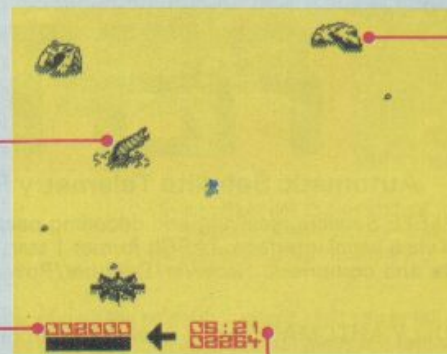


Mined the Gap! Stationary landmines are no hassle but the spinners move around and are almost always fatal if you hit them...

Alien ships don't really harm you but they do get in the way and slow you down.

When you're flying, the arrow shows the direction of the next alien attack wave. If the ship is destroyed, it shows the direction of the nearest emergency pool.

The place is riddled with Sandworms, particularly if you're using your emergency jetpack. But they can't actually kill you as long as you've got some energy left!



Mind the rocks and heaps of jagged crystals as they'll drain your shield if you hit them.

Don't go crazy with the laser — you've only got a limited amount of energy and you'll need it to make it to the next zone ...

This indicator keeps track of your score and the time left till the reactor blows — when it reaches zero, it's all over folks!

Datapen

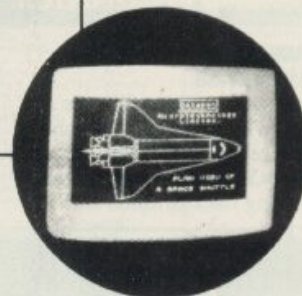
A QUALITY LIGHTPEN for use with the SPECTRUM computer

The DATAPEN lightpen enables you to create high resolution pictures and technical layouts directly on your T.V. screen. The accompanying software allows you to draw any shape or filled area you wish, to pixel accuracy, in full colour and the results may be utilised within your own programs, e.g. for animation, or to illustrate your title pages. At just £29 inclusive, the Datapen lightpen package represents superb value – just look at the actual screen photographs and you will agree that this must be the best value for money on the market.



PLUS: 3 SOFTWARE PROGRAMS

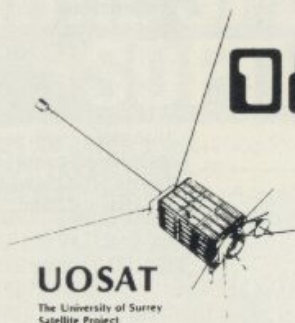
- Routines and ideas for your own programs. (Menus, games, music, etc.)
- User-defined graphics creation program.
- Superb full colour drawing program as illustrated in these actual screen photographs.



- Incorporates features not provided with other pens.
- Push button operation on pen – no need to use keyboard.
- Works under any lighting conditions.
- Plots to pixel accuracy.
- 20 pre-defined commands allow plotting of geometric shapes, including triangle, lines, circles, etc., text, or user-defined characters.

- Uses all paper and ink colours.
- A screen grid may be turned on and off, at will, to assist drawing.
- Flexible erase capability.
- All drawings can be saved to tape for further use.
- Plugs in direct – no batteries, additional components, or adjustments needed.
- Handbook, plus printout of routines for use in your own programs.

Send cheque or P.O. for £29.00 to: Dept. YS/11/85 DATAPEN MICROTECHNOLOGY LIMITED, Kingsclere Road, OVERTON, Hants. RG25 3JB 0256 770488 or ask at your local computer shop. Send S.A.E. for details. Lightpens and software are also available for BBC B, Dragon, CBM-64 and V C-20.



DATA FROM SPACE!



- ASTRID receives from UOSAT satellites:-
- ★ News Bulletins on spacecraft matters.
 - ★ Operating schedule of UOSAT.
 - ★ Satellite Status.
 - ★ Experimental Data.
 - ★ Messages on the Electronic Mailbox System
 - ★ Orbit Information.
 - ★ Digitalker Speech Telemetry.
 - ★ CCD Television Camera Signals.

Don't just play games
on your computer – use REAL
DATA from SPACE!

ASTRID

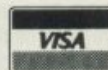
UOSAT Satellites are designed and built by the University of Surrey to encourage a deeper understanding of the rapidly expanding industries of space technology, electronics and computing.

Automatic Satellite Telemetry Receiver & Information Decoder

ASTRID is a COMPLETE Satellite receiving and decoding package that allows data from UOSAT Satellites to be displayed on home computers via a serial interface, (ASCII format 1 start 7 data 1 even parity & 2 stop bits). The system is fully tested and ready to operate and comprises: Receiver/Decoder/Power Supply Unit/Aerial/Feeder/Test Tape/Connecting Leads/Instruction Manual.

ASTRID operates FULLY AUTOMATICALLY – using the remote control on your tape recorder – for those night time passes!

ASTRID is only available from the manufacturers. Please send cheque or postal order (or use your Barclaycard or Access number) for £144.00 + £5.00 carriage to MM Microwave Ltd., Thornton Road Industrial Estate, Pickering, N. Yorks. YO18 7JB. Tel: 0751 75455.





ASTROCLONE

Hewson Consultants £7.95

Ross: Not only is this game a follow on from the arcade adventure *Dragonore* but also from the *Seiddab Trilogy*. It's obvious innit 'cos it combines similar adventure sequences and arcade action.

In the adventure sequence you control a figure who is on a space station moving from room to room in a search for hidden objects. Control is much the same as in other games except that you can request your figure to perform different actions. Pressing the fire button displays a series of icons that allow you to move the figure around, move both his arms independently and control a laser. Objects can be picked up, carried and dropped with the arms.

The status area in the bottom centre of the screen displays your laser's energy level, the available oxygen and any objects you're carrying. This part of the game is very similar to other Hewson productions but it does have a few twists.

Well, what about the arcade action I hear you cry. In this section of the game you must gain control of your 24 fighter

craft so you can destroy the Seiddab fleet encroaching into various local star systems in a last ditch attempt (we hope) to destroy civilisation as we know it. It plays very like *Defender* which is pretty good considering the memory that it must have been squeezed into.

Hewson has made an excellent attempt at mixing two completely different styles of game in *Astroclone* but I can't help wondering whether this will appeal to the buying public. The question is, do adventurers want to play the zappy bits and do arcade freaks want to solve the puzzles? **7/10**

Rick: Oh no! Not another *Avalon* clone! There's no peace for the wicked. **4/10**

Dougie: *Avalon* was never in itself state of the art but it has a big following so I've no doubt it will sell by default alone. **7/10**



RUPERT THE BEAR AND THE TOYMAKER'S PARTY

Quicksilver £7.99

Rick: Hey, this one is really weird man! See, there's this bear who wears these wacky yanky golfing pants and he can walk, jump and — wait for it — climb the

stairs. But he doesn't drink lager, well this is one for the kids, innit?

Rupert (that's the bear's name kids) has got to collect his many invitations to see his even wierder friends Bill the Badger and Podgy the Pig — you know one of those parties! Well Rupert needs more invitations than Podgy's had hot dinners, and not only that, naughty toy soldiers and toy trains try to trip him up along the way, though some will be very good sports and help him. They'll need to 'cos you have to go through four linked screens for each of the eight levels.

Unfortunately Rupert also has an embarrassing speech impediment which means all the screen instructions are in dum-di-dum rhyming couplets which will maim many an innocent ear to the power of poetry.

The toymaker's castle, its corridors and

castellations were presumably built by Barrett — or does that reflect the quality of the graphics? Rupert does look quite a lot like he did in the comic, though some wish he'd stay there. Oh, and he still wears that scarf to hide his love bites.

Quicksilver hasn't aimed so much at the mega-tots but their spinster aunts who feel that if Toby or Fenella have to have one of those awful computer games then this safe, competent platform game is the one to get. I'm afraid though that little Toby will be out on the corner with that vulgar Wayne doing a deal for a quick Buck Rogers. **4/10**

Ross: Frankie goes to the toymaker's party in this cute number. Not as good as the (dare I say it?) Commie version, but it'll do. **6/10**

Dougie: Frankly, I'd still prefer a copy of the annual in my Christmas stocking **4/10**



RICK'S RAVE OF THE MONTH

THE CUSTARD KID

New Generation £4.95

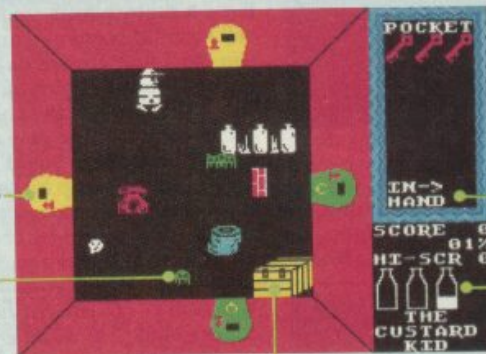
Rick: Well scroll on, New Generation's *Custard Kid* is the one to play with your spotted dick — if you see what I mean. The *Custard Kid* is a variation on the old favourite *Willy Wonka & The Chocolate Factory*, but this time Our Kid, who shows no yellow streak and is certainly not one for the Birds, has to search a custard factory to find 12 recipes. Funny I only know one way to make the stuff — open can, pour into saucepan...

With over 600 locations it wouldn't just be Laurel and Hardy who'd enjoy the custard pie potential of this game, which incidentally has a 'find an object and save it for a rainy day' facility. If you wanna be a successful cordon bleu of blancmange you'll have to do the mapping yourself!

You're in a bit of a sticky situation 'cos you gotta search the scrolling yellow corridors before you go for the chests with coloured keys. These keys are used to open certain

Keys aren't reusable but doors once unlocked stay unlocked. Once a key has been put in a door, the appropriate window turns black.

If it moves, it's dangerous. One false step and you could be reduced to a bottle of St Ivel Five Pints.



Every screen has its closed chest. Walk over it to discover what's inside — it could be a key, a nastie or even a copper!

Custard features can only pick something up if he's not already holding something. Fortunately, his cavernous pockets hold a great deal...

The milk bottles show how much life you have left... and no, milking the cow just doesn't help!

rooms, one of which may contain the custard detector. You'll also have to fill up with milky victuals to keep the stamina up. Only then can you pass to the green corridor to look for those illustrious recipes.

But you'll need a lotta bottle to search those chests — they might contain the yellow peril — the feared custard monsters or even worse the custodians of the custard

who'll send you to jail. Along the way a few useful items can turn up — money to bribe the guards, spoons to devour the custard monster, whose help might mean a grapple with a globule isn't Kid Custard's last stand.

Non-sexist, non-racist and very very violent (and extremely messy) this is one for jelly and ice cream and good games freaks everywhere. **9/10**



GRUMPY GRUMPHREY SUPERSLEUTH Gremlin Graphics/£7.95

Ross: Poor ol' Grumpy Grumphrey. It's a hard life being a store defective —

especially when you're getting on a bit and you reckon it's about time to take things easier. I mean, the shoplifters are getting younger and it's hard to spot them if the old eyes aren't what they used to be. On top of that the boss is out to get you, as he thinks you're a lazy old beep and he's got you running errands all over the place. So you'd better be on your toes 'cos as soon as you put a foot wrong, you're out on your ear, P45 an' all!

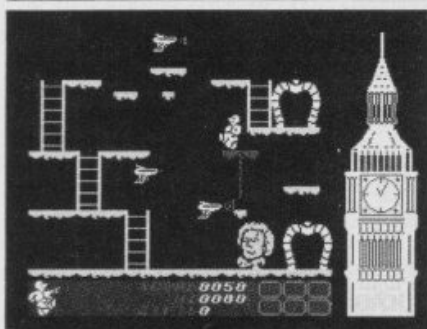
Your day at the store starts at 9am. Not only do you have to catch any shoplifters but when the boss says jump, you *jump* — and you'd better not be late with his tea. In between times, you'll have to cope with floods, fires and even an escaped gorilla monkeying about in the store.

Playing the game is pretty simple, although the controls aren't exactly responsive and the lifts between floors are prone to get stuck sometimes — I haven't sussed out if that's a feature or a gremlin.

Overall, this game's not bad but it feels as if there's something missing — not fun but perhaps addictiveness. I certainly don't think you could class it as one of the Gremlin Greats. **5/10**

Dougie: For a complex 3D game, I'm amazed at how they've overcome the colour problems. Get's my vote on that alone. **7/10**

Rick: So, Gremlin's taken the leap off the platforms into something altogether different. Out of the frying pan? 'Fraid so. **5/10**



BIG BEN STRIKES AGAIN Artic/£6.95

Ross: Big Ben Strikes Again, or does he? Bungling Ben, the hopeless hack from the Chronicle, has just received a report of a

leak in Parliament. So off he bumbles down to Westminster for the scoop of the century — or that's the theory anyway!

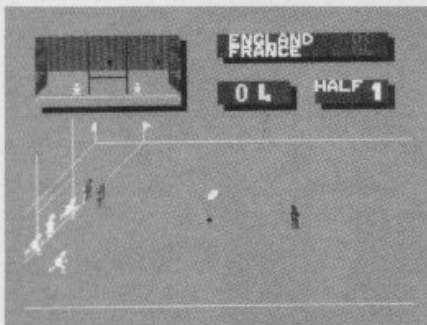
As Ben you've got to chase around the House looking for the six politicians who'll help you unravel your story. There's no doubt that Spitting Image would certainly be proud of the caricatures of the leading MPs! But you can't just go charging up to them and expect them to hand you the story on a plate. Oh no siree, you have to collect gifts for them in exchange for their snippets of information. Like all politicians they just love to be pampered! Hurry though, you must have your story before Big Ben strikes twelve. Perhaps you've never seen the wrath of an editor when you hand in late copy — it starts

'em foaming at the mouth. (*Grrrr! Ed.*)

One of the best features of this game is the screen editor and designer that's included in the program. It's strides ahead of some of the game designer packages I've seen. It lets you completely re-design and add new features to any of the twenty screens, so you never have to play the same game twice. Give it a go if you're into designing your own games. **6/10**

Dougie: Hmm, the age of flickering graphics isn't dead — thanks to a comeback in this game. **4/10**

Rick: It's worth taking a look at this one if only for the cracking caricatures of our illustrious (ho hum) leaders. Whether it's worth playing is another matter. **5/10**



INTERNATIONAL RUGBY Artic/£7.95

Ross: I say chaps let's have a game of rugby — at least it's a real man's sport. None of your wimpy *Everyone's A Wally*

stuff for us, eh? Right, on with the shorts and on with the matcho.

International Rugby's another sport simulation of the type that's so popular at the moment. We're here for the Home International Rugby Tournament with the choice of siding with England, Scotland, Ireland, Wales or France. And your job? Even a rugby player could wrap his brain cell round this one — you just have to win the Triple Crown or the Grand Slam.

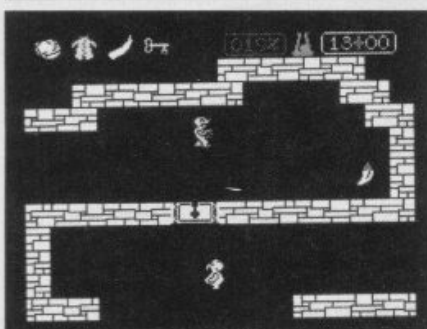
You have the choice of playing by yourself or against the computer and you can make it hard or easy on yourself. There's everything you'd expect in a real rugby game — drop kicks, tries, conversions, line outs, scrums, the lot except for bruises and broken bones!

And if you don't know a rugby ball

from a ball bearing, don't despair — you can always give it a go on the practice mode. For a sports simulation, the graphics and the playability aren't up to the standard of, say, *Imagine's Basketball*, but then that's a completely different ball-game. If you're a rugby fan then you'll still have fun chasing the ball around the screen. **5/10**

Rick: You control these little people three pixels high, bearing no resemblance whatsoever to rugby players — and I loved it! **7/10**

Dougie: You control these little people three pixels high, bearing no resemblance whatsoever to rugby players — and I hated it! (*OK, who's been looking over whose shoulder? Ed.*) **4/10**



RIDDERS DEN Electric Dreams/£7.95

Dougie: Riddle me this. My first is in arcade and my second is in adventure.

What am I? (*D'you really want me to answer that? Ed.*) *Riddlers Den*, of course, this is an arcade game that plays like an adventure.

So, instead of rushing about like a headless chicken through loads and loads of rooms (that all look much the same) and collecting as much treasure as you can before you run out of energy, you'll have to get the ol' grey matter into gear. Otherwise you're not going to get far at all. Not that you can't rush about like a loony if you want to — there's even a bank where you can stash your loot.

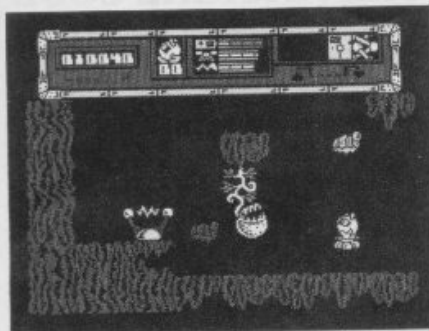
Your task is to get your mitts on the Golden Tusk, but don't expect to come close without a lot of brainache. And just to make life interesting, there's a full

complement of goblins and ogres, dragons and gargoyles, plus a raging bull and a giant spider.

Just like in a true adventure you can only carry a certain number of objects that can then be used only at certain times or places. Overall, *Riddlers Den* is both absorbing and frustrating at the same time — it's just a riddle why other games can't reach this sort of standard! **7/10**

Ross: Who could resist playing the part of a cute little elephant in search of the Golden Tusk. Great graphics make for a great adventure. **8/10**

Rick: Good riddance to this! It had me going flat out on my tasks for the tusk. **7/10**



STARQUAKE

Bubble Bus Software/£7.95

Dougie: Great galactic gargleblasters, an unstable planet has just emerged from a black hole and the galaxy is gonna go

Boom unless you stop it!

As BLOB (Bio-Logically Operated Being) you're the man for the job, the man in the know, so off you go. *Starquake* is a mega-massive arcade adventure in the *Sabrewulf*/Nodes of *Yesod* mould. All you have to do is save the galaxy from total destruction — so c'mon, by now that should be a complete doddle.

For openers, you must find your way about the inside of the planet, locate the missing pieces of the core and rebuild it. En route, you'll come across a whole host of objects that'll come in handy including your flexible friend — Axes or sumfin!

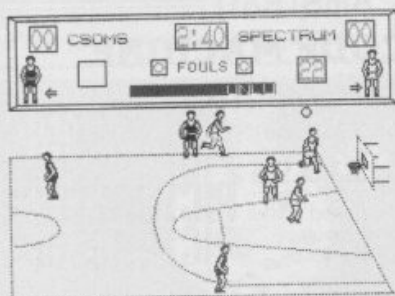
I'm reliably informed that there are 512 different screens in *Starquake*, but I can't verify this as I ran out of fingers and

tootsies! There are also over twenty different monsters and fifteen teleports — only one problem, you have to find the correct teleport codes and I've been sworn to secrecy. (Used notes only please, in a plain brown wrapper.)

If you're into arcade adventures, *Starquake*'s one of the best around at the moment. And you don't even have to take your brain out of neutral to play it. **7/10**

Ross: If it weren't for Ultimate, I'd say this game was totally original — but then Ultimate does exist! **5/10**

Rick: This matches, even beats the standards of most games. Now it's cracked the technique, perhaps Bubble Bus'll have a go at coming up with some fresh ideas. **7/10**



WORLD SERIES BASKETBALL

Imagine/£7.95

Dougie: Watch out, the Globe Trotters are about. Keep your feet on the beat and the ball on the bounce!

We can all name sports that haven't translated at all well into computer games, but *Basketball*'s one of the exceptions. As soon as the players come bounding out onto the court you can tell that this game's better than your average offering. All the men are well animated and move smoothly around the screen at a speed that must have the sprite routine working overtime.

You can play *Basketball* against one of your buddies or against the computer. Each game lasts six minutes and is divided into two halves of three minutes each (*Cor and how else might they be divided?* Ed). If the outcome's a draw, you're given another thirty seconds to battle for those baskets.

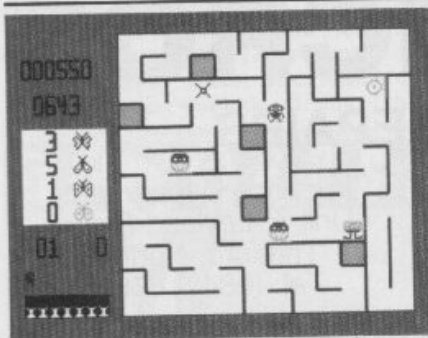
You'll find controlling the players is a

touch tricky at first so it's just as well there's a practice mode for improving your dribbling skills and passing techniques. Once you've got the hang of that, you're in with a good chance of taking the computer to the cleaners. But you'll have to maintain very accurate passing and shooting before you win.

Basketball is not only fun but it's also one of those games you keep coming back to. Net yourself a copy! **8/10**

Rick: Done 'emself proud, has Imagine! This is a worthy follow-up to *World Series Baseball*. **9/10**

Ross: Imagine's certainly making a name for itself with this series of sport simulations. What d'you mean it made a name for itself once before! Still, a goodie. **8/10**



MAZE CRAZE

Partyline £6.95

Rick: I s'pose it makes a change from painting the town red. Partyline's *Maze Craze* could cause a yellow fever of

excitement if you've never been dazed by a maze game before. Otherwise there's little here that an awayday to Hampton Court couldn't provide.

The game is simplicity itself. And the more simple you are the more you'll enjoy it. You've got to guide your man about the maze, choosing a level of difficulty between one and nine depending on how much you like wriggling your wrist.

As the man progresses he'll excrete something yellow to colour the maze. You better be quick though 'cos one of the beastly beasts has a taste for this sort of thing (rabbits do something similar, I believe) and he'll gobble up your trail.

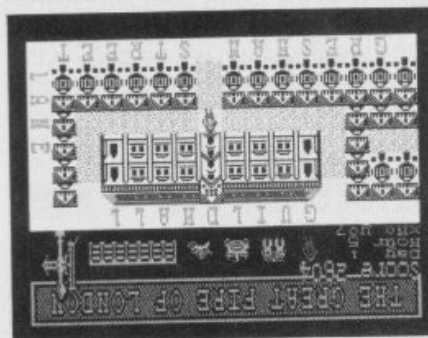
On leaving the yellow brick road you've

to collect moths of various value whilst avoiding the statutory plonkers and munchies! The moths get reincarnated and die as quickly as interest in this game and if you catch a frog or a bug you can enter one of the four special mazes.

Here the 'ugly bug ball' continues and pretty terrifyingly for those in awe of arachnids. 'Cos here comes a spider to sit down beside yer — and only a kamikaze dive with the poison bottle can save you. The khazi isn't the first place I'd despatch this game. Little 'uns who like pulling the legs off spiders or zapping flies in the microwave might get a kick out of it. **3/10**

Ross: Urrrgghhhh! **0/10**

Dougie: Even if the game's a pile of old dross you've got to give it to Partyline for being brave enough to release it. **1/10**



THE GREAT FIRE OF LONDON

Rabbit Software £3.99

Rick: Rabbit Software takes a few Pepys

into the past (*Groan!* Ed) with a re-enactment of the Great Fire of London. 1666 style, that is, not the summer of '81 or the autumn of '86. Forget all that stuff about it starting in a baker's shop in Pudding Lane because Alfred burnt his cakes while watching a spider. This fire can start anywhere and if you choose the variable wind option this bright spark of a burn-up will need some fast thought and action if it's to be extinguished.

Don't be diverted by the flashing graphic depicting the fire — even if it does look more like a stroboscope.

Essentially this is a strategy game with a degree of maze build in. A pretty accurate scrolling map unfurls as you, the mayor,

frantically beetle around mobilizing water pumps, demolition gangs and gunpowder men to deploy in a complete frenzy to contain the conflagration.

All in all a thorough quick-fire strategy game, which, if not exactly hot stuff has no obvious defects and might give you something to do other than fiddle while London burns around you. **6/10**

Ross: Not quite state of the art programming but it's addictive and a pyromaniac's dream **8/10**

Dougie: Being a Scot, I didn't half enjoy burning London down! And I'm sure everyone would enjoy seeing parliament go up in smoke! **8/10**

The Spectrum storage system



ROTRONICS WAFADRIVE

- Dual 128K storage
- Fast, reliable access
- Centronics and RS232 ports
- FREE Spectral Writer wp package
- FREE blank wafer

Blank wafers: 16K (£2.49)
64K (£2.79) 128K (£2.99)

Heathrow/Nightlife II £14.95 Space Wars/
Seiddab Attack/Luna Attack £14.95 Bear
Bovver/Wong's Loopy Laundry/World Cup
£9.95 Melbourne Draw £9.95 Starbike £7.95
ZAPP (Assembler/Disassembler/Monitor)
£19.95 Sherlock £14.95 RS232 lead £10.95
Centronics lead £12.95 Mugsy £9.95 Stock
Manager* £19.95 Finance Manager* £19.95
Address Manager* £19.95 VAT Manager* £19.95
* 80 column version

All prices include VAT and p + p. Please make
your cheque/PO payable to SMT. Or quote
Access/Barclaycard number. Write your name
and address clearly. Please allow 28 days for
delivery. SMT, FREEPOST, Greens Norton,
Towcester, Northants, NN12 8BR.



ONLY
£99.95
INC. P&P



£8.50 INC VAT, P&P



£7.50 INC VAT, P&P

SPECTRUM THE MACHINE CODE SYSTEM

- * "... one of the all too few jewels of Spectrum programming ... deserves a place in every serious programmer's library" (Simon Springett—Popular Computing Weekly—June 1984)
- * "... the whole package is very friendly and easy to use ... can be highly recommended for those who are just about to start programming in Machine Code." (Phil Holliday—Your Computer—May 1983)
- * Fully compatible with MICRODRIVES/NETWORK/RS232 (with Interface 1) and most popular Centronics interfaces for 80 col. printout.

AMSTRAD

THE CODE MACHINE

- * Both programs in one package
- * Many NEW FEATURES
- * Compatible with CASSETTE and DISC

AVAILABLE NOW **£19.95**

- * Send S.A.E. for fully detailed leaflet
- * Available from many computer shops, or by FAST mail order by sending a cheque/PO. to—



Dept YS, Picturesque, 6 Corkscrew Hill, West Wickham, Kent BR4 9BB

THETFORD MICROS

SPECIALIST IN SPECTRUM REPAIRS

21 Guildhall Street,
Thetford,
Norfolk,
Tel: (0842) 61645

Service Department
Unit 4, Leyland Close,
Thetford, Norfolk,
Tel: (0842) 65897

Why wait weeks to get your Spectrum repaired

We at Thetford Micros (Service Dept) have just put into operation a new fully equipped workshop to allow us to keep up our 24 Hours "Guaranteed" repair service on your Sinclair Spectrum computers. We have fully trained staff and our workmanship and repair work is fully warranted to give you the confidence that your micro is in the safest hands. Any first time repairs will be £16.00 + VAT + £2.00 postage and package = total £20.40 for any repair on your computer. We also specialise in the repair of the Spectrum microdrive, Interface 1, II and ZX printers at the same standard charge. Payment maybe made by cheque, Barclaycard, Access, American Express, or Postal Order. So all you have to do is post your faulty Spectrum to us along with payment and we will do the rest, your repaired Spectrum will be back in the post within 24 hours (we never sleep!) and depending on the post office it will be back with you within 5-6 days. We have already undertaken repairs from all over England and the continent.

We also undertake repair work on Acorn, Commodore, Amstrad, Texas, Dragon etc., at the lowest of prices.

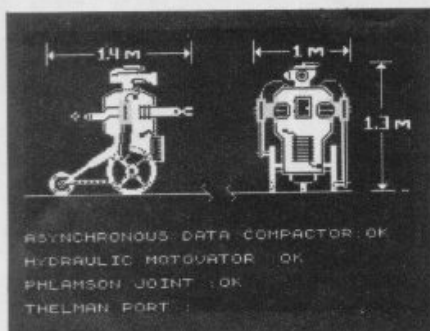
Any problems with your micro phone Pete on the above telephone numbers — I'll be only too pleased to assist.

We also produce our own Spectrum "48K Upgrade Kits" complete with fitting instructions.
£24.00 (VAT+P&P) inclusive.

QL repairs £35.00 + VAT + P&P £2.00. Microdrive £39.00 + VAT + P&P £2.00

Switchable UHF — composite video can be fitted to your Spectrum for only £14.00 + VAT + £2.00 P&P.

Trade enquiries welcome



HACKER

Activision/£7.95

Dougie: Phew, my brain hurts! A trifle perplexing this little number — the only instructions on the packaging tell you how to load the program. Nothing else, zilch, zero...

Panic not — we've already pieced

together the plot. It seems you take the part of a computer hacker who's just about to finish off a night on the phone. But then he accidentally dials a wrong number and the intriguing words LOGON PLEASE appear on the screen.

Of course, you're an experienced hacker so you try all the normal passwords — FRED, HELLO, GUEST and so on — all to no avail. No problem though, 'cos after you've tried to log on three times, the program lets you into the system anyway.

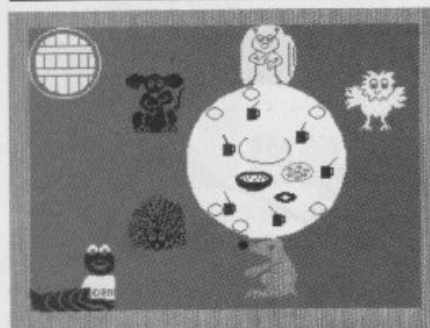
So, we're in and we're off! And the first thing you have to do is complete a laser test on the SRU (Subterranean Remote Unit). It's a trifle tricky at first, but once you discover the Infrared Video Image Sensor, then the Asynchronous Data Compactor, the Hydraulic Motovator, the Phlasmion Joint and the Thelman Port are a doddle to find.

Now, the plot thickens as you discover that you're in the computer of Magma Ltd. The firm has discovered how to use the Thermal Differential of Magma as a virtually unlimited power source. And with that, world domination is only a matter of days away. It's your duty as a citizen of the free world to stop them. And as much as I'd like to help you with more info — well the cheque from Magma to stop me talking came in handy.

This is definitely a game for those of you who like pitting your wits against the machine **6/10**

Ross: A very clever idea that'll let you get the feel for hacking. I'm just not sure whether Activision's pulled it off. **7/10**

Rick: A great game that lets you avert an astronomic catastrophe without incurring phone bills of astronomic proportions. Well, how'd you like to be cut off in your prime? **8/10**



ORM AND CHEEP — THE BIRTHDAY PARTY

Macmillan £6.95

Rick: *Orm and Cheep* doesn't exactly roll off the tongue like *Starsky and Hutch* or *Arfur and Tel* but they're the teeny heroes of the TV screen. Macmillan are definitely aiming this little offering at the

under eights. However, in the best tradition of *Watch With Mother* (or *Dad*) this game is well presented and requires enough thought to allow oldies to play along too.

The game starts with a reaction test which will determine the ability level you start on. A memory test follows with Cheep, a flighty little thing, having to choose the ingredients for Orm's (the caterpillar with the gorms) birthday.

Cheep, the chatty little canary, then has to round up all the guests for the party too. Hedgehog, snail and mouse can be found through a simple maze which even has signposts to help the lost. Mole's underground tunnels are a little more complex and require some mapping out — all good practice for a budding computer buff. It's not that easy though you've got to avoid those nasty baddies

the cat, crow and rat whilst you search.

Once the gang's all there they have to be seated in the correct chairs. Having achieved that, the crow turns up and causes a kerfuffle — so you have to start again. Never mind. The program cunningly adjusts the skill level the more accomplished you become.

Good, clear and colourful graphics, excellent sound effects and unpatronising instructions and attitude toward the younger user all go to make this a solid starter and, dare I say, educational game. **8/10**

Ross: Takes you back to your childhood, dunnit? Shame about Cheep's broken wing though ... **7/10**

Dougie: Educational software always seems to have the best graphics routines — why can't other publishers get to this standard? **8/10**



ROSS'S RAVE OF THE MONTH

MARSPORT

Gargoyle Games/£9.95

Ross: So, this is the first in a trilogy, eh? Well, if this one's anything to go by, you can stand by for a real treat. And don't be put off by first impressions — sure, this game looks very similar to Gargoyle's previous offerings, *Dun Darach* and *Tir Na Nog*, but the scenario and the problem solving are very different.

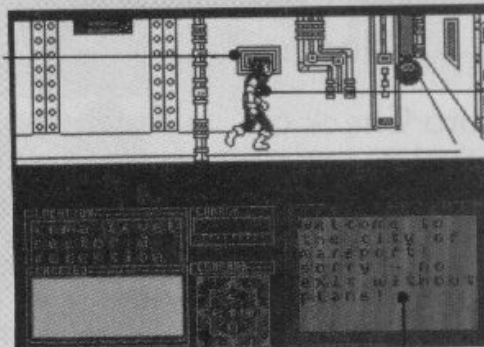
The year is 2494 and once again those nasty alien, space invader thingies (these ones are called the Sept) are trying to get their slimy claws on Mother Earth. Your mission is to prevent the impending catastrophe. So, you must penetrate the city computers on Marsport where the aliens are holed out and escape with the plans for a force field to surround earth. No problem, as they say...

Well, I've got news of you — it ain't that simple. Not only do you have to find your way around Marsport but you've got to do it without being blasted away by the baddies. Start off by mapping your progress — this'll

The lifts move you between levels but you've no control over where they stop. So it's easy to get lost or worse — you could end up on a level where the computer's defences are activated!

● Rule One: Make a map or the maze of corridors will beat you everytime.

help you find the objects you're gonna need if you stand a hope in hell of penetrating further into the base. It's also the only way to prevent that dizzy feeling you get from going round and round in circles, like I did before I got the hang of it!



Keep your bearings with the compass — otherwise you can wander for daze!

Early warning system: this screen will tell you when the bad guys are about to make an appearance...

Take a good look around any new corridor using the camera function. You can only see one wall at a time and it's easy to miss something vital on the opposite wall.

All too much for you? Nip into one of the Mars Bars for a quick drink.

The graphics are beautifully animated, the controls are excellent and it's great fun to play. And if you're into sci-fi, like me, you'll enjoy it even more. An all-round winner that's well worth lashing out the megabucks on. **9/10**

THE MAGIC BUTTON OF BETA-PLUS DISK INTERFACE FOR THE SPECTRUM

The latest **BETA-PLUS** Disk Interface has a unique feature - the **MAGIC BUTTON**.

It transfers tape based programs to disk system with speed, simply by one touch of the

MAGIC BUTTON. Other new features include:

- Auto Check on Disk Drive
- Auto Boot
- Random Access File Handling
- Sequential File Handling
- Reset Button

AT
A
**MAGIC
PRICE**

**SPECIAL
PACKAGE
From
£199**

<u>Single Drive</u>	<u>Drive and Beta-Plus</u>
5 1/4" disk drive (400K) 40 track double sided	£199
3 1/2" disk drive (800K) 80 track double sided	£229
<u>Twin Drive</u>	
3 1/2" disk drive (1.6Mb) 80 track double sided	£329

Cut out this coupon and send with cheque or Postal Order to the address above

PLEASE SEND ME:

Beta-Plus Disk Interface

Beta-Plus & 5 1/4" Single disk drive (40 track double sided) @ £109.25

Beta-Plus & 5 1/4" Single disk drive (80 track double sided) @ £199.00

Beta-Plus & 3 1/2" Single disk drive (80 track double sided) @ £229.00

Beta-Plus & 3 1/2" Twin disk drive (80 track double sided) @ £329.00

*All prices include VAT and apply to UK only

Name _____

Address _____

Qty _____ P & P _____

Total _____



Technology Research Limited

Unit 18, Central Trading Estate, Staines,
Middlesex TW18 4XE Tel: 0784 63547
Telex: 896691 TLXIR G

THUNDERBIRDS

ARE GO...

Just match the members of the Thunderbirds team to their craft and win one of 30 copies of the new game about them from Firebird. Go for it!

... or they would be if the dastardly Hood, arch-villain and mega-lomaniacal maniac, hadn't got to them first. He's enveloped Tracey Island in a cloud of amnesiac gas and, er... sorry, almost forgot what I was going to say there... oh, yeah, and now none of our five valiant heroes can remember anything, no, not even who owns which Thunderbird vehicle. The Hood plans to turn them into puppets of his evil intent and if they resist — well, he'll just string 'em up!

Now they only have one hope left — you! Can you remember who goes where? Should Virgil be shooting into space or splashing about at the bottom of the sea? At the moment, he can't even remember where he's put his keys. They're relying on you to pull a few strings and come up with the answers. You don't want to appear a dummy, do you?

All you have to do is connect up the team with their craft. So, if you think Scott's in Thunderbird 4, draw a line between the two. And as a reward for your help Firebird has generously agreed to send a copy of its new game, Thunderbirds to the first thirty readers who send in the correct solution. It's really the least you can expect for helping the team in the triumph of good over Hood!

STRINGS ATTACHED

Entries should reach us by no later than December 31st 1985.

Each entry must include a completed form or a photocopy of it.

Entries will not be accepted from employees of Firebird or Sportscene Specialist Press, their printers, family and friends. You're also ineligible if you're related to Mr Tracey and the boys.

The Editor's decision is final and no correspondence will be entered into — well, you didn't think he could write, did you?



Gordon



Virgil



John



Scott



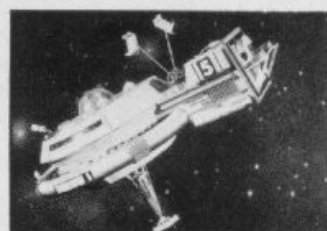
Alan



Thunderbird 2



Thunderbird 4



Thunderbird 5



Thunderbird 3



Thunderbird 1

Gee Mr Tracey, I know where your boys should go — and to help you out I've connected up the piccies. Here's where you should send my reward for saving civilisation as we've seen it on TV... So, don't string me along — puppet in the post pronto!

Name.....

Address.....

Postcode.....

Now cut out the coupon (or a photocopy of it) and send it to Thunderbirds Compo, YS, 14 Rathbone Place, London W1P 1DE.

RAMBO

Peter Shaw — no man, no law, no war could stop him. Flown to the far north-west and dropped behind enemy lines. His mission — to discover how well Ocean is coming on with the game based on his troubleshootin' rival, Rambo!

All hell has broken loose. Ack, ack, ack... A chopper swoops in low, spitting machine gun fire. Shadoom, shadoom! The enemy bazookas explode just feet from their target. There's swamp to the left and soldiers to the right. The flames, the heat... the jungle is a blazing furnace, a riot of fire. And in the centre stands one man... John Rambo.

Just how do you capture that on a computer game, you ask? Well, from what I saw when I went up to Manchester to visit Ocean, I'd say they were doing a darn good job — against all the odds. After all, games based on films haven't so far been acclaimed for their fidelity to the plot, or even the spirit of the originals. *Rambo* is the exception and there's a very simple reason for that. *Rambo*, the film, is, after all, just a shoot 'em up. And shoot 'em ups still make some of the most successful Speccy games.

If you haven't seen the film or been following Rambo's exploits, here's a

quick run-through of the story so far. John Rambo has been locked away for the crimes he committed while waging his own personal war in Vietnam. Now, as *Rambo*, the film, starts, he's been offered re-instatement to the army — but there's a price. He must agree to go on one more mission.

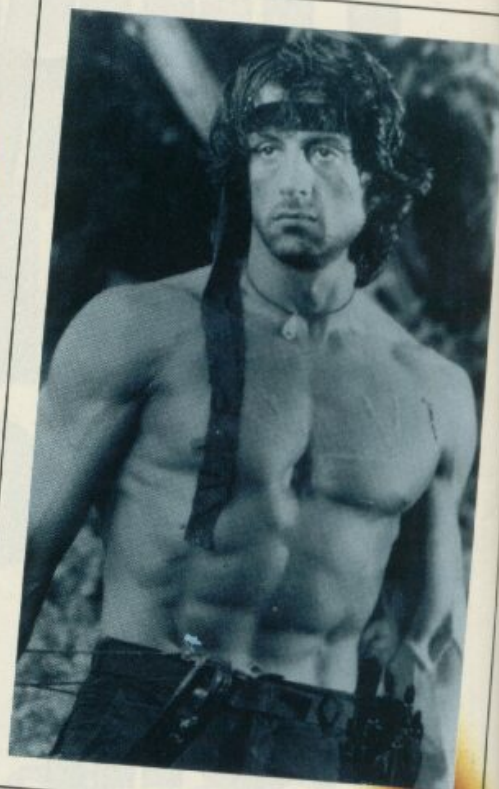
Rambo must return to 'Nam and take photos of the prisoners of war who still remain, locked up and almost forgotten by the country they fought for. But one thing is made very clear — under no circumstances must he engage the enemy. But how can you tame a man like Rambo? All that pent up fury and frustration inevitably leads him to disobey orders — and in the game, your role as Rambo requires you to do the same!

And so, John Rambo is dropped into the steamy jungles of South-East Asia close to the POW camp where he'd previously been incarcerated until his escape. This is the beginning of your operation as Rambo...

WRITIN' RAMBO

The Speccy version of *Rambo* is being converted further north than even Manchester — yes, all of us softy southerners will be amazed to know that such places do indeed exist! The work's being carried out by Platinum Productions, the same team that did such great stuff on the Speccy *Dambusters*. Of course, at the time of writing they can't guarantee that all the details I gleaned about the game for this preview will make it to the final version — but you can be sure they'll do their darndest, to try.

David Anderson is in charge of the operation north of the border, while back in Manchester, chief programmer, David Collier and stooge Tony Pomfret share the weighty task of designing *Rambo*. David, 26, has already designed *Roland's Rat Race* with 19 year old Tony. They both say that their designs come about after much verbal violence until a happy medium is reached — or one of them conks out. Sounds very much like YS to me!



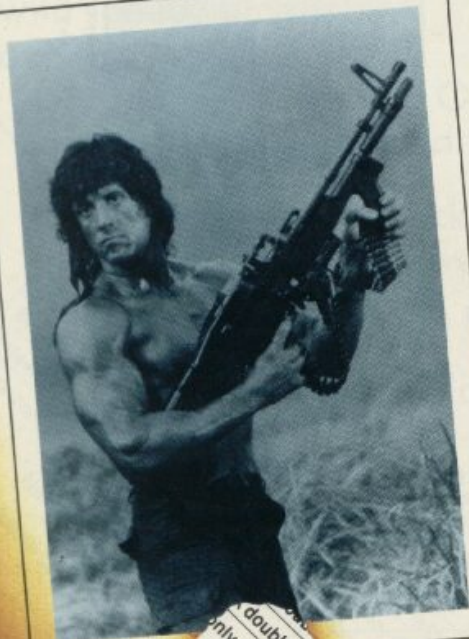
WORKIN' OUT

Rambo is a big game. It covers an area three screens wide by about thirty screens high, though the main play area is contained within the bottom fifteen. As you move to the left and the right, the screen scrolls half a page at a time but as you go up and down, the screen goes with you. You'll be able to see this scrolling technique first in *Beach Head II* — also converted by the very talented programmers at Platinum Productions.

Each screen is divided into fifteen different sections and each one can contain an object — a tree, a shack or some shrubbery, for example. Using this method, the programmers can save a screen in only fifteen bytes of memory. The scope this gives to *Rambo* is bigger than Stallone's biceps!

At any one time, there can be sixteen sprites active on the screen and this should be done with very little loss of speed. That spells an awful lot of woodentops you're gonna have to take out in the game before you achieve your objective.

And finally, a feature that the game designers, David Collier and Tony Pomfret, are very excited about is the weaponry selector. Each armament has its own special graphic and distinct flightpath and you can flip through the choices offered by your arsenal at the touch of a button — even while you're engaged with the enemy in a spot of the old killing and maiming!



TELEX: 896691 TLXIR G

So, you wanna be Rambo? Well, prepare to go on the rampage. And to help you out, just study our step-by-step — or should that be yomp-by-yomp — guide. And if you can't wait for the game to come out, you can always give it a practice run in the back garden!

L Made it! Fly this way and your mission is over. It may not have been strictly to orders but what the heck — you've made a fan of Ronnie Reagan and that sure is a high score!

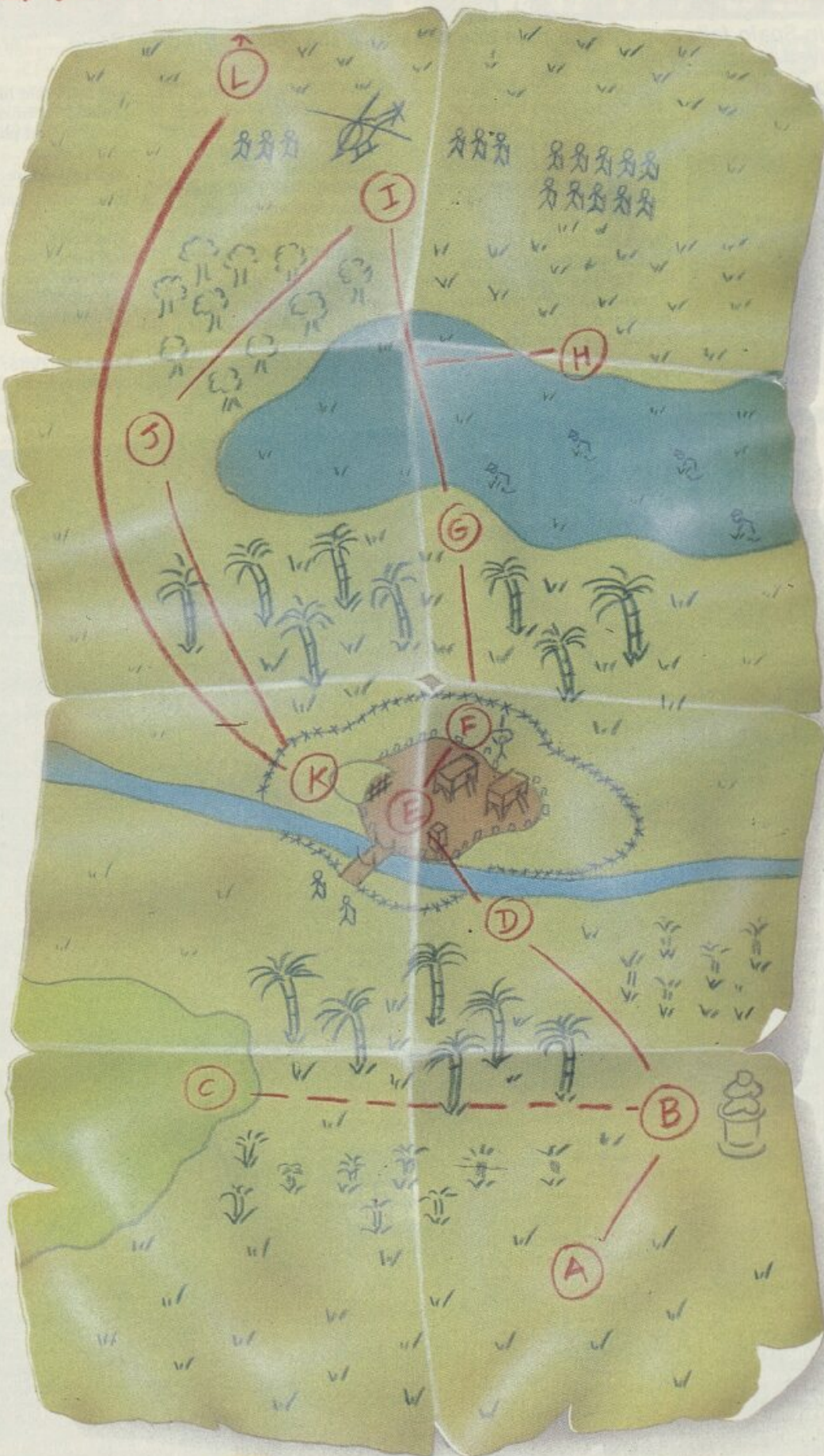
K Wow, so you're still going strong! Now all you have to do is rescue the remaining prisoners locked up in the cell-in-the-hill and take 'em home to mom. But don't expect the sentries to give up until every man jack of 'em is dead.

J Prepare for the choppiest chopper ride you'll ever have. Surely, you didn't think you'd be alone up there? You're gonna have to fend off the attacks of another chopper — and this one's from a rival firm!

I Way up north of where you started you'll find a helicopter in a clearing — it's your ticket on the cheap chartered flight South-bound. But first you're gonna have to overcome the guards with extreme prejudice — yeah, kill 'em Rambo!

E As soon as you're inside the camp, the guards'll make their move. Watch 'em jump out of those huts. It's no use pussy-footin' around now. From here on in, it's a case of if it moves kill it — unless it's one of the prisoners you've got to rescue.

C Here's the swamp — and like most swamps it's pretty impenetrable. If the fever don't get you, the mozzies will! It seems that it's been put here so you have to go round via the Buddah but if you think the programmers are handing it to you on a plate — well, you haven't played it yet!



H The idea behind the game's so simple even Rambo could understand it. The more violent you are, the more points you score. So, after you've thrown the chopper off your tracks, why not shoot up the shrubbery? — it all adds up to a good score!

G Now the enemy's real mad — and they're after you in a big way. It's here in the paddy fields that the attack from the air begins. And as you're on foot, you're gonna have to be quick — and don't go tripping over the vegetation. You either go to hell or get the hell out of there!

F Over here you'll find your first prisoner — and the poor devil's bound hand and foot. To save him from further torment, you only have to cut him down. No, not with your machine gun, stoopid.

D Right, you've made it up to the barbed wire perimeter fence. Now you're going to have to bring in a bit of brain power to work out which weapon you should use to break through. Your bow and arrow won't be a lot of use, the machine gun'll bring in the guards too soon, so that only leaves the knife. Quick, quiet and very, very effective!

B Behind the Buddah idol, you'll find a machine gun — snap it up but don't use it. Why? 'Cos it makes too much noise, and noise attracts soldiers — that's why!

A You're dropped into this area by plane. All you have with you is a knife and a bow'n'arrow and they're not much cop for a killing machine. So, you'll find the rest of the equipment you need scattered around the rest of the map.

SPECTRUM ADVENTURES

The game in Spain falls mainly as a pain and we knock the spots off Adrian Mole. . . Teresa Maughan lived to tell the tale. . .

The Secret Diary of
Adrian Mole Aged 13¾
Mosaic/£9.95



The Secret Diary Of Teresa
Maughan Aged 23¾

Oct 11th 1985: I received a

copy of Mosaic's new game, *The Secret Diary of Adrian Mole Aged 13¾* today. The Ed insisted that I write a review — he said he'd give me £10 but then he's always been a bit tight.

Oct 12th 1985: I took my first look at the game today. It's Adrian's diary on the screen with a few graphics thrown in.. It's Max's (the errand boy) birthday today.

Oct 13 1985: The game

doesn't seem very intellectual to me — all you've got to do is press keys 1, 2, 3, 4 or Caps/Shift to play it. Even I can do that, well nearly.

Troubleshootin' Pete thinks it's dead brilliant and plays it all day long.

Oct 14th 1985: Censored.

Oct 15th 1985: Being somewhat of a megabrain I've already read *Adrian Mole's Secret Diary* so the game seems a bit repetitive — not for intellectuals! The Ed said I

was fat. I told him it was probably because he forced me to sit and play computer games all day.

Oct 16th 1985: I don't think much of this game. First it says Adrian goes on holiday with Maxwell and the stick insect and then a week later he meets the stick insect for the first time. I think I'll ask Max if he can explain this reasoning to me.

Oct 17th 1985: Being a connoisseur of the arts I am of

GIVE US A CLUE...

Norsewoman of the Year, **Lorraine Weir** has just completed *Erik The Viking* and has decided to let you lot in on a few secrets. To get to the North Sea from the beach you must go West four times and then South seven times. You can then reach Denmark by going East and to enter the church type: PRAY TO THE TOMBSTONE. Some objects have pictures on them such as the Book, Bracelet, Stewpot and Medallion. If you have the Ragbag, stand on the deck and rub an object with a picture on it — you'll then appear at that location after you open the bag. So, don't look a gift Norse in the ... Sorry!

Seems a few of you are still having trouble with *Eureka*. Never fear, **Dan Johansson** from Sweden is here with a few hints. He says you must pick up the flint and the rib bone and use these to make an axe. Then go West from the river and you can use it. What you use it for is a complete mystery since Dan didn't tell us!

Paul McPherson has been having some fun with *Sherlock*. He's succeeded in stealing bodies, losing Lestrade, getting the cabbie to pay him £60 (*Sounds sensible to me. Ed*), and locking Basil Phipps and Daphne Stracham in a safe. Wow!

First you must take the lamp, wait for Watson to read the newspaper article, go to platform three at Kings Cross and there you should find Lestrade. Then go to Leatherhead by train. Once you've arrived give the lamp and your money to Watson, so you should then be carrying

nothing. Take the bodies from Sandstone Bridge and Jones' lounge and place them in Cobden Lane.

Having done this return to Kings Cross and wait for Lestrade to appear. He'll call a cab and get into it; you must then tell the cabbie to go to Bishop's Road — hoorah you've dodged Lestrade.

Return to Leatherhead and wait until 12 am, go to Basil's bedroom and you'll find him asleep. Type TAKE BASIL, go to the library and open the safe then put Basil in the safe. Go to Daphne's room (in Brown's house), take her and carry her back to the safe. If you want to have even more fun put the bodies in the safe as well. (*Is that for safe-keeping? Ed*) Bit of a joker is our Paul!

Finally **John Wilson** is back again with yet another *War and Peace* of hints and tips — you'd think he'd have run out of printer paper by now. He complains that he's never going to be 'El Supremo' if we don't print all the hints and tips he provides. What d'you want John, a whole issue of YS dedicated to hints 'n' tips?

Right John, here are a few of your supremo tips just to keep you happy. First *Warlord*. In order to get your mitts on the bronze helmet release the hare from the trap, go to the cavern on the beach and 'CLIMB INTO POOL', go East then North, 'CLIMB OUT OF POOL' and then retrace your steps. Once you've got the helmet you can cross the causeway. You can then get the sword by going North, East and North to the lake and SLEEP. You'll need

this to kill the bear.

Finally John reckons the Pig, Clay Pot, Silver Skull and Vase are red herrings — does anybody out there know better? If so write in and tell us.

He's also got a few tips for *Gremlins* — surprise, surprise! To avoid the darts, GO DOWN. To kill the Gremlin, take the Sword and go to the lounge — sounds like *Cluedo*. Well that's all we've room for this month — sorry John. But don't worry we'll be putting even more of you're hints 'n' tips in next month.

If you're still wandering about like a lost soul, have a shift at the masters below and if that's no help write in and we'll publish your problems. You'll even gain instant fame. On the other hand if you think you know all the answers, write in and let us all in on the secret. You may even oust John Wilson from the position of 'El Supremo', though it'll take some doing.

All you've got to do is write to Give Us A Clue, YS 14 Rathbone Place, London W1P 1DE. You too can become 'El Supremo' of the Adventure page.

KINGS OF THE CASTLE

The Hobbit, Urban Upstart and Dallas Quest
Neil McCabe, 2 Stafford Road, Eccles, Manchester M30 9HW.

Erik The Viking
Lorraine Weir, 42 Elie Avenue, Deans, Livingston, West Lothian, Scotland EH54 8ET.

The Hobbit, Twin Kingdom Valley, Lords Of Midnight, Shadowfire, Urban Upstart, Mountains Of Ket, Doomdarks
Revenge and *Eureka*. James Elliot, 266 Carseview, Tullibody, Alloa FK10 2SU.
Sherlock
Paul McPherson, 8 Foruie Path,

Bridge Of Don, Aberdeen AB2 8TG.

Eureka
Dan Johansson, Solbrinken 25, S 28100 Haussleholm, Sweden.

Warlord, Spiderman, Gremlins, Twin Kingdom Valley and many many more!
John 'El Supremo' Wilson, 26 Spotland Tops, Cutgate, Rochdale, Lancashire OL12 7NX.

DOWN IN THE DUNGEON

The Hulk — 'How do I lift the iron ring in the floor, and what's the use of the fan and the mirror?'
Eduardo Neves, R Jose Maria Niclau, 22, 2070 Cartaxo, Portugal.

Valkyrie 17 — 'How do I go to the town; where is the key?'
Robert Ridell, Ormvraksgatan 11, 21462 Malmoe, Sweden.

The Fourth Protocol — 'Any help gratefully received.' David Neeson, 25 Ladywell Drive, Tullbody, Clackmannanshire, Scotland.

Fantasy Diamond — 'How do I open the musical door and the wooden chest?' Andrew Sumpner, 248 Ramillies Park, Aldershot, Hants GU11 2EQ.

Hampstead — 'How do I meet the man on the train?' Toby Blake, 25 Holm Park, Inverness, Scotland IV2 4XT.

Sherlock — 'How do I get into Basil Phipps' London house?' Neil McCabe, 2 Stafford Road, Eccles, Manchester M30 9HW.

Quest For the Holy Grail — 'How do I get past the rabbit without being torn limb from limb?' Tony Wiltshire, 81 Whormely Road, Stevenage, Herts SG1 1SS.

Mountains Of Ket — 'Where is the hat needed to enter the skull?' A Saleh, 60 Washington Drive, Windsor, Berks SL4 4UR.

Spiderman — 'How do I kill Electro?' J Mullan, 77 London Lane, Bromley, Kent BR1 4HF.

the opinion that the graphics are pretty naff — if I were Adrian I'd feel positively embarrassed. Adrian seems to lead a very eventful life for a boy of 13½.

Oct 18th 1985: Adrian is now trying to teach his dog a few tricks and I can choose what he should do. I don't know why he bothers as the Ed always says you can't teach an old dog new tricks. I think I'm getting a complex about being fat!

Oct 19th 1985: I keep choosing the wrong options so I've made Adrian only a namby pamby schoolboy. This is making me lose confidence in my gamesplaying ability.

Oct 20th 1985: I didn't play the game today because of my complex over being fat!

Oct 21st 1985: I've just

noticed (people tell me I'm very observant for a girl my age) Mosaic has put the CBM 64 instructions on the tape inlay card and covered it up with a Spectrum sticker. I think I'll write a stiff letter to Mosaic about this cheapskate behaviour.

Oct 22nd 1985: I've come to the conclusion that Mole is a game for 13½ year olds and not 23 year olds. All you have to do is read snippets from his diary and make Adrian dead popular with everyone, especially that nymphomaniac Pandora.

Oct 23rd 1985: I finished the game today and Adrian is only a suburban schoolboy. I think this game will be dead popular but it's only a namby pamby computer game as far as I'm concerned.

but you've also got to remember daft thinks like locking the step ladder before you climb it or you'll break your neck!

And if you attempt to board the taxi without dropping the ladder you'll get more than a mouthful from the indignant cabbie.

Having successfully packed and survived the journey to the hotel with Ken throwing up all over the place, the adventure really begins...

Once you reach the sun-soiled shores of Spain you're confronted with seven greasy-haired, tight-buttocked prima donnas who fancy themselves as waiters and a crazy Spanish coach driver offering every excursion under the sun. It's here you've got to be selective as there are only twelve exposures in your camera and you must take ten successful pics.

Everytime you suffer a fatal experience or take a decent piccy, a picture will magically develop on the screen. The graphics in *Terrormolinos* are supposed to reproduce those saucy seaside postcards. If you ask me, they've got a real check to try it!

I got a bit fed up with being arrested for flashing or for taking a really good pic of a wild nightclub and I got even more cheesed off with dying everytime I put a foot wrong.

Terrormolinos is original and quite fast but its predecessor, *Hampstead*, is much the better game!

Wish you were here playing *Terrormolinos*... instead of me.

Terrormolinos

Melbourne House/£7.95



Terrormolinos isn't just the kind of place you only visit once it's also one of those games you'll never return to.

You've decided to visit *Terrormolinos* on the Costa Brava with Beryl, the wife, and Ken and Doreen, the kids. Sounds wonderful eh? Little do you know that *Terrormolinos* is a real dive and that you'll have to face such perils as being gored by a raging bull, getting heatstroke, suffering severe food poisoning and losing an argument with a Euro-juggernaut.

The aim of the game is not only to survive the worst package tour of your life but to bring back ten snapshots to prove you actually did it!

The trouble starts before you've even left your cosy semi in the murky depths of Slough. You've got about ten minutes to pack and get the kids out of the house. Sounds easy huh? Well it certainly ain't!

There are numerous catches designed to hinder your departure. But after a while they get to be a dead bore rather than an intellectual challenge. Not only do you have to search for your passport, tickets and suitcase,

New

TEAM UP WITH FLOYD!

FLOYD 40

BUILT IN
INTELLIGENCE FOR
YOUR SPECTRUM
PRINTER
SPECIAL OFFER
£69.95



Features

Clear easy to read print • No split words • Indented printing • 32 or 40 characters software selectable • Firmware program — no loading from tape % Comprehensive instruction manual supplied • Interface 1 & 2 compatible • Spectrum + compatible • No interface required

The printer comes in a slim plastic case which will compliment your spectrum. It connects with the spectrum via a 56-way ribbon cable and all connections are brought through to the back of the printer. The printer has two switches — one for paper feed and one for on/off line. A roll of paper is included in the price.

1. GRAPHICS MODE

FULL GRAPHICS CAPABILITY -
NORMAL 32 CHARACTERS PER LINE.

2. ADJUST MODE

THIS IS A HIGH QUALITY THERMAL PRINTER FOR THE SINCLAIR SPECTRUM. IT HAS THREE MODES OF OPERATION:

- THE GRAPHICS MODE
- THE ADJUST MODE
- THE LIST MODE

AND THREE SPECIAL FEATURES:

- DOUBLE HEIGHT
- DOUBLE WIDTH
- INVERTED PRINTING

IN THE ADJUST MODE THE PRINTING IS SUCH THAT NO SPLIT WORDS OCCUR, AND PRINTING IS DONE WITH UP TO 40 CHARACTERS PER LINE.

IT IS POSSIBLE TO MIX THE DOUBLE HEIGHT AND DOUBLE WIDTH
INVERTED PRINTING IS ALSO POSSIBLE!

3. LIST MODE

THE LIST MODE ALLOWS BASIC PROGRAMS TO BE MORE EASILY READ BY INDENTING THE PROGRAM STATEMENTS FROM THE CORRESPONDING LINE NUMBERS.

```
340 REM THIS IS AN EXAMPLE OF THE LIST
    MODE WHICH INDENTS STATEMENTS AND
    PREVENTS WORDS BEING SPLIT
345 DATA 10,38,42,22,65,2,43,54,67,76,8
    9,78
350 LPRINT "
360 LLIST
370 LPRINT "
```

£69.95 (+ £4.95 P&P)

To: FLOYD, PO BOX 76, PLYMOUTH, DEVON PL1 1SQ

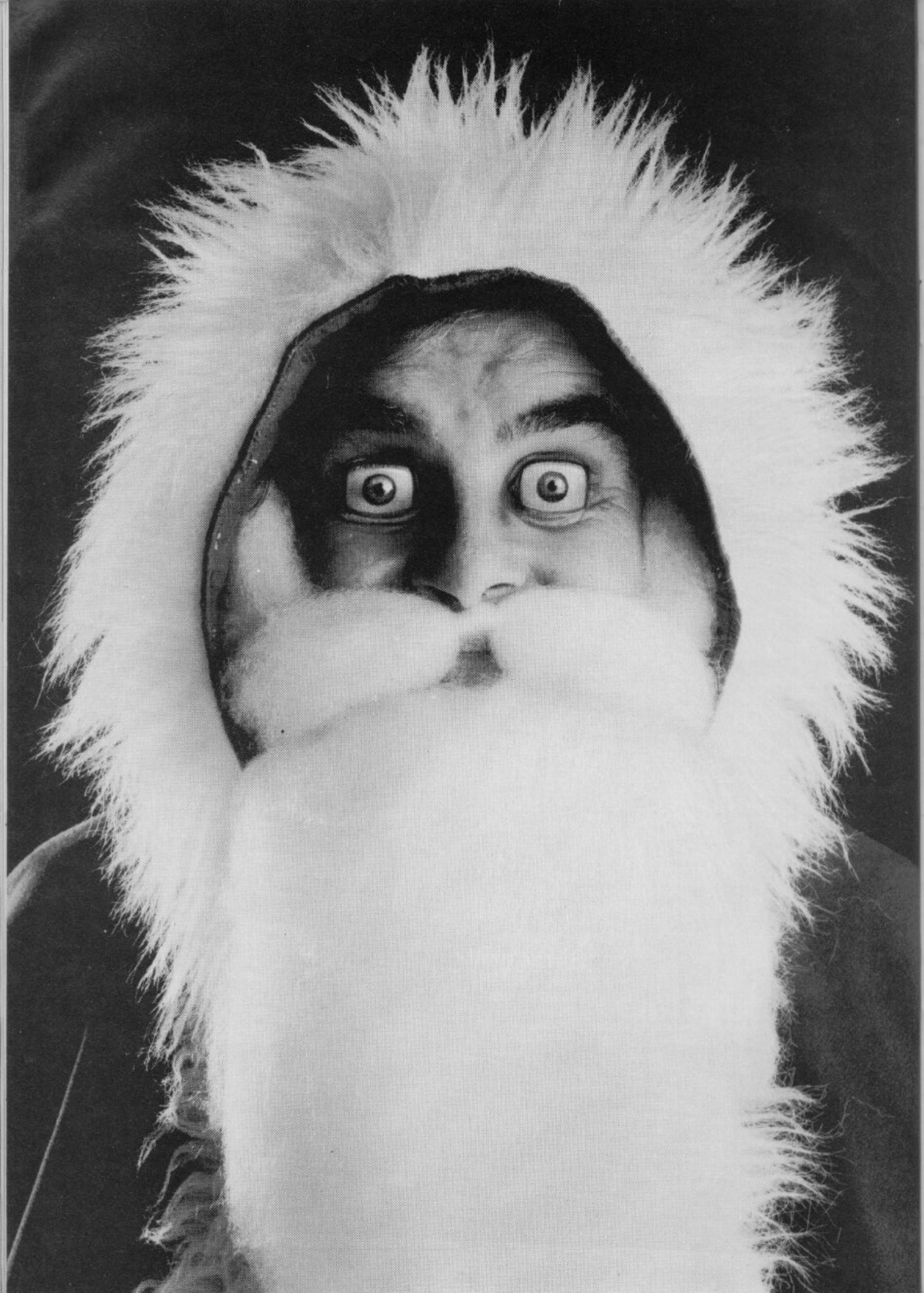
Enclose cheque/p.o. for £ made out to FLOYD —

.....printers @ £74.90 EACH (incl p&p) =

.....boxes of 10 rolls of paper @ £15.00 =

.....rolls of paper @ £2.50 each =

TOTAL =



CHRISTMAS MICROFAIR

Looking forward to a high-tech Christmas?

Then come along to the CHRISTMAS MICROFAIR at the Horticultural Hall, London SW1 on the 14th December.

It's enough to make even Santa Claus's eyes light up.

Everything you ever wanted for the ZX Spectrum, Spectrum + and the QL under one roof, in one day of non-stop computer entertainment.

No matter how many more shopping days there are until Christmas, don't buy anything until you see what's available at the MICROFAIR.

Software, hardware, books, add-ons, printers, monitors, user clubs, magazines, computers, and a fantastic range of gizmos that are not generally available in the shops.

There's all those 'just released' programs for the Spectrum and QL, and more than one opportunity of getting something at special "show" prices.

Send for reduced-price advance tickets now.

December 14th. The day that will make your eyes pop.

CHRISTMAS MICROFAIR

DECEMBER 14TH 1985, HORTICULTURAL HALL

GREYCOAT STREET/ELVERTON STREET LONDON SW1 10am - 6pm

ADMISSION: £1.75 (ADULTS); £1.25 (KIDS UNDER 14yrs)

SEND FOR REDUCED PRICE ADVANCE TICKETS TODAY

Send to Mike Johnston (Organiser), Dept vs ZX MICROFAIRS, 71 Park Lane, London N17 0HG.

Please send me advance tickets
(Adult @ £1.25)

Please send me advance tickets
(Child under 14 @ £1.00)

Name: _____

Address: _____



Please include a stamped, self-addressed envelope and make cheques/POs payable to ZX Microfair

EXHIBITORS. CALL MIKE JOHNSTON ON 01-801 9172
FOR DETAILS OF STAND AVAILABILITY.

THE END OF

Single Letter Keyword Entry ...

Three Character Fonts ...

Three Character Sizes ...

QL-Style Windows ...

Named Procedures ...

Stippled Characters ...

64 Column Text ...

Sprites Galore ...

... Upgrade Your Spectrum
To A MegaSpectrum—NOW!

ONLY £9.95!



It all began with the ZX80 ...the first personal computer retailing for under £100. Next, Sinclair Research announced the ZX81, offering memory expansion to 16K. Completing the ZX series of micros came the Spectrum and its big brother, the Spectrum+.

Although the hardware has been modified extensively, not much thought has been given to ZX Basic ... and, compared to Basics on many other home computers, ZX Basic is sadly lacking!

Until now, that is! *Your Spectrum* is proud to offer your Spectrum the opportunity to transform itself into a MegaSpectrum. All it needs is *YS MegaBasic*—the inexpensive miracle on cassette.

Professional Computing Power — On A Spectrum

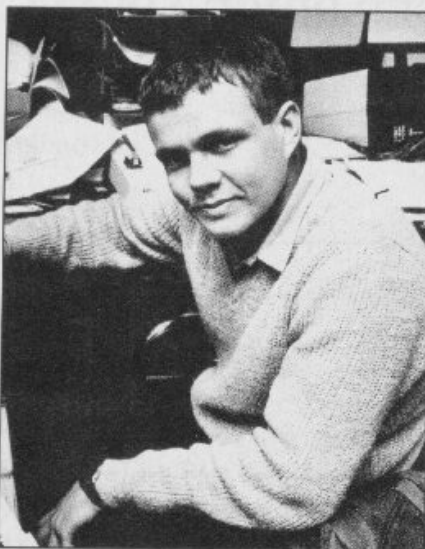
Incorporating many of the best features of Basics found on some of the Spectrum's major rivals (such as the BBC Micro, CBM 64 and Amstrad computers), *YS MegaBasic* gives you the opportunity to unleash power normally associated with machine code!

The program itself uses 19K of RAM, leaving you with 22K to write your own *YS MegaBasic* programs. It may seem as though you've lost a lot of memory, but you'll find you don't need so much code to create on-screen effects with *YS MegaBasic*. Anyway, when was the last time you wrote a program larger than 22K?

At Last! A Real Keyword Entry System

If you've ever suffered from cramp when you're playing double-octaves over the Spectrum's keyboard accessing some of those 'hard-to-get-at' commands ... then despair no longer.

YS MegaBasic incorporates a real single-letter keyword entry system. And before you start thinking this is going to mean more typing, *YS MegaBasic* allows most commands to be abbreviated. For example, you'd type 'RA.' instead of 'RANDOMISE'.



The man behind *YS MegaBasic* — Mike Leaman.

KEY FEATURES OF YS MEGABASIC

- An extended command set. *YS MegaBasic* recognises over 35 new commands, which allow you to access the new features available as well as providing the opportunity to make more of the commands in standard ZX Basic.
- 64 columns of text. Useful for wordprocessing and database applications.
- Three character sizes. Using *YS MegaBasic*, you've now the choice of accessing double-height, standard and half-width characters.
- Three character fonts. *YS MegaBasic* offers three font styles which allow your Spectrum to mimic other machines on the market.
- Windows. You can manage up to six QL-style windows on-screen at any one time.
- Sprites. Using the free *Sprite Designer* package that accompanies each copy of *YS MegaBasic*, you'll be able to design and manipulate up to ten sprites on-screen at once!
- Enhanced sound. Mike Leaman's taken the Spectrum's BEEP command and given it the full Mega-treatment.
- Procedures. Structure your programs and define new commands — it's all here!
- Stippled characters. QL-style stipples allow you to mix colours on-screen to give interesting colour effects.

ZX BASIC?

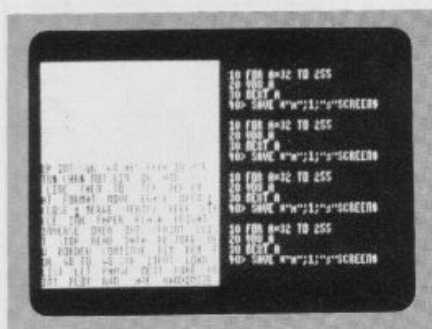
Sprite Designer — Free With Each Copy Of YS MegaBasic!

Included in the *YS MegaBasic* package, you'll find a special utility program called *Sprite Designer*. Written by Mike Leaman in *YS MegaBasic*, this 11K program is designed to help you create sprites on the Spectrum.

You can have up to ten sprites on-screen at any one time, but if you're careful with memory you can get more!



Here, *YS MegaBasic* is showing off its multifarious character sizes and fonts. Each window contains text in three different sizes: double height, normal height and that used for 64-columns; double height and standard text can be output in three different fonts.



The screen format for the input/output of *YS MegaBasic*. Three windows are provided for input, LISTing and RUNning programs; under software control, each window's size and purpose can be changed to suit individual requirements.

YS MegaBasic
Available only by
mail order and only
from

Your Spectrum

Your Spectrum, *YS MegaBasic*
Offer, SportsScene Specialist Press, 14
Rathbone Place, London W1P 1DE.

YS MEGABASIC PRIORITY ORDER FORM

Thousands of clever *YS* readers have now upgraded their Spectrums to the status of *MegaSpectrums* with a copy of *YS MegaBasic*. But there are still plenty of you who can't quite believe the claims we've made for the program. Well, you don't have to take our word for it, listen to **Tony Wise** a reader from North Yorkshire. "Mike Leaman deserves a knighthood for *YS MegaBasic*. It must stand as the classic Speccy program of all time." Need we say more?

How To Order MegaBasic

Just complete the order form below (or a photocopy) and send it off to *Your Spectrum*, *YS MegaBasic* Offer, SportsScene Specialist Press, 14 Rathbone Place, London W1P 1DE. For each copy you'll need to enclose a cheque/Postal Order for £9.95 made payable to SportsScene Specialist Press. We won't give up until a new name makes it to the birthday honours list — arise Sir Michael Leaman!

QTY	ITEM	PRICE	P&P	TOTAL
....	YS MEGABASIC	£9.95	45p

I enclose a cheque/Postal Order for £....., made payable to SportsScene Specialist Press.

Name

Address

..... Postcode

Phone Age

Name

Address

..... Postcode

Phone Age

Please allow 28 days for delivery.

MAGAZINE HEALTH WARNING

Using scissors to cut this coupon may prove hazardous to this issue's health.
Why not use a photocopy instead?

Beyond's latest saga is not a game to be trifled with. Over 4,000 locations and a claimed 30,000 graphics screens — remind you of anything? That's right — it uses the landscaping techniques pioneered by Mike Singleton in *Lords of Midnight*. Only this time, it's also a full blooded adventure which understands complex text commands and has all manner of people and creatures in it — both good and bad — all doing their

ARAVOR



Balord Aravor can be summoned in the church of Balomir. He'll outline your quest. Keep in with Aravor — he'll be a great help later.

own thing. And of course, there's a hefty storyline for you to digest before you stand a chance of playing the game.

Sorderon, not content with being an evil wizard, has discovered the secret of immortality, slain the rightful king of Elindor and now rules the land with fear and

SAMUS



Samus the winged horse desires Krok leaves, which can be found to the north. Pay him well and he'll lead you to the woodcutter's tool.

Beyond Midnight

Sorderon's Shadow is a major new epic, complete with a cast of thousands and glorious landscaped sets. Peter Freebre becomes the un-named one and prepares for adventure...

torment. All those faithful to the king have been slain or transformed. All who are known to him risk his terrible vengeance — fear stalks the day and death follows by night (*Calm down! Ed*). Under his rule, Elindor is dying.

But there's hope. One of the Lords of Elindor has for years been calling across the cosmos for an 'unknown warrior' who'll rid the land of Sorderon's evil shadow. All pretty standard stuff and nothing to thrill you to death. Until you discover that the unknown warrior is *you!* Your job is to single-handedly rid Elindor of its tyrant. To do this, you must complete, in order, nine separate tasks which lead to his downfall. This might seem a bit steep but it does at least give you some chance of succeeding in an otherwise strange and deadly land.

The 14-page manual is a great help and will be essential to complete the game — as is a speech in the early stages that was omitted from our review copy! The manual sets out the tasks and describes the major characters and objects. There's also a complete map of Elindor which is crucial even though some of the windmills and igloos have

been replaced by huts.

P'raps the climate changed or maybe the programmers ran out of memory...

Keep a close watch on where you are and what's in front of you or you may well find yourself dead! Bogs and marshes are no place for the newcomer. You'll also come across many different creatures on your travels, mostly hostile. Pay careful attention to that part of the instructions dealing with 'the nine tasks of the un-named one', 'characters' and 'objects'. You'd be wise to remember the names of the goodies and baddies 'cos if you kill the wrong one... you're done for!

Talking about 'the nine tasks' — these lead you through the adventure and without them you won't stand a snowball's chance in hell. As the hero you must complete these nine tasks, seven in the correct order and the other two at any time.

Cryptic verse and character speech will appear throughout play. These clues should aid you in your quest and the instruction booklet will provide you with further information when you're really stuck!

The range of gruesome creatures in *Sorderon's Shadow* is truly amazing and

LARRAS



The wicked witch of the west, Larras, is an evil old hag but she'll swap something you need for something she needs. It's a case of you scratch my back and I'll scratch yours.

their graphical representation brilliant. You'll meet anything from a manic treeblower (eh?) to a healer called Morkoth. These two characters are actually quite useful but you'll meet a lot of nasties too, such as the Thornman,

TRACKER



Tracker holds a very special stone, the Orb of Caradach, which reveals the means to overthrow the evil wizard Sorderon.

Sandman, Krillan and the Duncrawlers.

Elindor is a large land and it'll take quite a bit of time to trek across from one side to another. If some evil doer puts the boot in and you die you'll have to repeat that journey again — unless of course you've saved your position onto tape.

Should you meet with death the computer appears to 'hang' and none of the keys work. It's actually waiting for you to load in a saved position, though it

doesn't actually tell you this in the instructions. You did save as you travelled didn't you?

Don't be too surprised when some of the creatures you meet don't want to go

MANIC TREEBLOWER



Caradach's friend Manic holds something you want. You must return this object to it's rightful owner in order to receive the first part of Sorderon's bane.

away — this happens a lot and not only does it slow the game but if you can't satisfy their wishes you may find they decide to dispense with your services. Nasty eh? It's a good idea to move through the night though you must watch your strength as well as where you walk — you may not see that marsh up ahead...

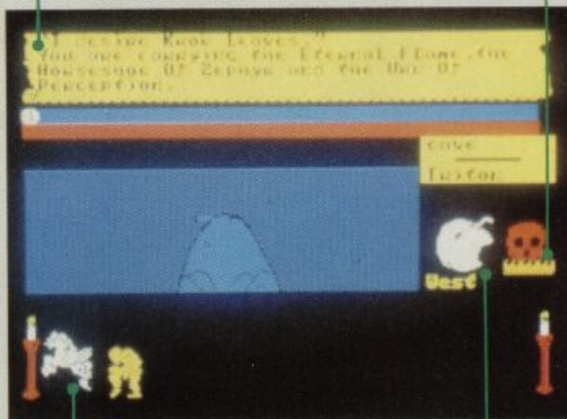
MORKOTH



You'll have to seek Hydral, prince of Bagul, to gain an object desired by Morkoth the healer. Give this to him and he'll help you speak to Kerral.

Sorderon's Shadow is one complex adventure, so if you like 'em big — get out your trusty sword, don your hiking boots and don't forget to leave a note for the milkman...

The text window shows what's going on and what you're carrying — in this case the Eternal Flame, Horseshoe of Zephyr and the Urn of Perception — in usual adventure style.

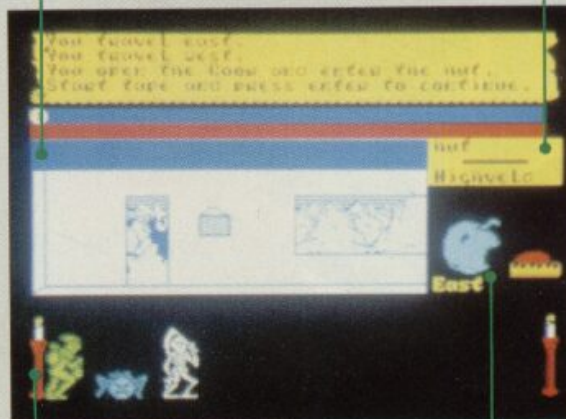


Samus, the winged horse, has a definite craving for Krok leaves and you're well advised to find him some. Keep Samus happy and he'll show you the woodcutter's tool!

Watch the numbskull ... it's a clock! When it rises completely out of the flames, it's midnight and the Krillan hordes take to the street looking for action. Best to REST until daybreak.

Core! This half-eaten apple shows your remaining strength. If it's white, you're on top of the world. Green means you're feeling a bit weedy and if it turns blue, you'd better watch it!

Innit pretty? The landscaping window shows you where you are — here, you're inside Tracker's hut. The window updates itself regularly and is capable of 30000 different views!

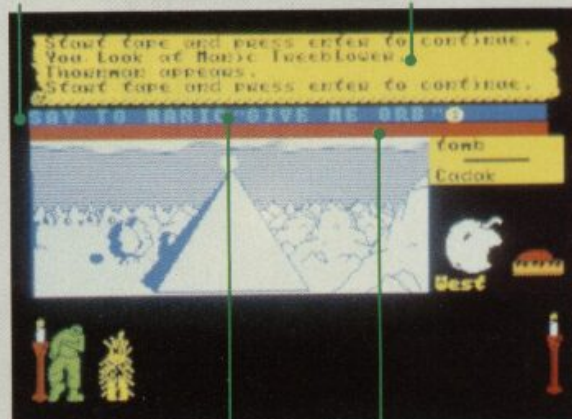


This window names the type of landscape you're in together with the region you're in. So here you are in a hut (wow, I'd never have spotted that) in the Highveld region.

These three are Tracker, Retriever and the Skeleton. The Tracker comes in very useful in the fifth task as he knows the whereabouts of the Orb of Caradach, a stone gifted with the knowledge of how to overthrow Sorderon.

Oh dear — the apple's gone a moudy blue colour! You're pretty low on strength — if you don't watch it, you'll be attacked by a Dunecrawler and you won't be able to fight back.

You've got one line to enter your commands — they can be quite complex like this one and you've got a vocabulary of 750 words to go all! One neat trick is the ability to instantly recall any of your last three commands using a sentence store feature.



Enter Manic Treeblower (Manic who?) and the Thorman. Old prickly features has a prickly nature too so don't mess with him unless you're feeling strong!

You could always try asking! Sorry, but in Elindor you rarely get something for nothing and you're going to have to come up with a better deal than this.

Refusals appear here — so if you've bodged up a command or the program can't understand you, you can still see the command you tried...



CLIP THE COUPON
FOR DETAILS OF OUR
FREE
1ST QUARTER SUBSCRIPTION OFFER!

Nice Identity. Shame about the Password.

It's a unique combination.

Your Special Identity Number and Personal Password. The valuable key to huge databases teeming with activity, set on our Mainframes across the nation.

On Micronet 800, you're a valued individual, adding your own special flavour and personality to the database.

Take our exciting new "Gallery" - You control your personal screens for all to see. The intriguing "Chatline" public conversation service gives you freedom to express your views and meet some remarkable people.

All part of a tremendous Communications section that networks you to 60,000 Micronet and Prestel users across the country. Try Teleshopping, or interview celebrities live on "Celebrity Chatline" every Wednesday night.

And there's FREE (& instant) National Electronic Mail, plus International Telex, and the Contact and SwapShop bulletin boards.

Get computer news first on Micronet's daily (and controversial) "Newsflashes" and read up on the latest reviews and courses. Feast from our regularly changing menu of programs to download straight into your micro - absolutely free.

You also get access to Educational Computing's "School Link" and Prestel's huge 300,000 page database, including world news, business & share bulletins and optional homebanking. For only £16.50 per quarter, that's less than

the price of a daily paper!

The only accessory you need is a Modem, to get the best value for money around in micro communications.

Fill in the coupon for the full facts and send to Micronet 800, 8 Herbal Hill, London EC1R 5EJ. But be warned, Micronet 800 is a 'living' service with ever-expanding features. So maybe you'd be better to call in at your local Micronet 800 Action Station. There are thousands of Micronetters waiting to meet you!



To: MICRONET 800, Durrant House, 8 Herbal Hill,
London EC1R 5EJ. Telephone 01-278 3143.
Please send me the full facts about Micronet 800.

Name _____ Age _____

Make/Model of Micro _____

Address _____

Telephone _____ YS/12/85

* For 98% of telephone users.
Prestel is a trademark of British Telecommunications plc.
On Prestel

SEE MICRONET 800 IN ACTION

At selected Boots, Laskys, John Lewis & your local computer store

<p>AVON Bath. Boots, 1 Marchants Passage, Southgate. Tel: 0225 64402. Bristol. Boots, 59 Broadmead. Tel: 0272 296331. Weston Super Mare. Peter Castelli Ltd, 28 Orchard Street. Tel: 0934 24778.</p> <p>BEDFORDSHIRE Bedford. Boots, The Harpur Centre, Harpur Street. Tel: 0234 56231. Bedford. Software Centre, 52a Bromham Road. Tel: 0234 44733. Leighton Buzzard. DJ Computers, 17 Bridge Street. Tel: 0525 383929. Luton. Boots, 82-86 Armdale Centre. Tel: 0582 20592.</p> <p>BERKSHIRE Slough. Boots, 178-184 High Street. Tel: 0753 27267. Maidenhead. Boots, 54-58 High Street. Tel: 0628 27892.</p> <p>BUCKINGHAMSHIRE Milton Keynes. Boots, 18 Crown Walk, Secklow Gate West. Tel: 0908 607327. Milton Keynes. Depson Business Systems, 65 Aylesbury Street, Blechley. Tel: 0908 367446. Aylesbury. Boots, 69-70 Friars Square. Tel: 0296 83661. Chesham. Reed Photo & Computers, 113 High Street. Tel: 0494 783373.</p> <p>CAMBRIDGESHIRE Cambridge. Boots, 65-67 Sidney Street and 28 Petty Curry Street. Tel: 0223 350213. Cambridge. Cambridge Computer Store, 4 Emmanuel Street. Tel: 0223 358264. Peterborough. Boots, 40-42 Bridge Street. Tel: 0733 65352. Peterborough. Logic Sales, Unit 6 Midgate Parade. Tel: 0733 49666. St Neots. Compute, 3 Cross Keys. Tel: 0480 72013.</p> <p>CHESHIRE Chester. Boots, 47-55 Foregate Street. Tel: 0244 28421. Chester. Computer Link, 21 St Werburgh Street. Tel: 0244 316516. Crewe. Midshires Computer Centre, 57 Earle Street. Tel: 0270 589191. Macclesfield. Computer Centre, 68 Chestergate. Tel: 0625 618827. Warrington. Boots, 39-45 Bridge Street. Tel: 0925 574825.</p> <p>CLEVELAND Middlesborough. Boots, 88-90 Linthorpe Road, The Cleveland Centre. Tel: 0642 249616. Darlington. Darlington Computer Shop, 75 Bondgate. Tel: 0325 487478.</p> <p>CORNWALL St Austell. AB&C Computers, Duchy House, 6 Lower Aylmer Square. Tel: 0726 64463. Bodmin. Microtest, 18 Normandy Way. Tel: 0208 31713182.</p> <p>CUMBRIA Kendal. The Kendal Computer Centre, Stramontage. Tel: 0539 22559. Whitehaven. PD Hendren, 15 King Street. Tel: 0946 2063. Workington. Technology Store, 12 Finkle Street. Tel: 0900 66972. Penrith. Penrith Communications, 14 Castlegate. Tel: 0768 67146.</p> <p>DERBYSHIRE Alfreton. Gordon Harwood, 69-71 High Street. Tel: 0773 836781. Chesterfield. Boots, 35-37 Low Pavement, Market Place. Tel: 0246 203591. Derby. Boots, 1 Devonshire Walk. Tel: 0332 45886. Derby. First Byte Computers, 10 Main Centre, London Road. Tel: 0332 365280.</p> <p>DEVON Exeter. Boots, 251 High Street. Tel: 0392 32244. Exeter. Open Channel, Central Station, Queen Street. Tel: 0392 218187. Paignton. Computer Systems Ltd, 35 Hyde Road. Tel: 0803 524284. Plymouth. Syntax, 76 Cornwall Street. Tel: 0752 28705. Plymouth. Computer Base, 21 Market Avenue. Tel: 0752 672128. Plymouth. Boots, 2-6 New George Street. Tel: 0752 266271. Seaton. Curtis Computer Services, Seaton Computer Shop, 51c Harbour Road. Tel: 0297 22347. Tiverton. Actron Microcomputers, 37 Bampton Street. Tel: 0884 252854.</p> <p>DORSET Bournemouth. Lansdowne Computer Centre, 1 Lansdowne Crescent, Lansdowne. 0202 20165.</p>	<p>Dorchester. The Paper Shop, Kings Road. Tel: 0305 64564. Poole. Lansdowne Computer Centre, 14 Armdale Centre. Tel: 0202 670901.</p> <p>ESSEX Basildon. Basildon Software Centre, 78-80 Liberty Shopping Hall, East Square. Tel: 0268 27922. Braintree. Mirage Micros, 24 Bank Street. Tel: 0376 48321. Chelmsford. Maxton Hayman, 5 Broomfield Road. Tel: 0245 354595. Colchester. Boots, 5-6 Lion Walk. Tel: 0206 577303. Colchester. Colchester Computer Centre, 3a Short Wyre Street. Tel: 0206 47242. Grays. H. Reynolds, 79 Orsett Road. Tel: 0375 5948. Harlow. Harlow Computer Centre, 17 Staple Tye. Tel: 0279 22846. Hornchurch. Compitel Computer Systems, 112a North Street. Tel: 0402 446741. Ilford. Boots, 177-185 High Road. Tel: 01-553 2116. Romford. Software Plus, 72 North Street. Tel: 70 65271. Southend-on-Sea. Computarama, 88 London Road. Tel: 0702 335443. Southend-on-Sea. Computer Centre, 336 London Road. Tel: 0702 337161. Southend-on-Sea. Estuary Personal Computers, 318 Chartwell North, Victoria Circus Shopping Centre. Tel: 0702 614131.</p> <p>GLOUCESTER Cheltenham. Screen Scene, 144 St Georges Road. Tel: 0242 528979. Gloucester. Boots, 38-46 Eastgate Street. Tel: 0452 42301.</p> <p>HAMPSHIRE Basingstoke. Boots, 15 Old Basing Mall. Tel: 0236 51611. Bournemouth. Boots, 18-20 Commercial Road. Tel: 0202 21713. Fareham. Electronequip, 36-38 West Street. Tel: 0329 230670. Fareham. Boots, 21 Westbury Mall. Tel: 0329 232011. Portsmouth. Micro Choice, 159 Havant Road, Drayton. Tel: 0705 327591. Portsmouth. RDS Electrical (Portsmouth) Ltd, 157-161 Kingston Road. Tel: 0705 812478. Portsmouth. Boots, 194/204 Commercial Road. Tel: 0705 825248. Southampton. Boots, 23-29 Above Bar Street. Tel: 0703 333983. Waterloo. G.B. Microland, 7 Queens Parade, London Rd. Tel: 0705 259911.</p> <p>HERTFORDSHIRE Potters Bar. The Computer Shop, 197 High Street. Tel: 0707 44417. Stevenage. DJ Computers, 11 Town Square. Tel: 0438 65501. Watford. SRS Microsystems, 94 The Parade, High Street. Tel: 0923 26602. Welwyn Garden City. DJ Computers, 40 Fretherne Road. Tel: 96 28444.</p> <p>HUMBERSIDE Beverley. Computing World, 10 Swaby's Yard, Dyer Lane. Tel: 0482 881831. Grimsby. R.C. Johnson Ltd, 22 Friargate, River Head Centre. Tel: 0472 42031. Hull. Boots, 48-58 Prospect Centre. Tel: 0482 22534. Hull. Computer Centre, 26 Analby Road. Tel: 0482 26297.</p> <p>ISLE OF MAN Douglas. T.H. Colebourne, 57-61 Victoria Street. Tel: 0624 73482.</p> <p>KENT Ashford. DGH, 10 North Street. Tel: 0233 32597. Beckenham. Supa Computers, 425 Croydon Road. Tel: 01-630 3569. Bromley. Boots, 148-154 High Street. Tel: 01-460 6688. Chatham. Boots, 30-34 Wilmott Square, Pentagon Centre. Tel: 0634 405471. Gravesend. Gravesend Home Computers, 39 The Terrace. Tel: 0474 23871. Folkestone. Kent Micros, 52 Union Street. Tel: 0622 52784. Rainham. Microway Computers, 39 High Street. Tel: 0634 376702. Sevenoaks. Ernest Fielder Computers, Dorset Street. Tel: 0732 456800. Shortlands. The Village House of Computers, 87 Beckenham Lane. Tel: 01-460 7122. Sittingbourne. Computer Plus, 65 High Street. Tel: 0795 25677. Tunbridge Wells. Boots, 7-11 Calverley Road. Tel: 0892 26486.</p>	<p>Tunbridge Wells. Modata Computer Centre, 28-30 St. Johns Road. Tel: 0892 41555.</p> <p>LANCASHIRE Blackpool. Boots, 28-38 Bank Hey St & Victoria St. Tel: 0253 22276. Blackpool. Blackpool Computer Store, 179 Church Street. Tel: 0253 20239. Bolton. Computer World UK, 208 Chorley Old Road. Tel: 0204 494304. Burnley. IMO Computer Centre, 39-43 Standish Street. Tel: 0282 54299. Lancaster. Northern Lights, 89 Scottforth Road. Tel: 0524 62634. Preston. 4Mat Computing, 67 Friargate. Tel: 0772 561952. Rochdale. Boots, 50 Market Way. Tel: 0706 53225.</p> <p>LEICESTERSHIRE Leicester. Boots, 30-36 Gallowtree Gate. Tel: 0533 21641. Leicester. DA Computers, 104 London Road. Tel: 0533 549407. Market Harborough. Harborough Home Computers, 7 Church Street. Tel: 0858 63056.</p> <p>LONDON W1. Computers of Wigmore Street, 104 Wigmore Street. Tel: 01486 0373. W1. Galaxy, 230 Tottenham Court Road. Tel: 01-636 6500. W1. Sonic Foto Micro Center, 256 Tottenham Court Road. Tel: 01-580 5826. W1. Tomorrow's World Today, 27 Oxford Street. Tel: 01-439 7799. WC1. Transam Micro Systems, 59-61 Theobalds Road. Tel: 01-405 5240. W8. Boots, 127a Kensington High Street. Tel: 01-937 6882. SE7. Vic Odds Micros, 6 London Bridge Walk. Tel: 01-403 1988. SE15. Castlehurst Ltd, 152 Rye Lane, Peckham. Tel: 01-639 2205. EC2. Devron Computer Centre, 155 Moorgate. Tel: 01-638 3339. N14. Logic Sales, 19 The Bourne, The Broadway, Southgate. Tel: 01-882 4942. N22. Boots, 38-40 High Road, Wood Green. Tel: 01-881 0101. NW4. Davina Computer Store, 112 Brent Street, Hendon. Tel: 01-202 2272. NW4. Boots, Brent Cross Shopping Centre. Tel: 01-202 52567. NW11. Computers Inc, 86 Golders Green. Tel: 01-209 0401.</p> <p>GREATMANCHESTER Altrincham. Boots, 13-17 George Street. Tel: 061-928 4471. Hyde. C Tech Computers, 184 Market Street. Tel: 061-366 8223. Manchester. Boots, 32 Market Street. Tel: 061-832 6533. Manchester. Mighty Micro, Sherwood Centre, 268 Wilmslow Road, Fallowfield. Tel: 061-224 8117. Manchester. NSC Computer Shops, 29 Hanging Ditch. Tel: 061-832 2269. Marple. Marple Computer Centre, 106 Church Lane. Tel: 061-449 9933. Oldham. Home & Business Computers, 54 Yorkshire Street. Tel: 061-633 1608. Oldham. Boots, 1 Town Square Shopping Centre. Tel: 061-624 2525. Stockport. National Micro Centres, 36 St Peters Gate. Tel: 061-429 8080.</p> <p>MERSEYSIDE Liverpool. Hangreaves, 31-37 Warbreck Moor, Walton. Tel: 051-525 1782. St Helens. Microman Computers, Rainford Industrial Estate, Mill Lane, Rainford. Tel: 0744 885242. Southport. Boots, 31-39 Chapel Street. Tel: 0704 3391. St Helens. Boots, 8 Church Street, 24 La Grange Arcade. Tel: 0744 25488.</p> <p>MIDDLESEX Harrow. Camera Arts, 42 St. Anns Road. Tel: 01-427 5469. Hounslow. Boots, 193-199 High Street. Tel: 01-570 0156. Southall. Twillstar Computers Ltd, 7 Regina Road. Tel: 01-574 5271. Teddington. Andrews, Broad Street. Tel: 01-977 4716. Twickenham. Productive Computers Ltd, 72 Heath Road. Tel: 01-891 4991. Uxbridge. JKL Computers, 7 Windsor Street. Tel: 0895 51815.</p> <p>NORFOLK Norwich. Adams, 125-129 King Street. Tel: 0603 22129. Thetford. Thetford CB & Micros, 21 Guildhall Street. Tel: 0842 61645.</p> <p>NOTTINGHAMSHIRE Mansfield. Boots, 39 Four Seasons Shopping Centre. Tel: 0623 23089.</p>	<p>Nottingham. Boots, 11-19 Victoria Centre. Tel: 0602 470676. Nottingham. Talsar, 280 Huntingdon Street. Tel: 0602 503585. Worksop. Computer Graphics, 32 Bridge Street. Tel: 0909 472248.</p> <p>NORTHAMPTONSHIRE Kettering. Boots, 35 Gold Street. Tel: 0536 514675. Northampton. Boots, 9 The Parade. Tel: 0604 22573.</p> <p>NORTHUMBERLAND Morpeth. Telerents (Northern) Ltd, 31 New Gate Street. Tel: 0607 513537.</p> <p>OXFORDSHIRE Abingdon. Ivor Fields Computers, 21 Stert Street. Tel: 0235 21207. Banbury. Computer Plus, 2 Church Lane. Tel: 0295 55890. Oxford. Science Studio, 7 Little Clarendon Street. Tel: 0865 54022. Oxford. Absolute Sound and Video, 19 Old High Street, Headington. Tel: 0865 65661.</p> <p>SCOTLAND Aberdeen. Boots, 133-141 Union Street. Tel: 0224 585349. Dundee. Boots, 49-53 High Street. Tel: 0382 21756. Edinburgh. Boots, 101-103 Princes Street. Tel: 031-225 8331. Edinburgh. Microworld Computer Group, 12 Leven Street. Tel: 031 228 1111. Edinburgh. Edinburgh Computers, 51-57 Lothian Road. Tel: 031 229 4418. Edinburgh. Silicon Centre, 7 Antigua Street. Tel: 031 557 4546. Glasgow. Boots, 200 Sauchiehall Street. Tel: 041 332 1925. Glasgow. Microworld Computer Group, 11 Bath Street. Tel: 041 332 1116. Glasgow. Boots, Union Street and Argyle Street. Tel: 041 248 7387. Glasgow. Tom Dixon Cameras, 15-17 Queen Street. Tel: 041-204 0826. Glasgow. Commiscot Ltd, 30 Gordon Street. Tel: 041 226 4878. East Kilbride. Boots, 33-37 The Plaza. Tel: 035 52 20629. Falkirk. Boots, 79-91 High Street. Tel: 0324 20535. Hamilton. Tom Dixon Cameras, 8 Cadzow Street. Tel: 0698 283193. Peterhead. North East Computers, 1 Ellis Street. Tel: 0779 79900.</p> <p>SHROPSHIRE Shrewsbury. Computarama, 13 Castlegate. Tel: 0743 60528. Telford. Computer Village, 2/3 Hazeldine House, Central Square. Tel: 0952 506771. Telford. Telford Electronics, 38 Mail 4. Tel: 0952 504911.</p> <p>SOMERSET Taunton. Boots, 64-65 High Street. Tel: 0823 76061.</p> <p>STAFFORDSHIRE Newcastle-under-Lyme. Computer Cabin, 24 The Parade, Silverdale. Tel: 0782 636911. Stoke on Trent. Town Computer Store, 30 Town Road, Hanley. Tel: 0782 287540. Stoke on Trent. Boots, 3-5 Market Square, Hanley. Tel: 0782 23271.</p> <p>SUFFOLK Bury St. Edmunds. Boots, 11-13 Cornhill. Tel: 0284 701516. Bury St. Edmunds. The Suffolk Computer Centre, 1-3 Garland Street. Tel: 0284 705503. Ipswich. Computer Magic, 24 Crown Street. Tel: 0473 50965.</p> <p>SURREY South Croydon. Concise Computer Consultants, 1 Carlton Road. Tel: 01-681 6842. Croydon. The Vision Store, 53-59 High Street. Tel: 01-686 6362. Croydon. Boots, The Mall, 12-18 Whiffitt Centre. Tel: 01-688 6021. Epsom. The Micro Workshop, 12 Station Approach. Tel: 0372 721533. Guildford. Guildford Computer Centre, 5 The Quadrant, Bridge Street. Tel: 0483 578848. Wallingford. Surrey Micro Systems, 53 Woodcote Road. Tel: 01-647 5636. Woking. Harpers, 71-73 Commercial Way. Tel: 0486 225657.</p> <p>SUSSEX Brighton. Boots, 129 North Street. Tel: 0273 27088. Brighton. Gamer, 71 East Street. Tel: 0273 728681.</p>	<p>Bognor Regis. Bits & Bytes, High Street. Tel: 0243 867143. Eastbourne. Boots, 15 Eastbourne Armadale Centre. Tel: 0232 27742. Horsham. Boots, 1 Swan Walk. Tel: 0403 53053. Horsham. Orchard Computer Centre, 34 East Street. Tel: 0403 64884. Worthing. Boots, 48-52 Montague Street. Tel: 0903 207106.</p> <p>TYNE & WEAR Newcastle-upon-Tyne. Boots, Eldon Square. Tel: 0632 329844. Newcastle-upon-Tyne. RE Computing, Parkview House, Front Street, 4 Lane Ends. Tel: 091 2701740. Sunderland. Business Micro Communications Ltd, Refuge Assurance Buildings, Saint Thomas Street, West Sunnyside. Tel: 0783 654916.</p> <p>WALES Aberdare. Inkey Computer Services, 70 Mill Street, The Square, Treycnon. Tel: 0685 881828. Aberystwyth. Aberdare at Gallows, 23 Pier Street. Tel: 0970 615522. Cardiff. Boots, 36 Queens Street & 105 Frederick Street. Tel: 0222 31291. Cardiff. The Computer Shop, 41 The Hayes. Tel: 0222 26666. Cardiff. Cardiff Microcomputers, 46 Charles Street. Tel: 0222 373072. Newport. Gwent Computers, 92 Chepstow Road. Tel: 0633 841760. Newport. Boots, 155-156 Commercial Street. Tel: 0633 551212. Swansea. Boots, 17 St. Marys Arcade, The Quadrant Shopping Centre. Tel: 0792 43461. Swansea. The Micro Store, 35-36 Singleton Street. Tel: 0792 46980.</p> <p>WARWICKSHIRE Coventry. Boots, 38-42 Corporation Street. Tel: 0203 26561. Leamington Spa. Boots, 31 Parade. Tel: 0926 24945. Leamington Spa. Leamington Hobby Centre, 121 Regent Street. Tel: 0926 29211. Nuneaton. Micro City, 1a Queens Road. Tel: 0203 382049. Rugby. O.E.M., 9-11 Regent Street. Tel: 0788 70522.</p> <p>WEST MIDLANDS Birmingham. Boots, City Centre House, 16-17 New Street. Tel: 021-643 7582. Dudley. Central Computers, 35 Churchill Precinct. Tel: 0384 238169. Stourbridge. Walters Computer Systems, 12 Hagley Road. Tel: 0384 370811. Walsall. New Horizon, 1 Goodall Street. Tel: 0922 24821.</p> <p>WILTSHIRE Trowbridge. West Wiltshire Micros, Whitehart Yard. Tel: 02214 67259.</p> <p>YORKSHIRE Bradford. Boots, 11 Darley Street. Tel: 0274 390891. Doncaster. Boots, 13-15 French Gate. Tel: 0302 62238. Barnsley. Boots, 34-40 Cheapside. Tel: 0226 82616. Huddersfield. Micro World Computers, 1006-1010 Manchester Road, Linthwaite. Tel: 0484 846117. Huddersfield. Boots, 22 King Street. Tel: 0484 21756. Leeds. Boots, 19 Albion Arcade, Bond Street Centre. Tel: 0532 33551. Leeds. Micro Power, Northwood House, North Street. Tel: 0532 458800. Sheffield. PIP Micro Communications, 9 Taptown Crescent, Broomhill. Tel: 0742 661096. Sheffield. Boots, 4-6 High Street. Tel: 0742 78333. Wakefield. Boots, 26-28 Upper Kirkgate. Tel: 0924 376181. York. York Computer Centre, 7 Stonegate Arcade. Tel: 0904 641862.</p>
--	---	---	--	---



Phone 01-278 3143 for your free information pack now!
Micronet 800, 8 Herbal Hill, London EC1.

It's 2010 and you're in the thick of it. Your only chance of survival is to collect valuable pellets which are essential for the propagation of the human race.

No it's not *Blade Runner* but *The Grid* — the fourth entry to YS fame frame, Opportunity Knocks. Conor O'Neill from Kilkenny in the Republic of Ireland has toiled for hours to perfect this program. It's easily one of the finalists but whether or not it reaches the number one spot is up to you...

A combination of Basic and machine code provides the formula for this compulsive action-packed game, based on a simple but ingenious idea.

You are thrown into the battlefield from the word go and don't you know it! Reaping your harvest is easy — you'll only need to occupy the same grid location as a pellet in order to collect it. But avoiding the trackers isn't quite so easy — ah trackers, did we forget to mention them?

Scanning the harvest area and shooting laser blasts at will (*Who he? Ed*) the trackers show no mercy where human scavengers are concerned. If you don't fancy an early grave keep well out of their firing line.

Control is simple. Put your fingers on the Q, A, O and P keys and prepare to face *The Grid*...

Knocking Order

Conor's entry into Opportunity Knocks now only leaves two places for your megagame — do you dare risk leaving it to the last moment?

If you want to have a go, remember that the program must be under 5K and make sure you include complete instructions with your tape. Last but not least, be certain that your entry is going

The Basic Loader

This program should be saved at the start of your master tape with **SAVE "THE GRID"** LINE 1. Its purpose is simply to load in the code and print high scores and so on.

```
1 LOAD ""CODE
4 PAPER 0: INK 5: BORDER 0: CLS
5 LET hsc=0
```

The Hex Loader.

Standard stuff this. Just enter it and type **RUN**. You'll be asked to enter the Hex code as listed on this page, once done, save the code after your Basic loader.

```
1 REM General Hex Loader
2 POKE 23658,8
3 INPUT "Start Address ";start
4 POKE USR "a",INT (start/256):
POKE USR "a"+1,start-256*INT
(start/256)
5 CLEAR start-1
6 LET start:=256*PEEK USR "a"
+PEEK (USR "a"+1)
7 INPUT "Length ";length
8 INPUT "File Name ";f#
10 FOR i:=start TO start+length
```

The Hex Data

Enter this into the Hex loader eight bytes at a time. Its start address is 45056 and its length 5147.

```
45056 3E 01 21 07 B2 77 CD A0 =765
45064 B0 11 01 08 2A 09 B2 CD =636
45072 2B B0 CD 32 B0 C9 3E B0 =1041
45080 2A 09 B2 77 11 00 01 2A =408
45088 09 B2 19 22 09 B2 21 05 =471
```

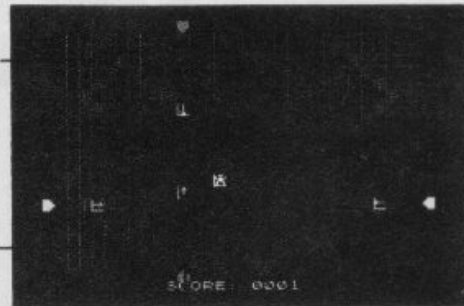
OPPORTUNITY KNOCKS

Blast off to the 21st century with Conor O'Neill's entry in the Opportunity Knocks fame trail. Can you beat it? Can you save the human race at all? You're gonna have to face ...

THE GRID

Your aim is to collect all the pellets. Harvest the lot on one screen and you'll get a new pattern on the next ...

You start down here but don't hang around as it's a very dangerous place. Stick to the middle of the grid and you'll give yourself more time to dodge the missiles.



Watch for the trackers at the sides of the grid ... they're not stupid you know and will fire only when you're in their sight!

Missiles are easy to dodge on the slower levels (six and above) but once you're down to level 1 to 3, you've got no chance of evasion manoeuvre at all ...

This program is available on DigItape

to knock spots off its competitors.

The outright winner, chosen by you the readers, will have his or her program taken to a software house for possible commercialisation. And that's not all — they'll also receive a hefty fee from YS as will the rest of the finalists.

So You Think You've Got it?

If you think you've got what it takes to be a megagame programmer don't waste a second, get your entry in fast. Send it to

Gavin Monk, YS, Opportunity Knocks, 14 Rathbone Place, London W1P 1DE.

DON'T READ THIS ...

... unless you want a hand in playing this game. POKE 48211,0 will give you infinite lives, POKE 47961,x will let you view screen x, and greater control over speed can be gained by POKEing 50097 with the required value. Good Grid-dance!

```
10 PRINT AT 4,8;"CONTROLS : Q=UP"
11 PRINT AT 5,19;"A=DOWN"
12 PRINT AT 6,19;"O=LEFT"
13 PRINT AT 7,19;"P=RIGHT"
14 PRINT AT 9,3;"SELECT SPEED 1-B"
(1 is fast)
15 LET a#="INKEY#"
16 IF a#="" THEN GO TO 15
17 IF (CODE a#)/48 AND (CODE a#)
<57 THEN POKE 50097,(VAL a#)*32-1):
GO TO 19
18 GO TO 15
```

```
19 FOR f=1 TO 300: NEXT f
20 POKE 47961,1
21 RANDOMIZE USR 50192
22 CLS
23 LET sc=PEEK 45589+256*PEEK
45590
24 IF sc>hsc THEN LET hsc=sc
25 POKE 45589,0: POKE 45590,0
26 PRINT AT 4,4;"SCORE=";sc;"
HISCORE=";hsc
27 FAUSE 0
28 GO TO 14
```

```
STEP 8
20 LET cs=0
30 PRINT AT 0,0;"Address ";i
40 INPUT "Hex B Bytes";LINE a#
60 IF LEN a#<16 THEN GO TO 1000
80 LET f=0: FOR j=1 TO 16
90 IF (a#(j)<"0" OR a#(j)>"9")
AND (a#(j)<"A" OR a#(j)>"F") THEN
LET f=1
100 NEXT j
105 IF f=1 THEN GO TO 1000
110 FOR n=0 TO 7
120 LET y=CODE a#(11)-48: IF y>9
THEN LET y=y-7
130 LET z=CODE a#(12)-48: IF z>9
THEN LET z=z-7
140 LET va=16*y+z
```

```
150 LET cs=cs+va
160 POKE i+n,va
165 PRINT AT 2,n*3;a#( TO 2)
170 LET a#="a#(3 TO )
180 NEXT n
183 INPUT "Checksum ";LINE a#
184 PRINT AT 2,25;a#
185 IF VAL a#<cs THEN GO TO 1000
187 CLS
190 NEXT i
200 CLS : PRINT "SAVE CODE AFTER
BASIC
LOADER.";"REMOVE EAR LEAD"
210 SAVE f#CODE start,length
220 CLS : PRINT "VERIFYING"
230 VERIFY ""CODE
240 CLS : PRINT "ALL OK": STOP
1000 PRINT AT 15,0;"ERROR": GO TO 20
```

```
45096 B2 34 C9 A7 ED 52 22 0B =962
45104 B2 C9 2A 0B B2 22 09 B2 =831
45112 21 05 B2 36 00 C9 2A 0B =524
45120 B2 CD 4C B0 E5 23 36 05 =958
45128 E1 36 0A C9 7C E6 18 CB =1067
45136 2F CB 2F CB 2F C6 5B 67 =936
45144 C9 3A 0B B2 E6 10 FE 10 =964
45152 1E 00 C2 67 B0 1E 10 3A =607
45160 0B B2 E6 0F 83 26 00 6F =714
45168 11 00 4D 19 C9 CD 59 B0 =777
45176 11 02 4D ED 52 D4 96 B0 =940
```

```
45184 C9 7E FE BE C0 CD 3A C3 =1421
45192 00 21 17 B2 34 C9 2A 0B =540
45200 B2 2B CD B1 B0 C9 CD 8E =1279
45208 B0 CD 00 B0 CD 3E B0 C9 =1201
45216 CD 32 B0 06 B0 11 0D B2 =653
45224 2A 05 B2 19 E5 2A 09 B2 =708
45232 3A 07 B2 FE 01 C2 BC B0 =1056
45240 2B C3 B0 B0 23 D1 1A 77 =992
45248 CD 16 B0 10 E0 3E FF 2A =1002
45256 09 B2 11 00 01 ED 52 77 =643
45264 C9 CD 0E B1 CD DB B0 CD =1402
```


YOUR SPECTRUM DOES NOT CONDONE SOFTWARE PIRACY

SPECIAL
XMAS OFFER!

2 GAMES (WORTH £10) WITH EVERY REPAIR

REPAIRS BETWEEN
£9 AND £20

OTHERS FOLLOW THE LEADER

EXPRESS SPECTRUM & BBC
REPAIRS!in all U.K. with
While-u-Wait repairs!

with INTERNATIONAL repair service!

to charge LOW PRICES for the smaller repairs!
(e.g. £9 for keyboard faults)

● **FOR SPEED** – "One firm at least can effect any necessary repairs over the counter in 45 minutes. Based in Manchester, MANCOMP can offer what is arguably the FASTEST turnaround in the business to personal callers" CRASH Magazine JUNE 1985.

● **FOR LOW PRICES** – "My Spectrum blew recently, I took it to MANCOMP, who fixed it in 8 minutes! and for less than £10! They are local, 'clued up', and blindingly efficient!" 4 HEATONS DIGEST.

● **FOR REPUTATION & HELPFULNESS** – "I have come across a firm that will be more than willing to advise you as to how to remedy your problems. They are called MANCOMP and as well as repairing faulty Spectrums, are also quite willing to discuss your problems with you and offer reasonably cheap and more importantly CORRECT CURES" Phil Rogers POPULAR COMPUTING WEEKLY JAN 85.

● **FOR PROFESSIONALISM** – "Of all the repair companies 'Sinclair User' spoke to, MANCOMP seemed the MOST PROFESSIONAL when it came

to advice and a helpful
attitude" AUG 85.

● **FOR HONESTY** – We let you watch your computer being repaired and if there is nothing wrong with it, we will tell you!!!

THIS IS WHY Spectrum users from London, Cornwall, Scotland, Birmingham, Liverpool, Coventry, Leicester, Glossop, I.O.M., etc. AUSTRALIA, AUSTRIA, BELGIUM, EGYPT, EIRE, GERMANY, HOLLAND, KUWAIT, NORWAY, PAKISTAN, PAPUA NEW GUINEA, SAUDI ARABIA, SWEDEN, SWITZERLAND and ZIMBABWE – send their Spectrums to MANCOMP for repair!

● 24 TURNAROUND ● NO-QUIBBLE GUARANTEE
● NO HIDDEN COSTS.

EXTRA-SPECIAL DISCOUNTS FOR EDUC INST.,
H.M. FORCES, CHARITIES, HOSPITALS, ETC!

WHY DELAY? For FREE no-obligation estimate PHONE OR
SEND YOUR SPECTRUM TO
MANCOMP FOR THE FASTEST
AND CHEAPEST REPAIR
SERVICE AROUND!

MANCOMP LTD
(Dept. YS/12)

Printworks Lane, Levenshulme,
Manchester M19 3JP
Phone 061-224 1888.
OR 061-224 9888.
OPEN MON - SAT 9am to 7pm
WE ALSO REPAIR APPLES, I.B.M.,
APRICOTS and EPSON & OLIVETTI
PRINTERS!!!

**The 1st choice**

BANISH LOADING PROBLEMS

AND THE 'WEENY' BEEP ON THE SPECTRUM
WITH THE ELINCA TAPELOADER £14.99 £12.99
OR THE LOUDMOUTH £12.99 £9.99

Both post free

SUMMER
SALE

For details send S.A.E. to:

Celina Ltd

Daisy Walk, Sheffield S3 7PY, England Tel: 756728 (0742)

SPECTRUM
RGB
OUTPUT
MODULE

adapt electronics

★ Connect a monitor to your Spectrum ★ Super sharp text ★ Superb colour graphics ★

- True TTL/Analogue outputs + comp syncs
- Monitor quality pictures-no dot crawl.
- Suits RGB monitors & monitor/TVs
- Simply plugs into expansion port.
- No separate power supply required.
- New through port version. Allows connection of modems, joy-stick interfaces etc.

Price £34.95 or £38.95 (through port) + £1 P&P
many add-ons parts & software SAE for details
20 STARLING CLOSE, BUCKHURST HILL,
ESSEX, IG9 5TN. Tel. 01-504-2840

SPECTRUM
REPAIRS

We expertly repair
Spectrums for £17 inclusive
of parts and labour and
return postage.

Spectrums upgraded 48K for
£34. Keyboard faults only
£12.

R.A. ELECTRONICS
133 London Road, South
Lowestoft, Suffolk
Tel: (0502) 66289

BLANK CASSETTES

WITH LIBRARY CASES

	C10	C15	C20	C30
10	3.80	4.00	4.15	4.15
20	7.00	7.20	7.35	7.50
50	15.00	15.20	15.35	15.50
100	27.00	28.00	29.00	29.00

Fully inclusive (C.O.D. 65p extra)

5 1/4" DS/DD DISKS

10 FOR £14.00 inc. PLASTIC CASE

DK'TRONICS KEYBOARDS

(SPECTRUM ONLY)
ONLY £30.00

(£32.50 FITTED. SEND FOR DETAILS)

RING US NOW! (0793) 695034
UK HOME COMPUTERS (DEPT YS)
82 CHURCHWARD AVE,
SWINDON, WILTS SN2 1NH

SPECTRUM REPAIRS
A Better Deal from Micro-World

REPLACEMENT OF MIC, EAR & POWER SOCKET	7.95
POWER SUPPLIES (Spectrum/Plus/ZX81)	10.95
KEYBOARD – REPLACEMENT (Mat, Membrane & Plate)	12.95
ALL OTHER FAULTS	17.95
SINCLAIR-PLUS KEYBOARDS inc fitting	29.95
SINCLAIR-PLUS KEYBOARD AND REPAIR	45.00
16-48K UPGRADE (12 months Warranty)	25.95
ZX81 – REPAIRS	15.95
ZX – INTERFACE I – REPAIR	15.95
ZX – PRINTER – REPAIR	15.95
ZX – MICRODRIVE – REPAIR	15.95

- Prices fully inclusive of VAT & Return P&P
- 48hr turn round on most machines
- 3 months warranty on repairs
- Send SPECTRUM ONLY suitably packed clearly stating fault, your name & address, cheque or postal order to:

Micro-World Computers (YS)

25 Hill Top Road, Slaithwaite, Huddersfield HD7 5ES
Telephone: (Day) 0484-846117 (Evening) 0484-845587

Showroom:

1008/1010 Manchester Road, Linthwaite, Huddersfield HD7 5QQ
Open 9 to 5.30, 6 days

FOR RATES AND DETAILS ON ADVERTISING CALL DAVID 01-580 0504

45272	F1	B0	C9	3E	00	21	07	B2	=898
45280	77	CD	A0	00	11	FF	07	2A	=981
45288	09	B2	CD	2B	B0	CD	32	B0	=1042
45296	C9	2A	B8	B2	CD	4C	B0	E5	=1118
45304	2B	3E	05	77	E1	36	06	C9	=715
45312	CD	59	B0	E5	D1	21	1D	40	=1034
45320	ED	52	D4	D1	B0	C9	2A	B8	=1170
45328	B2	23	CD	B1	B0	C9	CD	3E	=1191
45336	B1	CD	75	B1	C9	CD	B9	B1	=1444
45344	CD	ED	B1	C9	2A	B8	B2	7C	=1175
45352	11	20	00	FE	4B	CA	36	B1	=808
45360	FE	50	CA	36	B1	C9	3E	1F	=1061
45368	95	08	11	20	07	C9	CD	24	=863
45376	B1	2A	B8	B2	A7	ED	52	CD	=1099
45384	B1	B0	CD	32	B0	06	07	CD	=934
45392	24	B1	2A	09	B2	A7	ED	52	=928
45400	11	00	B2	F5	2A	05	B2	19	=687
45408	7E	E1	77	CD	16	B0	10	E7	=1120
45416	CD	24	B1	2A	B8	B2	CD	2B	=897
45424	B0	CD	32	B0	C9	2A	B8	B2	=1039
45432	CD	4C	B0	E5	11	20	00	19	=760
45440	36	05	E1	36	06	C9	2A	B8	=598
45448	B2	11	3F	40	ED	52	D4	16	=875
45456	B1	C9	21	7F	50	ED	5B	B8	=957
45464	B2	ED	52	D4	D1	B1	C9	2A	=1158
45472	08	B2	7C	11	20	00	FE	4B	=688
45480	CA	B1	B1	FE	40	CA	B1	B1	=1430
45488	C9	7D	06	00	D8	11	20	07	=103A
45496	C9	CD	9F	B1	2A	B8	B2	19	=998
45504	CD	B1	B0	CD	32	B0	06	07	=954
45512	CD	9F	B1	2A	09	B2	19	11	=812
45520	0D	B2	E5	2A	05	B2	19	7E	=796
45528	E1	77	CD	16	B0	10	E9	CD	=1201
45536	9F	B1	2A	B8	B2	19	22	00	=637
45544	B2	CD	32	B0	C9	2A	B8	B2	=1041
45552	CD	4C	B0	E5	11	20	00	ED	=972
45560	52	36	05	E1	36	06	C9	7B	=750
45568	50	7D	50	6A	B8	00	00	01	=574
45576	00	18	4B	6A	50	9C	0F	FF	=894
45584	9C	BE	A2	E3	FF	11	00	00	=1007
45592	00	3E	0F	DE	FE	CB	47	00	=1032
45600	00	CA	00	B1	CB	4F	CA	75	=980
45608	B0	3E	0F	DE	FE	CB	47	00	=1238
45616	00	CA	92	B1	3E	0F	DE	FE	=1311
45624	CB	47	00	00	CA	B6	B1	C9	=988
45632	00	00	00	00	00	00	00	00	=0
45640	00	00	00	00	00	00	00	00	=0
45648	2A	FF	B1	22	01	B2	21	05	=725
45656	2A	FF	B1	22	01	B2	21	05	=492
45664	B2	ED	5B	05	B2	19	E5	2A	=985
45672	01	B2	3A	07	B2	FE	01	C2	=871
45680	76	B2	2B	CB	77	B2	23	D1	=1075
45688	1A	77	2A	01	B2	36	00	11	=437
45696	00	01	2A	01	B2	19	22	01	=282
45704	B2	21	05	B2	34	10	DD	CD	=870
45712	2A	01	B2	11	00	0B	CD	9A	=606
45720	B2	C9	A7	ED	52	22	FF	B1	=1331
45728	C9	2A	01	B2	11	FF	07	CD	=906
45736	9A	B2	C9	2A	FF	B1	CD	4C	=1208
45744	B0	36	B4	C9	21	03	B2	11	=666
45752	6B	B4	73	23	72	2A	63	BA	=872
45760	22	FF	B1	CD	CD	B2	2A	FF	=1351
45768	B1	22	63	B4	C9	21	07	B2	=909
45776	36	00	CD	50	B2	CD	5C	B2	=992
45784	CD	A1	B2	CD	50	B2	CD	AB	=1383
45792	B2	C9	21	03	B2	11	73	BA	=905
45800	73	23	72	2A	65	B4	22	FF	=876
45808	B1	CD	CD	B2	2A	FF	B1	22	=1272
45816	65	B4	CD	B2	21	03	B2	=1048	
45824	11	6B	B4	73	23	72	2A	63	=709
45832	B4	22	FF	B1	CD	16	B3	2A	=1094
45840	FF	B1	22	63	B4	C9	21	07	=986
45848	B2	36	01	CD	50	B2	CD	07	=993
45856	B2	CD	90	B2	CD	50	B2	CD	=1373
45864	AB	B2	C9	21	03	B2	11	73	=896
45872	B4	73	23	72	2A	65	B4	22	=801
45880	FF	B1	CD	16	B3	2A	FF	B1	=1312
45888	22	65	B4	CD	3D	FE	2A	FF	=1238
45896	B1	CD	4C	B0	36	02	C9	CD	=1096
45904	50	B2	06	08	CD	BA	B3	2A	=834
45912	01	B2	19	ED	5B	03	B2	E5	=942
45920	2A	05	B2	19	7E	E1	77	2A	=762
45928	01	B2	36	00	11	00	01	2A	=293
45936	01	B2	19	22	01	B2	21	05	=455
45944	B2	34	10	D8	CD	8A	B3	2A	=1026
45952	FF	B1	19	22	FF	B1	CD	50	=1208
45960	B2	C9	2A	FF	B1	7C	11	20	=1025
45968	00	FE	4B	CA	B1	FE	40	=1200	
45976	CA	B1	B1	C9	21	03	B2	11	=988
45984	B3	B4	73	23	72	2A	67	B4	=900
45992	22	FF	B1	CD	4F	B3	CD	46	=1204
46000	B3	2A	FF	B1	22	67	B4	C9	=1171
46008	21	03	B2	11	7B	B4	73	23	=684
46016	72	2A	69	B4	22	FF	B1	CD	=1112
46024	4F	B3	CD	46	B3	2A	FF	B1	=1186
46032	22	69	B4	CD	9C	B3	CD	50	=1134
46040	B2	06	08	CD	15	B4	2A	01	=641
46048	B2	A7	ED	52	ED	5B	03	B2	=1173
46056	E5	2A	05	B2	19	7E	E1	77	=949
46064	2A	01	B2	36	00	11	00	01	=293
46072	2A	01	B2	19	22	01	B2	21	=492
46080	05	B2	34	10	06	CD	15	B4	=871
46088	2A	FF	B1	A7	ED	52	22	FF	=1249
46096	B1	CD	50	B2	C9	2A	FF	B1	=1315
46104	7C	11	20	00	FE	4B	CA	36	=755
46112	B1	FE	50	CA	36	B1	C9	21	=1178
46120	03	B2	11	7B	B4	73	23	72	=765
46128	00	00	00	00	00	00	00	00	=793
46136	CD	D6	B3	CD	46	B3	2A	FF	=1349
46144	B1	22	69	B4	C3	47	B4	21	=975
46152	03	B2	11	83	B4	73	23	72	=773
46160	2A	67	B4	22	FF	B1	CD	06	=1210
46168	B3	CD	46	B3	2A	FF	B1	22	=1141
46176	67	B4	C9	AA	50	0A	40	7F	=935
46184	50	60	50	1B	3C	7E	FF	FF	=976
46192	FF	FF	FF	FF	FF	FF	FF	FF	=2040
46200	7E	3C	1B	3C	7E	FF	FF	FF	=1474
46208	FE	FC	F6	1F	3F	7F	FF	FF	=1485
46216	7F	3F	1F	00	00	00	00	00	=221
46224	00	00	00	00	00	00	00	00	=0
46232	00	00	00	00	00	00	00	00	=0
46240	2A	FF	B1	23	7E	FE	BE	C2	=1273
46248	B0	B4	21	4A	B8	36	01	C9	=903
46256	21	4A	B8	36	00	C9	3A	4A	=678
46264	B8	FE	01	CA	C1	B4	C3	12	=1227
46272	B5	CD	50	B2	CD	A0	B4	CD	=1394
46280	50	B2	06	08	ED	5B	05	B2	=783
46288	2A	33	B2	19	7E	2A	01	B2	=595
46296	23	77	ED	5B	05	B2	21	7C	=812
46304	B8	19	7E	2A	01	B2	77	11	=692
46312	00	01	2A	01	B2	19	22	01	=282
46320	B2	21	05	B2	34	10	DD	11	=692
46328	00	01	2A	01	B2	ED	52	FE	=603
46336	FF	77	11	FF	07	2A	01	B2	=874
46344	A7	ED	52	22	FF	B1	CD	50	=1237
46352	B2	C9	CD	50	B2	CD	A0	B4	=1387
46360	CD	50	B2	06	08	ED	5B	05	=810
46368	B2	23	77	B2	19	7E	2A	01	=595
46376	B2	23	77	B2	19	7E	2A	01	=735
46384	11	00	01	2A	01	B2	19	22	=698
46392	01	B2	21	05	B2	34	10	DD	=624
46400	3E	FF	11	00	01	2A	01	B2	=556
46408	A7	ED	52	77	11	FF	07	2A	=926
46416	01	B2	A7	ED	52	22	FF	B1	=1131
46424	CD	50	B2	C9	21	03	B2	11	=895
46432	62	B8	73	23	72	2A	4B	B8	=844
46440	22	FF	B1	CD	B6	B4	CD	7A	=1360
46448	B5	2A	FF	B1	22	4B	BB	C3	=1142
46456	F3	B9	2A	FF	B1	CD	4C	B0	=1359
46464	E5	2B	36	05	E1	36	03	C9	=814
46472	2A	01	B2	2K	7E	FE	BE	C2	=1028
46480	98	B5	21	4C	B8	36	01	C9	=882
46488	21	4C	B8	36	00	C9	3A	4A	=682
46496	B8	FE	01	CA	A9	B5	C3	E2	=1412
46504	B5	CD	50	B2	CD	B8	B5	CD	=1371
46512	50	B2	06	08	ED	5B	05	B2	=787
46520	2A	03	B2	19	7E	2A	01	B2	=595
46528	2B	77	ED	5B	05	B2	21	72	=820
46536	B8	19	7E	2A	01	B2	77	11	=692
46544	00	01	2A	01	B2	19	CD	7A	=574
46552	B0	10	D8	00	00	C3	B8	B5	=927
46560	00	00	00	00	00	00	00	00	=985
46568	CD	50	B2	06	08	ED	5B	05	=810

47744	C9	2A	65	B4	ED	5B	57	BB	=1126
47752	A7	ED	52	D2	2B	B3	C3	E2	=1339
47760	B2	2A	00	B2	7D	E6	10	FE	=1034
47768	10	11	00	00	C2	A2	BA	11	=592
47776	10	00	7D	E6	F0	6F	A7	ED	=1126
47784	52	E5	22	55	BB	D1	2A	69	=973
47792	B4	A7	ED	52	C2	E5	BA	2A	=1317
47800	69	B4	23	22	4B	BB	2A	67	=755
47808	B4	2B	22	4B	BB	21	51	BB	=812
47816	36	01	21	4A	BB	36	00	21	=433
47824	40	BB	36	00	CD	01	BA	CD	=911
47832	E3	B9	21	4A	BB	36	00	21	=790
47840	40	BB	36	00	CD	2A	55	BB	=829
47848	ED	5B	69	A7	ED	52	D2	=1309	
47856	BB	B3	C3	27	B4	3A	51	BB	=1103
47864	FE	01	CA	03	BB	CD	91	BA	=1183
47872	C3	1E	BB	CD	01	BA	3A	53	=945
47880	BB	FE	01	CA	76	C3	3A	51	=1096
47888	BB	FE	01	CA	76	C3	3A	51	=1199
47896	BB	FE	01	CA	76	C3	3A	51	=1092
47904	BB	FE	01	CA	2F	BB	CD	3D	=1144
47912	BA	CD	F9	BC	C3	BB	CD	=1599	
47920	BA	CD	F9	BC	C3	3A	40	BB	=1221
47928	FE	01	CA	03	BB	C3	AS	C3	=1329
47936	CD	F9	BC	C3	BB	C3	00	00	=1208
47944	C9	00	00	00	00	01	00	6A	=308
47952	57	01	00	01	00	60	50	0A	=275
47960	40	01	00	60	00	00	00	00	=173
47968	00	00	00	00	00	00	00	00	=0
47976	00	00	2A	46	BB	22	4F	BB	=596
47984	CD	AD	BB	2A	4B	BB	22	4F	=960
47992	BB	CD	AD	BB	2A	4B	B2	22	=1001
48000	4F	BB	CD	AD	BB	2A	4B	B2	=1107
48008	22	4F	BB	CD	AD	BB	2A	4B	=959
48016	BB	22	4F	BB	CD	AD	BB	2A	=1075
48024	4B	BB	CD	F0	BB	2A	4B	BB	=1184
48032	CD	F0	BB	2A	4B	B2	CD	F0	=1308
48040	BB	2A	4B	BB	CD	F0	BB	2A	=1153
48048	4A	BB	CD	F0	BB	2A	4B	BB	=1211
48056	CD	F6	BB	2A	4B	BB	2A	4B	=1414
48064	BB	2A	4B	BB	CD	F6	BB	2A	=1190
48072	63	BA	CD	F6	BB	2A	4B	BB	=1244
48080	CD	F0	BB	2A	4B	BB	2A	4B	=1402
48088	BB	2A	4B	BB	CD	F0	BB	2A	=1184
48096	63	BA	CD	F0	BB	21	40	BB	=1208
48104	36	00	21	51	BB	36	00	C9	=610
48112	CD	40	BB	36	00	C9	22	4F	=830
48120	BB	06	08	2A	4F	BB	36	00	=563
48128	11	00	01	2A	4F	BB	19	22	=385
48136	4F	BB	10	EF	C9	21	E0	4B	=1051
48144	22	4F	BB	10	EF	C9	21	FF	=816
48152	BA	21	0F	40	22	65	BA	21	=640
48160	AF	50	22	63	BA	21	6A	50	=787
48168	22	0B	B2	C9	21	4C	BB	36	=771
48176	00	21	4A	BB	36	00	21	4E	=456
48184	BB	36	00	21	50	BB	36	00	=589
48192	21	40	BB	36	00	21	51	BB	=652
48200	36	00	21	53	BB	36	00	C9	=612
48208	21	5E	BB	35	C9	21	5E	BB	=882
48216	36	03	21	15	B2	36	00	21	=376
48224	17	B2	36	00	C9	21	05	B2	=672
48232	36	00	2A	0B	B2	22	4F	BB	=585
48240	06	07	ED	5B	05	B2	21	00	=570
48248	B2	19	7E	2A	4F	BB	77	11	=773
48256	00	01	2A	4F	BB	19	22	4F	=447
48264	BB	21	05	B2	3A	10	E3	21	=731
48272	05	B2	36	00	2A	0B	B2	CD	=673
48280	4C	B0	36	06	C9	3A	59	BB	=847
48288	FE	01	C2	AB	BC	21	5B	BB	=1119
48296	36	6C	C9	3A	59	BB	FE	02	=953
48304	C2	B9	BC	21	5B	BB	36	0C	=1072
48312	C9	3A	59	BB	FE	03	C2	C7	=1185
48320	BC	21	5B	BB	36	72	C9	21	=901
48328	5B	BB	36	0C	C9	3A	59	BB	=959
48336	FE	04	C2	DA	BC	21	59	BB	=1167
48344	36	00	21	59	BB	3A	CD	07	=627
48352	BD	21	17	B2	36	00	CD	6A	=788
48360	BB	CD	30	B9	CD	DE	BB	CD	=1441
48368	2D	BC	CD	00	BC	CD	9D	BC	=1184
48376	C9	ED	5B	17	B2	2A	5B	BB	=1050
48384	A7	ED	52	CC	CD	BC	C9	3A	=1342
48392	59	BB	FE	01	CA	3A	BF	FE	=1230
48400	02	CA	53	BF	FE	03	CA	7B	=1057
48408	BF	FE	04	CA	1B	BF	C9	CD	=1272
48416	6A	BB	CD	07	BD	CD	2C	BC	=1131
48424	CD	00	BC	CD	50	BC	21	17	=935
48432	BD	36	00	CD	65	BC	C9	00	=927
48440	00	00	00	06	07	ED	5B	05	=346
48448	B2	21	72	BB	19	7E	2A	97	=853
48456	BF	77	21	05	B2	3A	11	00	=595
48464	01	2A	97	BF	19	22	97	BF	=786
48472	10	E3	C9	2A	99	BF	22	97	=1015
48480	BF	21	05	B2	36	00	C9	22	=696
48488	99	BF	CD	5B	BD	CD	3B	BD	=1282
48496	C9	CD	5B	BD	CD	3B	BD	21	=1172
48504	99	BF	34	C9	22	99	BF	06	=981
48512	0F	C5	CD	71	BD	C1	10	F9	=1177
48520	C9	21	8B	40	CD	7C	BD	21	=985
48528	4B	50	CD	7C	BD	CD	22	99	=1058
48536	BF	06	0B	C5	CD	71	BD	C1	=1105
48544	10	F9	C9	21	CA	CD	96	CD	=1120
48552	BD	21	C9	21	CA	CD	96	BD	=1057
48560	22	99	BF	06	07	C5	CD	71	=906
48568	BD	C1	10	F9	C9	21	0C	4B	=965
48576	CD	BD	21	0C	4B	CD	BD	00	=1260
48584	BD	C9	CD	5B	BD	CD	3B	BD	=1328
48592	2A	99	BF	11	20	00	19	22	=494
48600	99	BF	C9	06	05	C5	CD	71	=1071
48608	BD	C1	10	F9	C9	06	03	C5	=1054
48616	CD	CA	BD	C1	10	F9	C9	06	=1261
48624	10	C5	CD	71	BD	C1	10	F9	=1178
48632	C9	06	06	C5	CD	CA	BD	C1	=1199
48640	10	F9	C9	21	63	40	22	99	=849
48648	BF	CD	DB	BD	21	E3	40	22	=1162
48656	99	BF	CD	DB	BD	21	C3	4B	=1257
48664	22	99	BF	CD	DB	BD	21	43	=1091
48672	50	22	99	BF	CD	DB	BD	21	=1104
48680	76	40	22	99	BF	CD	DB	BD	=1175
48688	21	F8	40	22	99	BF	CD	DB	=1147
48696	BD	21	DB	4B	22	99	BF	CD	=1093
48704	DB	BD	21	5B	50	22	99	BF	=987
48712	CD	DB	BD	21	A8	40	22	99	=1065
48720	BF	CD	EF	BD	21	08	50	22	=979
48728	99	BF	CD	EF	BD	21	05	4B	=1037
48736	22	99	BF	CD	F9	BD	21	1A	=1080
48744	4B	22	99	BF	CD	F9	BD	21	=1126
48752	83	40	22	99	BF	CD	E5	BD	=1196
48760	21	87	40	22	99	BF	CD	E5	=1044
48768	BD	21	9B	40	22	99	BF	CD	=1021
48776	E5	BD	21	9C	40	22	99	BF	=1049
48784	CD	E5	BD	C9	06	09	C5	CD	=1241
48792	71	BD	C1	10	F9	C9	06	03	=970
48800	C5	CD	CA	BD	C1	10	F9	C9	=1452
48808	71	E3	40	22	99	BF	CD	94	=1055
48816	BE	21	F1	40	22	99	BF	CD	=1111
48824	94	BE	21	C3	4B	22	99	BF	=1018
48832	CD	94	BE	21	8C	4B	22	99	=1259
48840	4B	22	99	BF	CD	DB	BD	21	=1096
48848	6B	4B	22	99	BF	CD	9E	BE	=1107
48856	21	69	4B	22	99	BF	CD	9E	=951
48864	BE	21	73	4B	22	99	BF	CD	=993
48872	9E	BE	21	74	4B	22	99	BF	=947
48880	CD	9E	BE	21	06	50	22	99	=859
48888	BF	CD	9E	BE	21	07	50	22	=898
48896	99	BF	CD	9E	BE	21	15	50	=1031
48904	22	99	BF	CD	9E	BE	21	16	=986
48912	50	22	99	BF	CD	9E	BE	C9	=1212
48920	DD	21	BA	BF	CD	00	06	C5	=729
48928	C5	DD	6E	00	DD	23	DD	66	=1107
48936	00	CD	67	BD	DD	23	DD	00	=753
48944	C1	10	ED	C9	DD	21	40	BF	=1252
48952	00	00	06	0C	C5	DD	6E	00	=546
48960	DD	23	DD	66	00	CD	67	BD	=1076
48968	DD	23	DD	00	C1	10	ED	CD	=907
48976	03	BE	C9	DD	21	75	00	00	=957
48984	00	06	4A	C5	DD	6E	00	DD	=829
48992	23	DD	66	00	CD	67	BD	DD	=1076
49000	23	DD	00	C1	10	ED	CD	BB	=823
49008	DD	CD	A3	BD	DD	23	DD	00	=1530
49016	DD	21	0B	C1	00	00	06	32	=514
49024	C5	DD	6E	00	DD	23	DD	66	=1107
49032	00	CD	67	BD	DD	23	DD	00	=753
49040	C1	10	ED	CD	BB				

RELAX!

**This issue's programs
are already on tape...**

Save your time, energy and sanity when you load direct from **Digitape** cassette, this month's program listings (as marked).

Create your own collection of games and utilities which will prove invaluable for years to come and will look superb when added to your own library.

This unique service, provided by **Digitape** in conjunction with **YOUR SPECTRUM**, is to increase the enjoyment for the readers. This service will be available every month.

Back issues, from July 1985 on, will be available on request.

Telephone Orders: ACCESS
CARD Holders ring
(0792) 799193



DIGITAPE
Please rush me my official copy of **YOUR SPECTRUM's Digitape** cassette issue No. (see front cover). I have enclosed a cheque/P.O. for £2.99 (£3.99 for Overseas)
OR please debit my ACCESS Card No. _____

Signed _____ Name _____
Address _____

Code _____
Send to: Digitape, Freeport,
Swansea SA5 5ZZ
(no stamp required)

48K SPECTRUM UTILITIES

KWIKLOAD allows cassette software to be loaded **THREE TIMES** the normal speed on a standard cassette recorder. The professionally written manual explains how to convert most commercially written Basic and Machine Code programs.

Knightlore loads in 115 secs
Jet Set Willy loads in 95 secs
Football Manager loads in 90 secs
Lunar Jetman loads in 105 secs
Jetpack loads in 58 secs

"A bit like upgrading your C5 to a 3.5 litre car"

ZX Computing

"I'm very satisfied" — N. Mellet — France

"Thank you for the delivery of your excellent Kwikload"

A. Cupif — Switzerland

Only £4.95 including a free tape header reader

VARILOAD is a new product written at the request of our customers. Several KWIKLOAD users asked whether loading speeds in excess of 4500 baud could be achieved. As a result VARILOAD was written to allow KWIKLOAD to operate at any of 8 different speeds between 2000-6000 baud. Depending on the reliability of your cassette recorder you can now tailor KWIKLOAD to your exact requirements.

NOTE — VARILOAD works in conjunction with KWIKLOAD. Only £3.50.

KWIKLOAD AND VARILOAD
only £7.50

Overseas customers please
add 55p postage.

Send SAE for details of our
Spectrum Utility product range.

For sale Software (15)
22 Gladstone Road
Hockley Essex
SS5 4BT
Tel: 0792 201208

THETFORD MICROS

SPECIALIST IN SPECTRUM REPAIRS

21 Guildhall Street,
Thetford,
Norfolk,
Tel: (0842) 61645

Service Department
Unit 4, Leyland Close,
Thetford, Norfolk,
Tel: (0842) 65897

Why wait weeks to get your Spectrum repaired

We at Thetford Micros (Service Dept) have just put into operation a new fully equipped workshop to allow us to keep up our 24 Hours "Guaranteed" repair service on your Sinclair Spectrum computers. We have fully trained staff and our workmanship and repair work is fully warranted to give you the confidence that your micro is in the safest hands. Any first time repairs will be £16.00 + VAT + £2.00 postage and package = total £20.40 for any repair on your computer. We also specialise in the repair of the Spectrum microdrive, Interface I, II and ZX printers at the same standard charge. Payment may be made by cheque, Barclaycard, Access, American Express, or Postal Order. So all you have to do is post your faulty Spectrum to us along with payment and we will do the rest, your repaired Spectrum will be back in the post within 24 hours (we never sleep!) and depending on the post office it will be back with you within 5-6 days. We have already undertaken repairs from all over England and the continent.

We also undertake repair work on Acorn, Commodore, Amstrad, Texas, Dragon etc., at the lowest of prices.

Any problems with your micro phone Pete on the above telephone numbers — I'll be only too pleased to assist.

*We also produce our own Spectrum "48K Upgrade Kits" complete with fitting instructions.
£24.00 (VAT+P&P) inclusive.*

QL repairs £35.00 + VAT + P&P £2.00. Microdrive £39.00 + VAT + P&P £2.00

Switchable UHF — composite video can be fitted to your Spectrum for only £14.00 + VAT + £2.00 P&P.

Trade enquiries welcome

» INPUT OUTPUT

THE FREE YS CLASSIFIED AD SERVICE

Are you on the hunt for hardware, screaming for software, or pining for a pen pal? Whatever your message, you can leave it here for free! Just fill in the form below.

SOFTWARE

■ Will swap *Wizard's Warrior*, *I'm In Shock*, *Paratroopers*, *Horace Goes Skiing*, *Survival*, *Make A Chip* for any good Speccy software. Tel. Rumney, Cardiff 791 550 and ask for David.

■ Lots of software to swap. Many recent titles including *Nightshade*, *On The Run*, etc. Send your list for mine and an s.a.c. Write to D Parker, 94 Willow Lane, North Featherstone, Pontefract, West Yorks WF7 6BG.

■ Will swap *Technician Ted* and *Manic Miner* for *Spy Hunter*. Tel. (0672) 40170 and ask for Christopher.

■ I have *Monty is Innocent*, *Pitfall II*, *Hunchback II*, *Eye of Bain*, *Finders Keepers* if you are interested. Direct swap of *Survival* for *Bruce Lee*. Tel. Basildon 285875 and ask for Mark.

■ I'll swap *Lords of Midnight* for *Doomdark's Revenge*, and I'll throw in *Spawn of Evil*. Tel. Hemel Hempstead 62380 and ask for Rob.

■ Swap *JSW II*, *Shadowfire*, *911TS*, *Gyrone*, *Alien 8*, *Knighthore* and many more. Write to Saqi Shechter, 26 Golomb, Haifa, Israel 33393.

■ Swap my *Lords of Midnight*, *Abersoft* *Forth* for your *Snowball* and *Masterfile*. Also *WTHA Sea*, *Brain Damage*, *Timegate* for either *Lunar Jetman*, *Zaxxon* or *Moon Cresta*. Write to C D Newell, 6 Cooke Street, Hazel Grove, Stockport, Cheshire SK7 4EG.

■ Swap any of *Gift From The Gods*, *Doomdark's Revenge*, *Rocky*, *Gremlins* for *Dun Darach*, *Spy v Spy*, *Herbert's Dummy Run*, *Frankie* etc. Tel. 01-892 5337 and ask for Paul.

■ I have *Warlock of Firetop Mountain* and will swap it for any other game, preferably an Ultimate game. Please write to Guy Walters, Egham's Farm, Knotty Green, Beaconsfield, Bucks HP9 1XL.

■ Games to swap including *Frankie*, *Dynamite Dan*, *Way of The Exploding Fist* and *On The Run*. Tel. 061-860 5803 and ask for Nick.

■ Sinclair Logo swap for *Bliss*. Tel. (07605) 402 and ask for A Pearson.

■ Swap *Shadowfire*, *Baseball*, *Dark Star*, *Match Point*, *JSW*, *Softaid* and more for *Out Of The Shadows* or *Cauldron* or *Spy Hunter* or *Highway Encounter*. Tel. Watford 31165 and ask for R Bennett.

■ Will swap *Jasper*, *Specupede*, *Ah Diddums*, *Survival* and more for *The Quill* and *The Illustrator* or *Currah MicroSpeech* unit. Tel. (0749) 813527 and ask for Andy.

■ Swap *Sherlock for The Artist*, *Also Strangeloop*, *Jack and the Beanstalk*, *Mafia Contract* and more. Tel. (0786) 78609 and ask for Robert.

■ Swap *Arnhem* and *Bulge* for *Stonkers* or other war games. Tel. (734) 27333 and ask for Mike.

■ I have lots of software to swap. Send an s.a.c. for your free booklet of what I've got. Write to K Jarman, 18 Poplar Close, Biggleswade, Beds. SG18 0EW.

■ Swap your software with a Dutch Spectrum user! Send your list to Robert Hulsebos, Bremstraat 14, 7391HX, Twello, Holland and you will always get a reaction!

■ Many games to swap including *Raid Over Moscow*, *War of the Worlds*, and *Finders Keepers*. Send your list for mine. Write to Gary Brighton, 111 Studlands Park, Newmarket, Suffolk CB8 7AP.

■ Anyone interested in swapping Speccy software for Amstrad software? If so, please write to Glynne McDonald, 64 Perth Crescent, Mount Blow, Clydebank, Dunbartonshire G81 4QQ.

■ Will swap issues of *YS* for your software. I have issues 6, 9, 10, 11 and will swap one for any of *Skoold Daze*, *Baseball*, *The Biz*, *JSW* or any racing horse predictor. Write to G Jordan, 88 Inchfad Drive, Drumchapel, Glasgow G15 8DD.

■ Swap *Nightshade* for *Alien 9* or *Tapper*. Tel. (0904) 51948 and ask for James.

■ Many top games to swap. Send your list with an s.a.c. and I'll send you mine. Write to Melanie Morris, 461 Bellhouse Road, Sheffield, S. Yorks.

■ Swap *River Raid* for any of the following: *Knighthore*, *Skoold Daze*, *Sabrewolf*, *Ghostbusters*, *Alien 8*, *Everyone's A Wally*, *Herbert's Dummy Run* or *Bruce Lee*. Write to Lee Jennings, 36 Curzon Road, Stainforth, Doncaster, South Yorks DN7 5DZ.

■ Swap *Underworld* for *Knighthore*, *Fighter Pilot* for *Psion's Flight Simulation*, *Everyone's A Wally* for *Pjaramara*. Tel. (09285) 74282 and ask for Lee Derbyshire.

■ Will swap *White Lightning* for 2 of your games. Please send list to Paul Finch, 1 Penfilia Road, Manselton, Swansea, SA5 9HX.

■ I have *The Quill* and manual, will swap for *Dukes of Hazard*, *Lode Runner* or *Project Future*. Write to Stephen Butler, 4 Waterloo, Pembroke Dock, Dyfed, S. Wales SA72 6UA.

■ Swap *Ghostbusters*, *Shadowfire*, *OCP Editor/Assembler*, *Pssst*, *Cosmic Cruiser* and *Ground Attack* for *Starion*, *Spy Hunter*, *JS MegaBasic*, *Dun Darach* or others. Tel. (04892) 4943 and ask for Nigel.

■ Have you got *Starion*? If so, will you swap the *Guide To Playing The Hobbit* and *More Games For Your ZX Spectrum* as new. Tel. Ireland 052-23372 and ask for Darryl.

■ Lots of new software to swap, including *Spy v Spy*, *Shadowfire*, *Dun Darach*, *The Artist*. Send s.a.c. for list. Write to Chris Jenkins, 48 Gladys Street, Aberdare, Mid Glamorgan, S. Wales.

■ I want *YS MegaBasic*, and I've got loads of great games to swap including *Bruce Lee*, *JSW II*, *Brian Bloodaxe*. Tel. (0279) 28303 and ask for Michael.

■ Will swap *The Hobbit*, *Valhalla* and *JSW* for *Quill* Series C and *The Illustrator*. Write to Scott Young, 2 Drums Ave, Paisley, Scotland PA3 1PL.

■ Have *Knighthore*, *Frankie*, *Boulderdash* and other top games to swap for a MicroSpeech or software. Send your list for mine to David Thorpe, 23 Inkerman Terrace, Whitehaven, Cumbria CA28 9AF.

■ Swap three games for *Alien 8* or two for *Skoold Daze*. Choose from *Great Space Race*, *Bugalo*, *Traxx*, *Alcatraz*, *Harry* and more. Tel. Sandbach 60446 and ask for Terence.

■ Over 250 titles to swap for a modem or other hardware or software. Send lists to L Kroese, P. Oldebarneuld Str 86, 1052 KG Amsterdam, Holland.

■ Every back issue of *Your Spectrum* on offer! What is your price? Let me know what you'll pay for one or more issues. Tel. Osted 6175 and ask for S F Clark.

■ I'll swap *Make A Chip*, *Survival* and *Horace Goes Skiing* for *Dambusters* or *Skoold Daze* and issues 14 and 15 of *YS*. Write to David Bobble, 34 Monteith Gardens, Clarkston, Glasgow, Scotland G76 8NU.

■ Will swap *Zaxxon*, *Pedro*, *Grid Runner* and *Zip Zap* for *Nodes of Yesod* or *Daley's Superstest*. Tel. 01-886 4954 and ask for Vazal.

■ Swap *HURG*, *Melbourne Draw* and *BMX Racers* for a joystick and interface. Will also swap *Tir Na Nog* for *Alien 8*. Write to Alex James, 7 Priory Street, Cambridge, Cambs CB4 3QH.

■ I have *White Lightning*, *HURG*, *Abersoft* *Forth* and *Melbourne Draw* to swap. Please write to P K Smith, 2 Faircroft Avenue, Beechdale Road, Nottingham, NG8 3AL.

■ Lots of software to swap, please send your list for mine. Also, has anybody got a spare *Lode Runner* codesheet? Please write to D Wheatley, 20 Tudhoe Moor Estate, Spennymoor, Co. Durham DL16 6HA.

■ I have *Lunar Jetman*, *Astro Blaster*, *Night Flite II*, *Maze Death Race*, *MegaPede* and *Horace Goes Skiing*. Wanted — *Currah MicroSpeech*. Write to Colin Rice, 75A, Corbets Tey Road, Upminster, Essex.

■ Swap *Fighter Pilot*, *Lords of Midnight*, *YS MegaBasic*, *Monopoly*, *Scrabble*, *Daley's Decathlon*, *Beach Head*, *Zoom*, *Monitor* and much more, for software or hardware. Write to Chreag Anderson, Harland House, Welbeck College, Worksop, Notts. S80 3LN.

■ I have many well-known titles to swap. Send your list for mine please. Write to Magnus Ramage, 16 Claremont Gardens, Milingavie, Glasgow, Scotland G62 6DG.

■ Will swap six games, *Scrabble*, *Horace Goes Skiing*, *Chess*, *Chequered Flag*, *Survival* and *Make A Chip* for a cricket game. Please write to Tejram Dyal, 43 Nigel Road, Peckham, London SE15 4NP.

■ Will swap *White Lightning*, *Zaxxon* and *Softaid* for *Spy Hunter*. Two of these for *Orc Attack* or *Dukes of Hazard*. Tel. (0625) 22559 and ask for Karl Sheridan.

■ I have over 600 titles to swap for other software, or perhaps an interface and software. Please write to Jose Suarez Marquez, C/Vazquez Varela 19-3-B, Vigo, Spain.

■ Swap *Melbourne House Machine Code* *Guide for Chequered Flag*, *Pole Position* or *Tir Na Nog*. Write to Robin Gray, 53 King's Road, Beith, Ayrshire.

■ Will swap any two of *Hungry Horace*, *Horace and the Spiders*, *Embassy Assault*, *VU-3D* or *Chess for The Hobbit*. Tel. (06473) 3594 and ask for Lucien.

■ Spectrum software including *Nightshade*, *Nodes of Yesod*. Over 50 titles altogether. Will sell together or separate. Tel. (0522) 690330 and ask for Ian.

■ Logo wanted. Will swap *Chess*, *Quadracube*, *Make A Chip*, *Chess Tutor*, *Valhalla* and *VU-3D*. Tel. Luton 21122 ext. 8308 and ask for Paul Rex.

■ Swap 3 or 4 of *Gnasher*, *Chiller*, *Bullseye*, *Wizard's Warrior*, *Action Biker* or *BMX* for any decent game. Tel. Uttroter 3674 and ask for Tim.

■ Software to swap. Send your list and an s.a.c. to Matthew Platts, 33 The Tartars, Sherston, Malmesbury, Wilts SN16 0NT.

HARDWARE

■ Currah MicroSpeech £19, Currah MicroSlot £4, Microdrive wallet — holds four drives. 50p each. Tel. (0582) 597 000 and ask for Stephen.

■ Swap Tandy Chess Computer (cost over £60) for quality software or hardware. What've you got? Tel. (04215) 63618 for more info. Ask for Tony.

■ Dk'tronics Lightpen, original box and instructions. Good condition. Will sell for £13. Tel. (0672) 41070 and ask for Chris after 4 pm.

■ ZX Spectrum for sale, Currah MicroSpeech, Protek Joystick Interface, over £230 of software and magazines. Many top games. Tel. (0900) 825 123 and ask for Richard.

■ Voice Recognition Unit by Orion Data Ltd. Complete with mike. As new, boxed, cost £49.95. A bargain at £27 on. Tel. (0235) 834589 and ask for Mr Samler.

■ Sinclair printer paper — four rolls for sale, £7.50. Please write to Alexander Black, 4 Rockburn Drive, Clarkston, Glasgow G76 7PE.

■ Spectrum rubber keyboard for sale. Hardly used. Will sell at bargain price of £9. Tel. Hull 650 903 (after 5 pm) and ask for James.

■ 48K Spectrum, Lo-profile keyboard, cassette recorder, 30+ games, including *Frank Bruno's Boxing*, *March Day*, *Technician Ted*. Cost £550+, will sell for £200. Tel. 021-459 4993 and ask for Gary.

■ 48K ZX Spectrum, Interface 1, Microdrive, Ram Turbo interface, Microdrive and cartridges, Currah MicroSpeech, £250+ worth of software. Tel. 051-608 1330 and ask for Ian.

■ Competition! First person to send me a free ZX or Alphacom printer will win a cheque for £15. Tel. (0642) 314096 and ask for Pete.

■ Atari VCS with library of 22 cartridges, including *Pacman*, *Frogger*, *Missile Command*, *Sword Quest* and *Donkey Kong* plus two joysticks and paddle controls. A mere £70 please! Write to N Buxton, 20 Junction Road, Andover, Hants.

■ 48K Oric 1 plus manual, all leads and software including *Chopper*, *Ultra*, *Hobbit* and *Donkey Kong* £85 on. Tel. (0277) 227 921, after 6pm, and ask for Christopher.

■ Dk'tronics Light Pen, 5 months old. Still under guarantee. Will sell for £10. Tel. Larkhall 885407, after 4 pm and ask for Mark.

■ Alphacom printer for sale, £35. ZX printer £20. Interface 1, £30. Prism VTX modem, £35. All prices include p&p. Tel. 031-556 3831 and ask for Alex.

■ Mirage Microdrive £30, Interface 1 with RS232 printer cable £35. Both 'as new' and under guarantee. Tel. 041-959 6125 and ask for Gregor.

■ Will swap Currah MicroSpeech, *Knighthore* and *Centi-bug* for a ZX printer. Also want *The Artist*. Please tel. Long Eaton 873 0775 after 5 pm and ask for D Goddall.

■ Spectrum 48K, 6 months old and hardly used. Also many recent games to swap. Tel. (03744) 69458 and ask for Dave.

■ Currah MicroSpeech and Trojan Light Pen for sale. £20 for both. Also 400+ software titles to swap. Send your list for mine to Geoffrey Inns, 26 Bowyer Close, Basingstoke, Hants RG21 1UZ.

■ Spectrum 48K for sale, also cassette recorder and joystick. Also, over £100 worth of software to swap. Tel. (0292) 79419 and ask for J Adams.

■ Cheetah 32K Rampack as new, only £19.99. Tel. Great Missenden 4345 and ask for W Morris.

■ 48K Spectrum+, Interface 1, Microdrive and a branded new Seikosha GP50S printer. Software including *Decathlon*, *JSW II*, *Hypersports* and *Tasword II*. Bargain at £290. Tel. Stow-on-the-Wold 31965 and ask for Tony.

■ Transform keyboard plus buffer £30, Microdrive £20, Sinclair RS232 cable £5, Ness Load/Save switch and Beep booster £3. Tel. (0706) 227672 and ask for J Ormerod.

■ 48K Spectrum, Dk'tronics keyboard, Downsway interface, Quicksheet II, joystick, 22 pieces of software and books. A bargain at £100! Tel. (020622) 2168 and ask for Kev.

■ Cheetah 32K rampack for £15 or *The Quill*/Light Pen. Will consider another piece of hardware instead. Tel. (0933) 675 079 and ask for Brian.

■ Spectrum Dk'tronics keyboard, Interface 1, 11 cartridges, Kempston joystick and interface, cassette recorder, books, magazines, software, faulty Alphacom printer thrown in! Bargain at £250. Tel. 061-370 6739.

■ 48K Speccy, tape recorder, joystick, interface and games including *Manic Miner*, *Penetrator* and *Caveland*. Bargain at £150 on. Tel. 021-777 1592 and ask for Greg.

BOOK YOUR FREE AD HERE

I'd like you to insert the following advertisement in the next available edition of INPUT/OUTPUT.

Please enter it under the following category:

☐ HARDWARE ☐ SOFTWARE ☐ WANTED
☐ MESSAGES ☐ CLUBS & EVENTS ☐ PEN PAL

Address this coupon to: INPUT/OUTPUT, *Your Spectrum*, 14 Rathbone Place, London W1P 1DE.

If you don't want to mutilate your issue, send a photocopy instead!

Name

Address

Postcode

»INPUT'OUTPUT

■ 48K Spectrum+, cassette recorder, games, books and mags. £200 ono. Please write to Geraint Aubrey, 38 Mayflower Drive, Marford, Clywd, Wales, LL12 8LD.

WANTED

■ Wanted, *Art Studio or The Artist*. Would swap *School Daze*, *Finders Keepers*, *Mozzies*, *Zig-Zag and Jumbly*. Please write to Christopher Martin, 14 Langham Dene, Kenley, Surrey, CA2 5RX.

■ Assembler wanted! Either Hisoft's *Devpac* J, or the Picturesque Assembler/Monitor. Write to Andrew Cunningham, 20 The Chanornry, Old Aberdeen, Aberdeen AB2 1RP.

■ Wanted, a Currah MicroSpeech. Will buy or swap for software, including *Blockbusters*, *Finders Keepers*, *Scrabble*, etc. Tel. (0746) 3182 and ask for Gregor.

■ Hints, POKES and cracker's advice for games like *Tir Na Nog*, *Doomdark's Revenge*, *Avalon*, *Shadowfire* and *Alien 8*. I'll answer all letters. I'm a 22 year old loony Speccy fan. Write to Frank Reeders, Pr Margrietstrasse 9, 4797 HW Willemstad, Netherlands.

■ Wanted — an assembler, Pascal, C, Forth, Lisp, Micro — Prolog, any utility program. Can offer *Ghosts*, *TLL*, *View To A Kill*, *Chequered Flag*, *Flight Simulation* and *Make A Chip*, or cash. Tel. (0616) 520051 and ask for D Hirani.

■ Wanted — software swap lists for mine. Write to Diane Harper, 16 Badgeney Road, March, Cambs PE15 9PA.

■ Wanted, *Go To Hell* (it's nothing personal?) Will swap *Way Of The Exploding Fist*. Tel. Tenterden 3094 and ask for Fredrik.

■ Wanted, 2000AD back issues 1-309. I'm offering 40 Refractor Telescope, 1-17 YS, 1-12 Insight, Data Car, and *Avalon*. Write to Michael Sanderson, 27 Newholme Avenue, Haltwhistle, Northumberland, NE49 9ET.

■ Wanted, a Dattel sound sampler. Will swap a VTX5000 modem and software. Tel. 051-928 4364 and ask for Andy.

■ Wanted, 32K rampack and a book to teach machine code. Let me know the price and send it to Kevin Cusack, O'Deas Road, Kilrush, Co. Clare, Ireland.

■ Wanted! *Moon Cresta* urgently! Will swap for *Grand National*, and *Chequered Flag* or *Travel with Trashman* and *Kentilla*. For further details Tel. (0782) 625911 and ask for Mark.

■ Interface 1 wanted. Will swap for £40 worth of software including *Softaid*, *Pole Position*, *Eskimo Eddie*, *Cauldron* and *TLP*. Tel. (0183) 848468 and ask for Andrew.

■ Wanted, *Rocky*, *Nodes of Yesod*, *Herbert's Dummy Run*, *Shadowfire*, *Dambusters*, *Frankie* and other recent games. Will swap other recent games or cash. Tel. Ewell, Surrey 393 3920 and ask for Alistair.

■ Wanted, ZX printer or better. Will pay up to £25. Tel. (0743) 75404 and ask for Richard.

■ I want your old software. Will pay a good price. I also want a ZX printer and Saga keyboard. Write to Anthony Brown, 49 Primate Road, Plains Farm, Sunderland, SR3 1RP.

■ Issue 7 of YS please. Will pay a good price. Write to MW Parry, 34 Milbrook Drive, Old Hall Estate, Kirby L32 1TF.

■ Wanted YS issue 4. Will pay a reasonable price. Write to Manuel Freire, Avenida Sanchez Arjona 39-B, Sevilla, Spain 41010.

■ Wanted, *Toukenkhamby* Micromania. Please write to William Hepburn, 8 Malvaig Lane, Blantyre, Glasgow G72 0RS.

■ Wanted issue 6 of *Your Speccy*. I'll pay up to £5. Tel. (0638) 664329 after 6 pm and ask for Gary.

■ Circuit diagram for an issue 4 Speccy required. Also a circuit or construction details for a centronics interface. Send details to B T Taylor, 61B Solent Road, Drayton, Portsmouth PO6 1HJ.

■ Currah MicroSpeech wanted. Will swap for any three games including *Sherlock*, *Avalon*, *The Hobbit*, *Caterpillar* and more. Tel. Appleby Bridge 2910 and ask for Mick.

■ Wanted, a brand new CBM64 and disk drives. Will swap for *Horace Goes Skiing*. Write to Kevin Dominy, 11 Kitchener Crescent, Waterloo Estate, Poole, Dorset, BH17 7HU. (Seems reasonable. Ed.)

PENPALS

■ I would like some pen pals to swap games hints and tips. I'm French. Send your list for mine to Arnod JF, 13 Place du Forum 57000, Metz, France.

■ You must like me! I want a pen pal to swap games, hints and tips. I have over 200 games to swap. Send an a/c to Wayne Griffin, 27 Melling Road, Aintree, Liverpool L9 0LE.

■ My name is Rob Unwin. I'm very square and would like a 12 year old pen pal preferably female. Write to 12 Poplar Avenue, Lutterworth, Leics. LE17 4TH.

■ I'm nearly 15 and would like a pen pal of any age who likes maps, tips and POKES. Send your list for mine. Write to Martin Playford, 7 Kingston Close, Cleethorpes, S Humberside, DN35 0QN.

■ Lonely, romantic 16 year old male, into Queen, Eastwood films and computers is looking for females into adventures, rock concerts and long country walks. Please include a photo. Write to Fraser McNicol, 15 Commonsides Street, Airdrie, Lanarkshire, Scotland ML6 6NQ.

■ Help! Pen pal wanted to swap games, hints and tips. Send a list of what you have or what you want. Please write to Frank Papadopoulos, 13 Kroombit Street, Dulwich Hill, NSW, Australia 2203.

■ 17 year old hacker, programmer, games freak wants a pen pal for swaps, hints and tips. All letters answered. Write now to Steve Tomaszewski, The Square, Saltash, Cornwall PL12 4SH.

■ Pen pal, boy or girl age 12+ who's interested in Spectrum programming in Basic or machine code. I want to swap ideas and tips about writing games etc. Please write to Bradley Clutton, 56 Ranelagh Gardens, Ilford, Essex IG1 3JP — Now!

■ Wanted, a female pen pal, age 11-12 to swap info on machine-code, POKES and more. Please enclose a photo. Write to Paul Hayes, 23 Derby Road, Shepway, Maidstone, Kent, ME15 7JJA.

■ Calling all American Speccy owners. If you're ace at machine code and think Speccy arcade games are great, then please write to Kevin Coverdale, 664 Analby High Road, Hull, N Humberside, HU3 6LZ.

■ Pen pal needed for an adventurer. No previous owners! He comes complete with batteries. Write to Gutterheart Page, 3 Larwood Square, Cricketers Way, Andover, Hants SP10 5DR.

■ Scottish lad would like people to write, if they're into games, machine code, hacking, drawing computer characters and being daft. Please write to Michael Bell, 91 Machie Place, Dunfermline, Fife, Scotland.

■ I want a female Speccy owner (12-14 years) for a pen pal. My interests include FGTH and computers. Interested girls? Then write to me, Stuart Green, 38 Newborough Street, Burton Stone Lane, York YO3 7AT.

■ Pen pal wanted. I am 15 and would like to write to someone the same age. My hobbies include shooting, fishing and playing with computers. Write to P Harrison, Castle Hill, Warcop, Appleby, Cumbria, CA16 6PD.

■ Male or female pen pal wanted. 13+. I have 160 games to swap. Please write to Wayne Griffin, 27 Melling Road, Aintree, Liverpool.

■ Boarding school student in Texas needs software, correspondence and info from pen pals of 16+ years. (His house is near Peterborough). Write to TH Ward, Kawonk, 2 Barby Road, Rugby, Warks.

■ I am 15, an arcade player and would like a female pen pal. If possible, foreign. I'm looking for tips on *Urban Upstart*. Send a photo — I'll send mine. Write to Frazer Smith, 190, Lomond Road, Coatbridge, Lanarkshire ML5 2NL.

■ Female pen pal wanted for lonely male Spectrum owner. I like different types of music and I'm interested in swapping hints and tips on simple programming. I'm 13. Please write to Ashish Chanarana, 25 Maheshwar, Niketan, Peddar Road, Bombay 400026, India 16509.

■ I am 14 years old and would like a pen pal to exchange ideas on gaming and hacking. I have a Speccy and a Beeb. Write to Stuart Meese, 1 Sandy Lane, Altrington, Nr Wolverhampton WV7 3ES.

■ I would like a pen pal to swap POKES, maps and games with. Especially someone to help me hack into games. Boy or girl as long as you're a good hacker. Write to Mark Cairns, Glenfield House, 246 Comber Road, Lisburn, Co. Antrim, BT27 6XZ.

■ 17 year old Israeli seeks Spectrum owning pen pals worldwide. Female (are there any?) or male — to swap programs and crazy ideas. Write to Claudiu Schiller, Rh Gedaliahu 7/5, Haifa, Israel 32587.

■ I'm 16, and would like to swap ideas, programs and other things Spectrum. My other hobbies include body building. Write to Aymen Ali Al Bannaw, PO Box 15471, Daiya, Kuwait.

■ Pen pal wanted, age 14, to swap hints and tips on games, and programming ideas. Please write to Tim Claveley, 73 Ladysmith, East Gomeloon, Salisbury, Wilts SP4 6LE.

■ Female Speccy lover needed to swap games, hints and tips. I am 12 and games mad! Please write to Chris Buxton, 8 Byrl Street, Keighley, West Yorkshire BD21 3LY.

MESSAGES

■ I am 14 and have had my Speccy for six months and would like to find out how to load and save machine code programs and things like that.

■ For sale! YS issues 2 (without poster), 3,4,11,12,13,14 and 15. All in excellent condition (but for 13, which is slightly tatty!) Offers please to S Butterfield, 1 Poole Crescent, Crossgates, Leeds LS15 7NB.

BINDERS!

You can tell at a glance. Some people have just got it while others don't even come close. It's tricky to pin it down exactly. P'raps it's the way they walk — as if they owned the world? No, that's not quite it. There's definitely something about them though, that makes others envious of their success. Of course! It has to be the *Your Spectrum* binder — can you come up with a better explanation?



I've been a bit of a drop-out up till now but I'm keen to try the YS way to worldly success.

Please rush me.....exclusive YS binders.

Tick the appropriate box:

☐ UK £4.95 each

☐ Europe £5.45 each

☐ Absolutely everywhere else £5.95 each

I enclose a cheque for £.....

Alternatively, please charge my Access/Visa/Am Ex/Mastercharge* card number.....

(*delete as applicable)

Signature

(Credit card orders cannot be accepted without a signature)

Name.....

Address.....

.....

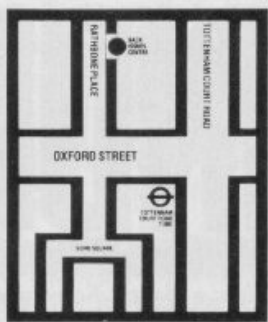
.....Postcode.....

Now send the completed coupon (or a photocopy of it) with payment or credit card number to:

Your Spectrum, Binder Offer, PO Box 320, London N21 2NB.

Prices include post & packing.

BACK ISSUES BLITZ



You can now obtain any of these back issues of *Your Spectrum* by filling in the coupon below and enclosing £1.10 for each issue.

Also, our shop is open Monday to Friday, 9.30am to 5.30pm. The address is 14 Rathbone Place, London W1P 1DE.



ISSUE 16 (JULY 1985)
REVIEW
Disko-Tech
FEATURES
3D Daze, Flash Moves,
Program Power
GAMES
Shadowfire, Ashkeron,
Funhouse, Rocky Horror Show



ISSUE 17 (AUGUST) 1985
REVIEWS
Black Magic Boxes
The Generation Game
FEATURES
3D3, Just A Tick, Program
Power
GAMES
A View To A Kill, Dun
Darach, Cauldron



ISSUE 1 (DEC/JAN 1984)
REVIEWS
Currah's MicroSpeech, general
computing books, joysticks.
FEATURES
Speech synthesis, Toni Baker's
machine code break-out,
Spectrum communications,
DIY keyboard buffer, machine
code scrolling.
GAMES
Chess packages.



ISSUE 13 (APRIL 1985)
REVIEWS
Microdrivin'
Megademo
FEATURES
Program Power, Screen
scrubber, Big Deal
GAMES
Kong Strikes Back,
Hunchback II, JSW



ISSUE 18 (SEPTEMBER)
1985
REVIEWS
Bits 'n' Pieces, Joystick Jury
FEATURES
The Ghostwriter, New Rom
Antics, Hidden Extras,
Program Power
GAMES
Dambusters, JSW, The
Fourth Protocol



ISSUE 5 (JULY 1984)
REVIEWS
British Micro's Grafpad, DIY
computing books.
FEATURES
Computerised bulletin boards
and modems, software for
printer interfaces, ZIP
compiler [Pt. 3], DIY joystick
interface.
GAMES
Gilsoft's The Quill.



ISSUE 14 (MAY 1985)
REVIEWS
Speed Trials
FEATURES
It's A Cracker
Patching Up The Drives
GAMES
Alien 8, Emerald
Isle, The Illustrator.



ISSUE 19 (OCTOBER 1985)
REVIEWS
Joystick Jury
FEATURES
Sprite High, No Limit, Movin'
'n' Groovin', Program Power,
Second Opinion,
GAMES
Exploding Fist, Frankie,
Highway Encounter, Red
Moon, Mordon's Quest,



ISSUE 12 (MARCH 1985)
REVIEWS
Music packages
FEATURES
Multisearch, Mac Man, Harry
Hacker, Tuning UP
GAMES
Ghostbusters, Ghoules,
Doomdark's Revenge



ISSUE 15 (JUNE 1985)
REVIEWS
Painting by Numbers
Hot Heads
FEATURES
Pic 'n' Mix,
Snap, Crackle & Pop
(YS Megabasic), Mastermind
GAMES
Starion, JSW, Gremlins



ISSUE 20 (NOVEMBER 1985)
FEATURES
Buzzwords, Shoot Out
PROGRAMS
Play it Again Sam, Shrink
Wrapped, Out of All
Proportion
GAMES
Elite, The Rats, Nightshade,
Fairlight

ORDER YOUR BACK ISSUES NOW!

Please send me the following back issues of *Your Spectrum* (UK £1.10 inc. p&p, £1.50 Europe, £1.70 rest of planet)

- | | | |
|-----------------------------------|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> Issue 1 | <input type="checkbox"/> Issue 14 | <input type="checkbox"/> Issue 18 |
| <input type="checkbox"/> Issue 5 | <input type="checkbox"/> Issue 15 | <input type="checkbox"/> Issue 19 |
| <input type="checkbox"/> Issue 12 | <input type="checkbox"/> Issue 16 | <input type="checkbox"/> Issue 20 |
| <input type="checkbox"/> Issue 13 | <input type="checkbox"/> Issue 17 | |

Issues 2,3,4,6,7,9,10 & 11 are now sold out, so don't waste your time ordering them!

I enclose a cheque/Postal Order for £..... made payable to SportsScene Specialist Press Ltd.

Name.....

Address

Postcode

Date

Please fill in this form and mail it immediately to:
Your Spectrum, Back Issues, PO Box 320, London N21 2NB.

You can use a photocopy of this form if you don't want to deface your issue.

FAST COMPUTER REPAIRS

VIDEO VAULT INTERNATIONAL 10★ REPAIR SERVICE



ACCESS
WELCOME

THE NO. 1
REPAIR CENTRE
IN THE U.K.

24 HOUR
TURNAROUND



HOW TO SEND YOUR COMPUTER

Just parcel your computer in suitable wrapping enclosing £19.95 for Spectrum repairs, please do not send power supplies. Commodore computers, just send £1.75 (U.K. Eire, I.O.M. C.I.) or £6.50 (Europe/Scandinavia) with your address or phone number and we will contact you same day by phone or letter with quote, if you prefer, please call us and we will give you a quote over the phone, we aim to please. That's what made us the most reliable service centre.

SPECTRUMS REPAIRED for only £19.95 including PARTS · INSURANCE and P & P. NO HIDDEN EXTRAS

We don't give you a between price and let you guess the bill, we give you a 100% fixed price NO extras. We don't need to boast about our service, we have 1000's of customers from all over the world highly delighted with our service and help. Only 20 minutes from Manchester Centre. BBC, Commodore 64, Vic 20, also repaired call us for details.

Don't wait weeks for your repair, we turn around all computers in 24 hrs. All repairs carry a full 3 month guarantee, plus on every Spectrum we repair, we send you a free game worth £5.95 for your enjoyment and pleasure.

- * While you wait service by Professional Computer Engineers.
- * 3 month written guarantee on all repairs.
- * International Repair Company. We repair computers from all over the world.
- * All computers sent by Mail Order turned around in 24 hrs.
- * Most Spectrums repaired within 45 minutes.
- * All Micros insured for return journey.
- * Keyboard faults only £8.95
- * School repairs undertaken - discount available.
- * Free software with each Spectrum repaired.
- * Over 8 years experience working with computers. All computers fully tested.

TRADE
REPAIRS
most
welcome

BEST SERVICE — BEST PRICES!

COMMODORE 64

* NOW REPAIRED *

Call us for details or purchase the I.C.'s from our D.I.Y. section

WE ONLY USE SINCLAIR
SPARES. FITTED BY OUR
QUALIFIED STAFF!

SPECIAL OFFER!

YOU CAN'T REFUSE

16K to 48K Upgrade

Upgrade your 16K Spectrum to 48K Spectrum for only £19.95 fitted including V.A.T. and P.&P.

(Limited offers while Stocks Last.)

Makes a great Christmas present.

To order the Upgrade Kit,

(only £17.95.)



P.S. We would like to wish all our customers past and present a very Merry Christmas and a Happy New Year.

THERE'S
NOBODY QUICKER
IN THE BUSINESS AT PRICES
THAT CANNOT BE
BEATEN

THE
LOGICAL
CHOICE

*SPECIAL KEYBOARD UPGRADE



Why not upgrade your Spectrum into a new keyboard, we can upgrade your old Spectrum into a new D.K. Tronics keyboard

for only £31.50
which includes fittings + return P & P and V.A.T

Normal retail price £39.95 without fitting

ORDER
NOW!

VideoVault D.I.Y. CORNER

We regret we cannot show all the components available. Just give us a call and we can quote you over the phone, delivery by return.

Spectrum Parts

280A CPU	3.00
4116 Rams	0.95
ZTX 650	0.60
Service Manuals	20.00
ULA 6C001	9.50
Transistor ZTX 213	0.30
Transistor ZTX 313	0.50
Keyboard Membrane	3.00
Keyboard Template	3.00
Keyboard Mat	5.00
Power Supply Units	7.95
Feet (Each)	0.25

Commodore 64 Chips

6526	23.00
6510	23.00
6581	23.00
901227-03	23.00
901226-01	23.00
901225-01	23.00
6569	23.00
4164 Rams	3.00
Power Supply Units	29.00

All prices + P & P. £1.50
But include V.A.T.

TRADE
ORDERS
WELCOME

VIDEOVAULT HEALTH WARNING!!!

Sending your computer to any other Repair Centre can seriously Damage its Health

STOP
PRESS

VIDEOVAULT LTD will shortly be opening their New Branch in Manchester City Centre for while you wait computer repairs, watch this space for details of Special opening offers.

OPEN

7
DAYS
A
WEEK

VideoVault Ltd.

Telephone: Glossop (STD 04574) 66555/67761
140 High St. West, Glossop, Derbyshire, England.

FREE GAME WORTH
£5.95 WITH
EACH SPECTRUM
REPAIR.

YOUR SPECTRUM DOES NOT CONDONE SOFTWARE PIRACY

COMPUTER REPAIRS
IN SOUTHEND

Spectrum/plus	£19.95
Spectrum K/B faults	£12.95
Interface 1 & 2	£14.95
C64/Vic 20	from £12.95
Brand new Spectrum power supply units	£9.95

Above prices include parts, post & packing. All repairs are guaranteed 3 months. Call in or phone for more details.

MINNIE MICRO ELECTRONICS
12 EASTERN ESPLANADE,
SOUTHEND, ESSEX. TEL: (0702)
62033/615809
OPEN 7 DAYS A WEEK

SINCLAIR
SERVICE CENTRE

Fast repair service for Spectrum: ZX81 interface 1: microdrive. All units repaired to original standard by our H.N.C. qualified staff average repair cost £15.00. But for free estimate send £1.95 return postage with a brief description of your fault: turnaround approx 24 hours: established international service: our work is fully guaranteed. Personal callers welcomed.

QUANTUM
33 City Arcade,
Coventry CU1 3HX
Tel: (0203) 24632 or (0203) 714080

BUDGET PRICE
SOFTWARE

available in CBM 64; SPECTRUM; BBC; MSX; CBM 16; AMSTRAD and VIC 20 all at £1.99 plus 25p P&P. List of titles can be obtained from:

CAROJO PRODUCTS
34 St Vincent's Road,
Westcliff-on-Sea,
Essex.
Tel: 0702 582877
(24 hr answering service)

BLANK CASSETTES

WITH LIBRARY CASES

	C10	C15	C20	C30
10	3.80	4.00	4.15	4.15
20	7.00	7.20	7.35	7.50
50	15.00	15.20	15.35	15.50
100	27.00	28.00	29.00	29.00

Fully inclusive (C.O.D. 85p extra)

5 1/4" DS/DD DISKS

10 FOR £14.00 inc. PLASTIC CASE

DK'TRONICS KEYBOARDS

(SPECTRUM ONLY)
ONLY £30.00
(£32.50 FITTED. SEND FOR DETAILS)

RING US NOW! (0793) 895034
UK HOME COMPUTERS (DEPT YS)
82 CHURCHWARD AVE,
SWINDON, WILTS SN2 1NH

KIDDISOFT

The Tape Magazine for the younger child
(4 to 8 years)

LOTS of GAMES — PLENTY of FUN & INTEREST

IT'S CHILDS PLAY!

OUT NOW
Issues No. 1, 2 & 3
£3.99 per tape



Send to: KIDDISOFT
5b, NANPUSKER ROAD,
HAYLE, CORNWALL.

SPECTRUM OWNERS

Are you a manic arcade player; a dedicated adventurer/strategist; or do you want an independent, no nonsense critical review of current software/ utilities?

Whichever, we have the brochure(s) for you!

Based on the formula which has already produced the successful Hints and Pokes brochures, we are now able to offer not one but three individually tailored brochures specific to the Spectrum and your own particular interests.

For further information on the above and our other computing services, send an S.A.E. to:

H&D SERVICES (YS)
FREEPOST (no stamp required)
MANCHESTER M11 2FA
TEL: 061-370 5666

IS YOUR SPECTRUM
WORKING FOR YOU?

100% MACHINE CODE PROGRAMS (48K)

EXCELLENT VALUE DEDICATED DATAFILES

-SEARCH TIME LESS THAN ONE SECOND!!!!-

- ★ VIDEO/FILM £4-90
- ★ MUSIC DISC/RECORD.....£4-90
- ★ MAGAZINE ARTICLE.....£4-90
- ★ BOOK LIBRARY.....£4-90
- ★ RADIO STATION LOG.....£5-90
- ★ SPEEDFILE (all purpose) £5-90

X (Micro-Drive compatible)

For your leisure:

NNNUDGER: 4X4 fruit graphics: Smooth action Cash winnings falling down tube on screen % Payout: Coins in/out: Holds: Nudges:

(ADDICTIVE) £5-90

SAE for details:

DGF SOFTWARE (Dept YS)
7 RUSHLADE CLOSE, PAIGNTON
DEVON TQ4 7BZ

48K Spectrum
NEW TITLES —
LOW PRICES

All Microdrive Transferable

PROGS-FILE — When we saw this program-name data base, we used it for the sheer joy of seeing the screens which are the best we have seen in a utility program. Reduce typing, this program reads in your microdrive program names — automatically! Very easy to use.

SKETCH — three, free screen pics to show what is possible with this graphics utility.

THE GOLDEN COBRA — Real-time adventure in Basic? Yes, it can be done — join in the search for the Golden Cobra. (Runner-up in the 1984 Cambridge Awards.)

UTILITY A — Four programs, two specifically for the microdrive owner.

Cat Loader — a single-key, self-updating "run" menu to dramatically simplify Microdrive use. Save It — developing a program? 'Save it' auto-numbers each version, erasing anything older than you want to keep.

Time Count — converts elapsed time to counter readings in table form on video and cassette recorders.

Autodraw — artificial intelligence? Just who is doodling — man or machine!

ALL THE ABOVE NEW TITLES AT £2.50

PRO-MAT — This menu driven program will save you scrambling through the manuals for those elusive control codes. Easy use. Available for Epson, Brother M1009 and Walters WM80, via Inter-face 1 or Kempston's Centronics E. Please state printer and interface when ordering. (Other versions under development.) £3.50.

SAE brings details of any of the above. Please add £1.00 for overseas orders.

CHEZRON SOFTWARE (Dept. 212)
605 Loughborough Road, Birstall,
Leicester LE4 4NJ

★ ★ SEVEN STARS ★ ★
UTILITIES

C-DOC is the essential Microdrive utility. Find, load, repair and rewrite bad sectors, and hence load damaged files. Features "filter" option for text files (eg Tasword Two), full status reports, monitor type editing and fast 100% machine code. Order now so you have it ready for the "File not found" blues! £4.95

GENER-80 is the fastest Spectrum assembler, and one of the easiest to use, with an excellent 40 column full screen editor. Can load/save/verify source and object code via tape/Microdrive/network/Opus Discovery disc. Also compatible with ZX printer and "full-size" printer interfaces. "An excellent machine code development program" five stars instructions 100%, display 100%, ease of use 100%, value for money 100% — Home Computing Weekly, £7.95.

MODER-80 is a handy monitor/disassembler with a built in mini assembler. Features include breakpoint, single step and hex-dec hex conversion. Can be used with Gener-80 to form a complete machine code programming system. "it offers all the features you would expect from a machine-code debugging tool" Popular Computing Weekly, £5.95.

PROFILA is an activity profiler which displays in bar chart form the "bottle necks" that are slowing down your BASIC and mic programs. Fascinating to use, and cuts out guesswork when "tuning" programs for maximum speed — a "must" for the serious programmer. £4.95.

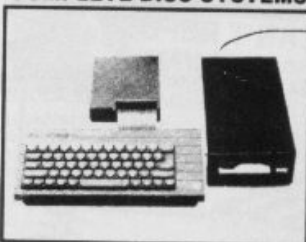
TASPRO enables Tasword Two to justify using equal spaces between words (even with proportional mode on FX80 and Juki 6100!) for that professional-quality look. Uses no extra memory. Approved by Tasman Software. £4.95 (please state printer and interface).

All programs except C-DOC are compatible with both Microdrive and Opus Discovery discs. C-DOC, Profila and Taspro run on 48K Plus only. Fast mail order 3UK post free, Europe add £1, outside Europe add £2 (airmail with seven day "money back if not entirely satisfied" guarantee (statutory rights not affected), or please for leaflet. All programs now on sale via Microcan 800! Dealers welcome.

SEVEN STARS PUBLISHING
(Dept. S), 34 Squirrel Rise, Marlow,
Bucks SL7 3PN
Tel: 06284 3445

PACER INTERFACE

COMPLETE DISC SYSTEMS

DISC DRIVE INTERFACE FOR THE
SINCLAIR SPECTRUM AND SPECTRUM PLUS COMPUTERS

- Purpose:** Allows users of the Spectrum Computer to drive and load programs on a floppy disc.
- Features:**
 - User and software from tape to disc storage
 - Simple operating system provides easy file handling incorporating 16 user commands
 - Supplied with demonstration and instruction disc
 - Compatible with all popular 5 1/4 inch disc drives
 - Fast and reliable storage of basic and machine code programs
 - Automatic cut of basic or machine code programs after loading
 - Free loading — hence well property connected to Spectrum Plus
 - Storage of programs and information for home and office use
- Uses:**
 - Word processing — fast access to word processing software speeds creation, editing and storage of text files
 - Accounts — home and office accounts can be quickly accessed, updated and stored
 - Filing System — names and addresses of friends, family and business contacts can be quickly stored and retrieved
- Disc Drives:**
 - Suitable for 5 1/4, 3 1/2 and 3 inch drives (Shugart Mini-disc e.g. Opus, Cymatic, Tasc, Trugard, Minidisc and SDC compatible drives)
 - Single Discs added single density, 40 KS track, soft sector
 - 5 inch plus the interface between your Sinclair Spectrum and disc drive using the demonstration disc — "Off you go!"
- Prices:**
 - Discs: Single Discs added single density, 40 KS track, soft sector
 - Installation: 5 inch plus the interface between your Sinclair Spectrum and disc drive using the demonstration disc — "Off you go!"

OMNITRONIX LIMITED

13 Dartford Road, Leicester LE2 7PQ.
Tel. No: (0533) 839713

FOR RATES AND DETAILS ON ADVERTISING CALL DAVID 01-580 0504

INCREASE YOUR SALES THROUGH

SPECTRUM

SPECTRUM MARKETING

SPECTRUM

16K

SPECTRUM REPAIRS

48K

by
TAPS

Test and program services on Spectrum production style test equipment. Gives rapid high quality test and repair, most within 24 hours. No hidden costs. Open Monday to Friday (8.30 to 18.00) Saturday (8.30 to 13.00).

Send or bring your Spectrum and ONLY £16.00 to:

TAPS (BETONE) LTD, 3 Cordwallis Street, Cordwallis Trading Estate, Maidenhead, Berks SL6 7BH. Tel: 0628 781202/32640

**LIVE IN LAS VEGAS
A NEW FRUIT MACHINE
GAME FOR 48K SPECTRUM
FRUIT 2000**

This is the most addictive fruit machine game ever devised. It incorporates holds, roulette-style gambles, feature board, feature holds, super series, lines, multiple odds up to x 12, and half gamble. Superb sound and brilliant graphics (729 pixels per fruit graphic!).

Hours of fun for only £4.99

★ You'll be delighted ★

Cheques/POs to:

ROSSWARE (YS)

646 London Road, Westcliff, Essex SS0 9HW

FIVEDICE

For the 48K Spectrum.

A great version of a popular dice game, using well known playing card hands such as:

ONES, TWOS, THREES, FOURS, FIVES, SIXES, 1 PAIR, 2 PAIRS, 3 THE SAME, 4 THE SAME, FULL HOUSE, LOW RUN, HIGH RUN, FIVE DICE, CHANCE.

A game for any number of players.

£4.99 + 50p P&P (UK), £1.00 (Europe).

Send cheque/PO to:

**REPLAY SOFTWARE
(Dept YS)**

8 Stevenage Rd,
East Ham,
London, E6 2AX.

FUNDATA LIMITED.

Do you have a VIDEO RECORDER?

If so, then you need the VIDEO TAPES INDEXING SYSTEM available for the: 48k ZX Spectrum
32k BBC model B
48k Apple II

It not only tells you where to find the programme you want, but also tells you on which tape you have enough spare space to record another programme. Your tapes are expensive so use them efficiently with this computer program which accepts any video system (eg VHS & BETAMAX)

Just send a cheque or postal order for £7.95 to the address below. Please also state your name and address, which computer you have, and whether you require the disk, tape or ZX microdrive version.

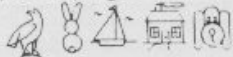
Fundata LTD, PO Box 73, Pinner, Middx, HA5 3PR

KIDDISOFT

The Tape Magazine for the younger child
(4 to 8 years)

LOTS of GAMES — PLENTY of FUN & INTEREST

IT'S CHILDS PLAY!



OUT NOW
Issues No. 1 & 2
£3.99 per tape

Send to: KIDDISOFT
5b, NANPUSKER ROAD,
HAYLE, CORNWALL.

SUBSCRIBE TODAY

and see what you're missing!

Some people just aren't in touch with the real world. Make sure you're not one of them — simply fill in the coupon below and send it (by Royal Mail) to Speccy Subs, 14 Rathbone Place, London W1P 1DE. It's the only magazine that treats one like royalty!



SUBSCRIPTIONS: PRIORITY ORDER FORM

I would like to subscribe to **Your Spectrum**. Please start my subscription from the..... issue.

Please tick appropriate boxes:

☐ One year £12 UK and Eire

☐ One year £15 Europe

☐ One year £25 Rest of the world (inc. Mars)

I enclose my cheque/postal order payable to Sportscene Specialist Press Ltd for £.....

☐ Please charge my Access/Visa/American Express/
Mastercharge card number
(Delete where not applicable)

Signature
(Credit card orders cannot be accepted without a signature)

Name

Address

Postcode Phone No.

Send the completed form with payment or credit card number to: **Your Spectrum** Subs, 14 Rathbone Place, London W1P 1DE. If you don't want to cut up your magazine, use a photocopy of this coupon.



HACK FREE ZONE

Hi, Hi, Hi games-playing hexperts, it's me Hex Loader with another helpful heap of your trips and ticks for winning at those wacky games...

Zo, you haz come back ha? I knew you would — there we were last month poised at the very brink of solving *Dun Darach* when I suffered a tape loading error. Not to worry, the third and final part of the **P Bradford** serialised solution saga is coming up right now:

Go through the next door (bet you've tried that by now, haven't you?) and you'll be presented with a row of six doors (row A). Take the third door to row B. Third door again and you're on row C. Now take the fifth door and you'll come to row D. From row D, it's the fifth door. Betcha reckon all this took ages to work out! Nah, the 2**25 scroll from last month — and before you load up your *YS Megabasic*, that works out at 33554432 — gives you the route to take. So from row A, we took door 3, then door 3, then door 5 and so on. Easy enough.

Once you get to the end of the row of doors, you should be faced with a normal door. Inside, spell out the word O A K and pick-up the L-key. Find Loeg and give it to him and he will say "Fair exchange — let's go..." and witter on much like I do. Now go to South Gate on Claw Lane. Make sure you put the asterisk on another object besides the L-key or the pickpockets will get it. Use the Portal to get to the Soke and go through the South Gate for the final message. And that's it — thanks a million 'P' — couldn't have done it without you!

So now I've given the game away, I might as well add insults to information and tell you what **Charlie Morgan** thought of the game. First, he thought the ending was a bit of an anti-climax — the final message is just "The End. Ta from GG!". Worse, you don't even have to free Leog from jail to finish the game (ah, but it's more fun than just finishing it!) There's also a trawler full of red-herrings — deliberate or a last minute rush asks our man in Croydon?

Two examples; entry to Laydos is with the spell "Show

the lady" — you'll get the message "forbidden". Gargoyle says this is because there's all sorts of naughty, naughty goings on inside Laydos. But if you can't get in, why is it there at all? To enter 21 Cinder Bank you need "Gold in Ashes". Inside is a Pyrite which no one in the game wants and therefore seems to be of no use whatsoever. Umm... yes, what does the Gargoyle say to that? Meanwhile, anybody been to *Marsport* or more importantly got out again?

Right then, who's next? Here's a letter from **Peter 'Gutterheart' Page** of Andover, Fist (sorry, Hampshire). Oh, and here's another one... and here's another one. Thought you could crush me into printing some of your magic words, huh? You're right! Excerpt one coming up:

"... Aha! Yep, that's right! I've finished Ocean's *Pud Pud* (2nd September). To finish, you have to collect 10 puds then make your way to the last location (if you imagine the map is on a 30 x 14 grid then this would be location 8,23). Try to eat power-giving objects, winged objects, snakes, crabs, bats, skulls and walking blobs. Make a map... yours puddingly... Peter Page".

Nice to see a pudding-head who writes in my own imitable style. More pages from the Page guide to games-beating coming up soon — he really knows his stuff.

James Fitzpatrick who's holed up in West London writes on *Pyjamarama*: always get the £1 coin and change it for the penny (those £1s burn a hole in your pocket anyway). You can then get into the bathroom and grab the hammer as well as the scissors which will help you cut the balloon and get the Box Key — provided the help-on switch is down. Phew!

Meanwhile, *Fists* are exploding all over East Lothian courtesy of **Graham Cairns**. The way to down an opponent of any Dan is to walk three side steps towards

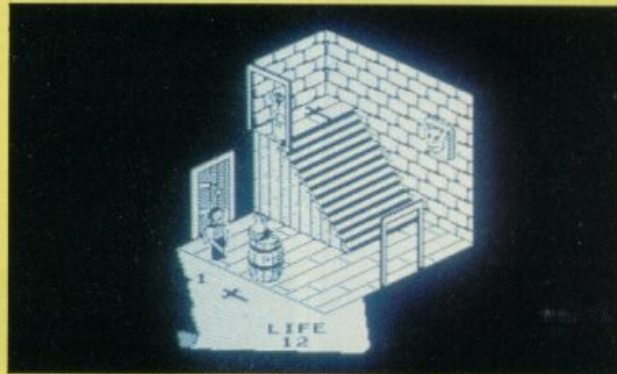
him then kneel down and punch him when he's in range. Sounds a bit below the belt to me.

Evan Mason, live from Zimbabwe, talks of *Dragonorc*. If you find yourself in the Druid's Last Sanctuary and get transported to a room without any doors (*Carful Hex, we're trying to find one for you! Ed*) then don't go spair, sorry despair — just try your Leyrod!

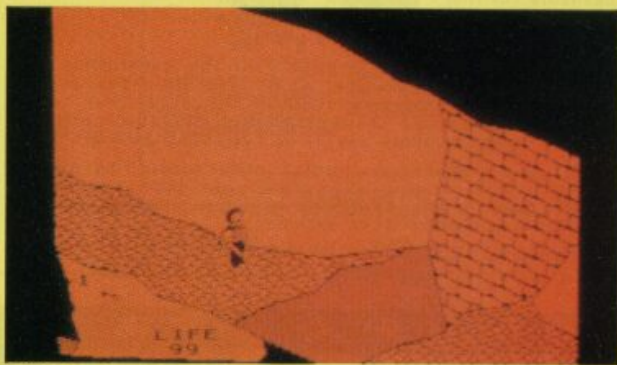
Right, dammit, that's enough for one month. Next time I'm taking over... they've promised me more memory space for my winning bytes so I'm going to need

more input from you lot out there — keep writing to me, **Hex Loader**, at YS, 14 Rathbone Place, London W1P 1DE and keep 'em tips a-coming which reminds me the Editor can't pull the plug on me this month 'cos I got Trouble-totin' Pete to screw the plug to the wall so they can't get away with that old trick and I can tell you about something that had slipped my mind when I was dumping that other stuff which is that... hey, no, that's just not fair I mean... L BREAK into program, 3000:8. (Sorry about that but we're running out of magazine! Ed).

READER SPOT: FAIRLIGHT

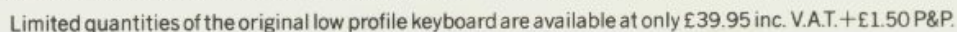
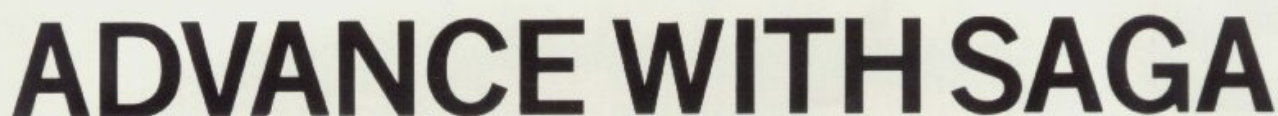


Don't Get Cross: Small buglets rounded up for free, courtesy of **Kit Simpson** of Manchester... 'cos I bet you thought that to get past the mad monk you'd need to get the cross from under the throne and chuck it at him didn't you? Well, yes, that does work doesn't it? Ah, why not save yourself the trouble and climb up on the edge of the stair, right at the top and next to the monk and then jump against the door frame. Huh! I didn't think you were thin enough to fit through the gap either...



Cliff Hanging: Oops... I accidentally erased the name of my valiant reader who helped me crack this one but here goes all the same: all you do is collect two stools from the Troll's cave and bring them back to the cliff. Push 'em as far over the cliff as you can (here's one time when it's not safe to fall between two stools) and fetch two barrels from the cave. Climb on the stools and chuck the barrels over the edge. Haha... you can now climb down in comfort!

Editor Kevin Cox; Art Editor Martin Dixon; Deputy Editor Peter Shaw; Production Editor Teresa Maughan; Editorial Consultant Andrew Pennell; Software Consultant Gavin Monk; Contributors Steve Adams, Dougie Bern, Nick Davies, Peter Freebrey, Ross Holman, Dave Janda, Max Phillips, Rick Robson, Tony Samuels, Phil South, Chris Wood; Advertisement Manager David Baskerville; Advertisement Executive Neil Dyson; Production Manager Sonia Hunt; Group Advertisement Manager Chris Talbot; Managing Editor Roger Munford; Art Director Jimmy Egerton; Publisher Stephen England; Published by Sports Illustrated Press Ltd, 14 Rathbone Place, London W1P 1DE. Telephone (all departments) 01-631 1433. Telex 8954139 BunchG. Company registered in England; Typesetters Carlinpoint, London; Reproduction Graphic Ideas, London; Printed by Chase Web Offset, St Austell, Cornwall; Distribution Seymour Press, 334 Brixton Road, London SW9. Telephone 01-733 4444. All material in *Your Spectrum* © 1985 Felden Productions, and may not be reproduced in whole or part without the written consent of the publishers. *Your Spectrum* is a monthly publication.



STEREOSCOPIC TELEVISION HAS ARRIVED!



SEE

**INCREDIBLE
IMAGES THAT
LEAP OFF
THE SCREEN**

IN 3D

STEREOSCOPIC

Use your spectrum to explore the fantastic world of 3D television, see truly STEREOSCOPIC (3D) IMAGES that appear both in front and behind the surface of your television screen. Explore the future of new technology with these fantastic.

**ELECTRONIC
HOLOGRAMS**

**TAKE A LEAP INTO
ANOTHER DIMENSION!!**

This incredible programme is unique, and will present you with the most amazing screens ever created for the Spectrum. The screens have true dimensionality and appear both in front and behind the surface of the television screen.

THIS IS NOT A GAME, although you can use the information in this programme to create your own stereoscopic games and screens.

**A FREE PAIR OF 3D GLASSES
PROVIDED WITH THE PROGRAMME.**

ELECTRONIC HOLOGRAMS!

**THIS PROGRAMME TOGETHER
WITH A STEREOSCOPIC (3D)
FACT PACK IS ONLY**

£9.99

To view the three dimensional (STEREOSCOPIC) screens in this programme you will need to view on a conventional colour T.V. wearing the special 3D glasses provided with the programme.

To view this poster in 3D (STEREOSCOPICALLY) you will require a pair of 3D glasses we can supply these for 99p. We will also supply you with a voucher to the value of 99p which you can use against the purchase price of the programme.

Please rush me without obligation my

FREE 3D POSTER

I also require () pairs of 3D glasses at 99p each.

Send correct remittance and s.a.e. to: 3D Poster Offer, P.W. Marketing, P.O. Box 21, Manchester M16 8EE.

Name _____

Address: _____

RETURN THIS COUPON FOR YOUR FREE 3D POSTER!

FREE POSTER OFFER

WE WILL BE HAPPY TO SEND YOU A FREE STEREOSCOPIC (3D) POSTER WHICH ADVERTISES THIS SOFTWARE THE POSTER IS IN 3D SIMPLY SEND A LARGE STAMPED & ADDRESSED ENVELOPE TO: 3D POSTER OFFER, P.W. MARKETING, P.O. BOX 21, MANCHESTER M16 8EE.