




# FRST CIFFPUTER REPRIRS 




# TASWOR THE WORD PROCESSOR - ANEW STANDARD FOR THE Z 





TASWORD TWO led the way in setting a standard for word processing on the ZX Spectrum. TASWORD THREE pioneers the new standard.
TASWORD THREE retains all the features which have made Tasword Two a household name for the Spectrum. With many additional features and enhancements, including a built-in mail merge and up to 128 characters per line, TASWORD THREE is the definitive word processor for the Spectrum and Spectrum + with microdrive.

## TASMERCE <br> THEMAIL MERGER

TASMERGE for the ZX 48K Spectrum cassette $\mathbb{1 0 . 9 0}$
Transfer data from MASTERFILE to TASWORD TWOI Letters and forms typed on TASWORD TWO can be printed with addresses and data taken from MASTERFILE. The mail merge facility allows, for example, multiple copies of a letter to be printed each containing a different name and address taken from your MASTERFLLE data. To use TASMERGE you must have one or more microdrives as well as TASWORD TWO and MASTERFILE by Campbell Systems (version 9 or later).

## TAS-DIARY <br> THEELECTRONICDIARY

TAS-DIARY for the ZX 48 K Spectrum and microdrives. Cassette $\mathbf{8 9 . 9 0}$
Keep an electronic day-to-day diary on microdrivel TAS-DIARY includes adock, calendar, anda separate screen display for every day of the year. Invaluable for reminders, appointments, and for keeping a record of your day. The data for each month is stored as a separate microdrive file so that your data for a year is only constrained by the microdrive capacity TAS-DIARY will work for this year, next year, and every year up to 21001 Supplied on cassette for automatic transfer to microdrive.

## TASMAN Printer INTERFACE

## TASPRINT PRINTER INTER FACE for the ZX Spectrum $\mathbf{2 9 9} 90$

RS232 Cable for ZX Interface 1 £14.50
Plug into your Spectrum and drive any printer fitted with the Centronics standard parallel interface. Supplied complete with ribbon cable and driving software. The user changeable interface software makes it easy to send control codes to your printer using the method so successtully pioneered with TASWORD TWO. The cassette contains fast machine code high resolution full width SCREEN COPY SOFTWARE for Epson, Mannesmann Tally, Shinwa, Star, Tandy Colour Graphic (in colourl) printers. TASCOPY shaded screen copy software for this interface (value $f 990$ ) is INCLUDED in this package.
The TASCOPIES and TASPRINTS drive all Epson compatible eight pin dot-matrix printers e.g.

Anctwoonrex
ESONESOO Exonex


NECRCROBSN MWVEWWWTRIYMT: STRONPSDIS 55810 SHRNPS
COSMOS momamax Bontrits
cosins at giwacra
Drticturter DUXCOWTRER
DTACFWTREAI

CONPACIA - bold and heavy, good for eaphasis QRTA-FIVC - A FUTUAISTIC SCABPI LECTURA Llart - clean and pleasing to read MEDIRH - a serious business-like script POINER JXGPI - a distinct ive thoving font TASPRINT output shown at less than half-size.


## DTHREE

## ZX SPECTRUMAND ZX SPECTRUM+ WITH MICRODRIVE




Please note that TASWORD THREE is only supplied on, and will only run on, microdrive.

## TASWORD THREE-THE WORD PROCESSOR - Microdrive $£ 16.50$

One of a famous family: TASWORD TWO (ZX Spectrum), TASWORD MSX (MSX Computers), TASWORD 464 (Amstrad), TASWORD 464-D (Amstrad), TASWORD 6128 (Amstrad), TASWORD EINSTEIN (Tatung Einstein), TASWORD 64 (Commodore 64) Available from good software stockists and direct from Tasman Software, Springfield House, Hyde Terrace, Leeds LS2 9LN. Tel: (0532) 438301

## TASCOPY <br> THESCREEN COPIER

TASCOPY for the ZX Spectrum with Interface 1 cassette $\mathbf{8 9 . 9 0}$ microdrive cartridge $\mathbf{5 1 1 . 4 0}$
The Spectrum TASCOPY is for use with the RS232 output on ZX interface 1. It produces both monochrome (in a choice of two sizes) and large coples in which the different screen colours are printed as different shades. With TASCOPY you can keep a permanent and impressive record of your screen pictures and diagrams. A list of printers supported by TASCOPY is given to the left.

TASWIDE

THE SCREEN STRETCHER TASWIDE for the ZX 48 K Spectrum cassette $\mathbf{5 5 . 5 0}$

With this machine code utility you can write your own Basic programs that will, with normal PRINT statements, print onto the screen in the compact lettering used by TASWORD TWO. With TASWIDE you can double the informationshown on the screen/

Available from good stockists and direct from:


Springfield House, Hyde Terrace, Leeds LS2 9LN. Tel: (0532) 438301
If you do not want to cut this magazine, simply write out your order and post to: TASMAN SOFTWARE, DEPT YS, SPRINGFIELD HOUSE, HYDE TERRACE, LEEDS LS29LN


# Marketing are proud to announce the arrival of their 125 Joystick 

## NEW JOYSTICK from Cheetah

Compatible with ZX Spectrum,48K, 128K. Commodore 64. Vic 20. Amstrad, Atari. MSX. etc.
At only $£ 8.95$ the features on the 125 are second to none Besides its unique internal structure, built to withstand immense punishment from even the most vigorous games player, the joystick contains no less than four extremely sensitive fire buttons Two are housed in the handgrip which has been moulded for extra comfort and ease of operation. The trigger finger fire button provides ease and comfort for your finger and the top fire button is contoured to fit your thumb for sure fire shooting. The base fire buttons are positioned for extra control and two hand firing whether you are right or left handed
A built in auto-fire switch provides continuous shooting at the touch of a fire button

The 125 comes complete with a full 12 months
 wismirie High Street stores and all good computer shops.


Price inctude VAt Postage and Packing Delivery normally 14 days Export onders at hio extrd cost Dealer enquines neicome Send cheque PO now to

## Cheetah Marketing Ltd.

1, Willowbrook Science Park, Crickhowell Road, St. Mellons, Cardiff Telephone: (0222) 777337 Telex: 497455


Eureka, as the Scotsman said to his smelly friend. But as well as a really bad joke (What joke? Ed). Eureka is also the name of Domark's first product after the horrors of Friday The 13th. It's a medium resolution monitor with the option of using it in green screen mode. It also boasts a sound booster for your Speccy's beeps and then plays them through its own speaker. But the most interesting feature is its expand screen option. Now you can make yourself feel really sea sick by zooming in'n'out while you're playing a game. At under $£ 250$ we can even forgive 'em for importing it from France.

'SCRAZY!
Mirrorsoft is going bananas and releasing megatons of games this month. Numero one is Dr Blitzen And The Islands Of Arcanum, an arcade/ adventure follow-up to Dynamite Dan - see pur-reety brillo, fab screenshot. Second is Reflex, a labyrinth of caverns game ...um... and there's the battle/flight simulator. Strike Force Harrier er ... and scary ... Nervous Wreck - an underwater diving drama.

He can't even give 'em away! Sir Clive launches the Spectrum 128 on a suspecting world.


F A B
N,
Go on, admit it You actually bolieved last issues amazing only-a-real-drongo-would-all-tor-this' scoop review of Generation 4 A Arcade Dream? Bet you toel a right pionker. eh? Just to make you teel less of a complete and utter-nwh the first noodio to tal hook ine and sinker works for a load ing sothware house. For a small remuneration Frontinines may just be persuaded to reveal which one.

Last month, ys brought you the 'Do-it-yourself-and-look-a-right-wally' Trainspotter kit. Caused quite a stir down at King's Cross we can tell you. But we can't let the anorak and notebook brigade hog all the glam spots. So, for all the trendspotters rather than the trainspotters, prepare to be put in the picture about all that's hip in the Spectrum world. Dedicated followers of fashion will note that it's now ultra cool to have an old style Speccy. Rubber is definitely making a comeback this season. Some hipsters are even making a move to revive the 16 K machine - here at YS we've dubbed them the Artificial Hips. And it's no good you trainspotters pointing out to the trendies that microdrives are an unreliable form of storage. You can talk till your spots drop off about Wafadrives and disks but Joe Cool's only interested in matching logos. Form not function is his motto. Stylish or what?


- Sinclair ZX Spectrum (no longer available in this formate Sinclair Microdrive and Intertace 1 (E99.95) - Microvitec Cub Monitor (E242.61) Romantic Robot's Multitace 1 (£39.95) - Transform microdrive storage Dox (E5.95) - AMX Mouse (E69.95 - Rainbird's Art Studio is fucked away in the piccy too) CGL Command Control Joystick ( $£ 27.95$ ) Sony WM22 Walkman ( $£ 29.95$ ) - Sony Sports Headphones (E29.95) © Grand Gorgon Zoid (E17.95) H1-Tec Trainers (E22.95) © Aiwa Stereo Radio Cassette Recorder W330 (£99.95) Casio FM Card Radio ( $£ 19.95$ ) © Marks and Spencer Pullover ( $£ 14.99$ ) Designer Trousers (E18.99) - Crappy cassette recorder found in Castle Rathbone (no value whatsoever) © Your Spectrum Binders before they'd been arttully changed into Your Sinclair ones (a snip at £4.95) - Piastic Pacman (99p from the Brighton Rockn Novelity Shop).

TROS

Gasp: Puft I nearly didn t pant make it this huft month exc lixe tham han? Nhanchestot Pint tol ontor was delayct gasp due to lemmings on the line But what Was loomg in Whincrister की Looking at Oceats now
kerpow-zap-sockit-to-em Batman game that 5 what And holy mackerol is il thot havera look for yourself on page 60 Splat Talking of fotting around the country ive alse been down to sumny Brathton to see a couple of Martechs proctammers And dyou know what they told me Martech s Managine Director David Martin found his programmers werent open to persuasion when it came to digitizing bouncy Sam Fox Sound a totpatyoto youn Thats what I thought but its actually all being done in the name of the new oame Sam Fox's Strip Poker Titte

Interesting fink. this Domark having made a bit of a boob win Friday 13 th is delinitely producing a game based on th
James fond move Live And Let Die Boy racois Daminic and Mark are also in the throes of signing a few mere licensing deals but they re keeping stumm on whether it in bey for another fitm
Everyones Catching the licensing bug Those complate and-utter-nutters at Orpheus are hoping to secure another contract for a game bised on a TV program Other than that its converting a Commie 64 game (Spit spit) to the spectrumi lyperoland it s called The

## Web

And guess what? Woll if you
cant guess I mi certainly not going to tell you Oh okay then figgiveyoun हiug हilt licensing deal agan Areade Classic Paper Boy Got it Watch this space for more dotams

Eh up flowers leat scopt puth Wi t whoppet an farret t phiy Alligatias now carmo Pub Games its got all the old fivournies darts donminot tatile fogtiall poot and thontoon Theress nuwt quitreliky

It you ve plaved Back To Skool you maiy woll be wondering who S.im Cruse Wha indeged if theres movern 4Wo listering I can toll vor

## Contact Sam Cruise s:

Aetinally Mierospheres imw 1940 s styke detective quine and it prommeds to be beil chithtiti Amif what where the sutheret did any of vim


DSTRUBUTION

## ALL GAMES GUARANTEED IN STOCK



## 5\% DISCOUNT \& FREE SECURICOR DEUVERY ON ORDERS OVER £40. NOW! <br> EASY ORDERING WTH OUR NEW FREEPOST ADDRESS.

## SINCLAIR

| Commando | 5.95 |
| :---: | :---: |
| Deathwake | 5.95 |
| Zoids | 5.95 |
| Mikie | 5.95 |
| Enigma Force | 7.50 |
| Nomad. | 5.95 |
| Transformers. | 5.95 |
| Blade Runner | 5.95 |
| Yie Ar Kung Fu. | 5.95 |
| Panzadrome | 5.95 |
| Lord of the Rings | 11.20 |
| International Karate | 4.50 |
| 3 Weeks in Paradise | 7.50 |
| Winter Games. | 5.95 |
| Back to Skool | 5.20 |
| Arc of Yesod | 7.50 |
| Tomohawk | 7.50 |
| Saboteur | 6.70 |
| Death Wake | 5.95 |
| Sweevo's World | 5.95 |
| Impossible Mission | 5.95 |
| Bounty Bob | 5.95 |
| Gyroscope | 5.95 |
| Gunfright | 6.70 |
| Arcade Hall of Fame | 7.50 |
| Battle of the Planets | 7.50 |
| Elite | 11.20 |
| Critical Mass | 6.70 |

## SINCLAIR

Gladiators
Swords \& Sorcery 7.50
Sold a Million $\quad 750$
B.C.'s Quest 5.95

Starquake
Fighting Warrior $\quad 5.95 \square$
Sorderon's Shadow _$\quad 7.50 \square$
Wham-the Music Box - $7.50 \square$
Terrormolinos 5.20
Tau-Ceti $5.95 \square$ $7.50 \square$
Exploding Fist - $\quad 7.50$
Never Ending Story
$7.50 \square$
$7.50 \square$
$5.95 \square$
7.50
$5.20 \square$
5.95 口
$7.50 \square$
$5.95 \square$ 7.50 $5.95 \square$ 11.20 6.70 5.20 5.95 5.95 $5.95 \square$
$7.50 \square$
Winter Sports
Sir Fred
d


Runestone 5.95

Rasputin $5.95 \square$ Chimera $2.95 \square$
Willow Pattern 2.95
Hypersports 5.95 -

Showjumping 5.95
Benny Hill 5.95 -

Worm in Paradise _ $\quad 7.50 \square$
Fairlight 7.50

Bored of the Rings $\quad 5.20 \square$
Cosmic Wartoad 5.95 -
30 Games $\quad 7.50$
Southern Bell $\quad 5.95 \square$
Surfchamp $\quad 8.95$ [
Highway Encounter - 5.95 [
Schizofrenia 5.95 [
Vectron 5.95 [
I.D. 6.70 [

International Rugby - 5.95 [
F.A.Cup 5.95

Spy Hunter 5.95 -
Their Finest Hour_ $\quad 7.50$
Artstudio $\quad 11.20 \square$
Peripherals

1. Ram Turbo Interface -_- $13.95 \square$
2. Quickshot II - $6.25 \square$
3. Ram MKII (Kempston) - $7.75 \square$
4. Datex Micro Stick - $9.95 \square$

## NAME

ADDRESS

## POSTCODE

I enclose cheque/P.O. for £
TELEPHONE

Send order to:
UNITSOFT,
FREEPOST,
GLASGOW G1 4BR.

- UK ONLY


Number one in a series of one. Collect the set.


All you latin scholars (amo, amas, amat) will immediately know that the word Opus means work. And that's just what the Opus Discovery now does with the 128 - work. For 149 librae and 49 denarii you get a 250 K disk drive that uses $3 \frac{1}{2}$ inch disks and includes a joystick interface amongst other things. Now parse off and construct a sentence


## Don't think you can doze

 off just 'cos it's Knight Tyme, Mad Game's follow-up to Spellbound. Fast forward into the 25th century to meet our old mate, the Magic Knight aboard his starship. Take a walk around the 50 rooms and 49 planets, rub shoulders with 16 different characters and choose from 50 objects. And you'll still only have toBet you didn't know that the Brazilian Spectrum, the TK 90X from Microdigital is rather different from our own native machine. The NMI Rom error has been fixed and there is no dot crawl just like the 128.
It's also got two added instructions - Trace and UDG - and all the messages are in Portuguese. Technical note for Trainspotters: "Interface incorporado para joystick, de 4 poscoes de movimentacao."

using the
words Opus,
Spectrum and I, Claudius.


## Core! It's the new arcade/adventure

 from A'n'F Software - its first since Chuckie Egg II. All the action takes place in the core of an asteroid, and the aim of the game is to pick up various objects and suss out how to use them. Watch out for Core II too.

You cant go far wrong with Frontlincs. Look what we've got for you this month. An casy-pcasy-do-it-yourself-patent-microdrive kit Wave goodly io messing about with cartridge doctor programs or carefully rethreading that cartridge you acciden-
tally opened. Build our revolutionary repair unit based on ancient Egyptian computer technology and it Il automatically recover duff files, cure bud actors and improve access time
All you've got to do a cut out the shape below and stick it to a piece of stiff black card: Simply place your tautly microdrive under the special repair unit and leave it overnight. Next morning the tape'll work like magic. No pecking, mind you.

$$
2
$$

Fold

111
Trainspotters out there notice the mistake in the Sain Cruse ad in last issue? Thought not you really are sipping you know

Crumbs YS nearly came a cropper last month when Young Ones star Nigel Planer s agents rang up to sound off about issue 2 s cover Luckily they didnt have a log to stand on least not after we sent Vyyan found to deal with em There no pleasing some people
Remember last month I toil you about Sagas new inttated keyboard? il s now been christened the 2001 and its remote controlled so you can wander off to the loo while typing in the YS program pullout. Wipe that smirk off your face - we cont want any smut about using YS as loo roilthis is not yer average bog standard magazine Hmmmmm
isn't it great to be soooco very popular The programmers converting Fairlight to the Commie 64 and Amstrad are using the Fairlight map in YS issue 1 to find their way about Impeccable taste. Enough of all this sickly sugary sweetness Yeurrich' Let s get on with some more skulduggery. PSS is on the warpath again Tactics are to release Commie conversions
Battle of Britain and
Theatre Europe it s also on a manoeuvre to produce Iwo Sima Hrrummph!
Naughty naughty' It you want to know why Activisions
Ballblazer hasn' reared its ugly head yet it s because Lucas Films told the programmers it was t up to scratch and sent them of to have another bach Should tho good when it does arrive?

Oh and heres some really good news its now been decided which games il feature on the Off The Hook tape that il hopefully raise money to help drug addicts Are you steady for it? Here goes
Pitfall II. Cytron. Fall Guy Sam Stoat Ad Astray Splat Mugsy Kong Strikes Back Chequered Flag and Blue Max Great stuff!
And now for the Tasteless Scrooge Award Really does Argus Press Software have to compare its latest compilation of 30 games with those of
Softaid and Off The Hook? And oven worse describe them as miserly At least all the profits of those compilation lames go to a good cruse which Ni moro than you can stay for the prohtis of 30 Games Ohs, and tedorel go the Pandora portable (note lack of cheap smutty cricketing tokes) will be launched at in e end of this war and numerrs ate that il il inge the Aston credit cited for of storage Dons have home without it

And then, , ts they sine is that!
Teresa Maughan

## YS EXCLUSIVE COMPO VIRGINMAKESOFFER YS READERS CANT REFUSE

# E.A. CUP SNATCH 

VICIOUS THUGS smashed their way into the
F.A.'s Headquarters yesterday evening and made off with the F.A. cup.

Elderly caretaker, Oliver Shuffles, was there throughout the drama. He's now recovering from his ordeal.

Oliver, 72, later told police that he'd been threatened by the youths.

## Obscenities

"They shouted obscenities at me", he said, "like, keep yer gob shut Grandad or you'll be into injury time. Know wot we mean?"
Morale in soccer circles is running at an all-time low. But now Virgin Games has stepped in.

## Reward

Virgin is offering a reward of a Minerva football and 30

## Keep your gob shut say swipers

copies of its new game F.A. Cup Football to anybody who can help get these soccer swindlers booked permanently.

## Tie-breaker

And you can help too. Virgin is sending in the F.A. Team - football's answer to the A Team, but it needs a hand in choosing which footballers would make up the best team. Just choose five players who you think would have the best chance of getting the F.A. Cup back into play. Then all you've got to do is complete the tiebreaker in less than 10 words. Fill in the coupon below, or a photocopy, stick it on a postcard and send it to F.A. Cup Compo, YS, 14 Rathbone Place, London W1P 1DE.


It's time we showed these cup crooks the red card. These thugs have scored an owngoal with this little caper. We say send the snatchers off and give 'em extra time.


## YSRULES F.A.

Sportscene and Virgin players will be sent off if they attempt to enter.
The cup draw takes place on the 31st May with no allowance for extra time.
Fall foul of the Editor and you're booked.
c 1983 Warner Bros. Inc. All Rights Reserved Ocean Sotware Limited, 6 Central Street, Manchester M2 SNS. Telephone: 0618326633 Telex 669977 Ocens G
Ocean Software is aviable from selected branches of:




WRITE TO: YOUR SINCLAIR, 14 RATHBONE PLACE, LONDON W1P 1DE<br>A fabulous bundle of software for the star letter \&\& All letters win a YS Badge

## STERN WARNING

At last the cover illustration of Your Sinclair issue 3 has pushed me into writing to you.

Do you really think that the image of computing (to non computees) is enhanced by the childish and revolting cover of your latest issue?
My wife asks, do I have to read horror comics? My nurse says, is this what you look like after on hour at the keyboard?
I would not read this issue in a crowded trainl Perhaps you should advertise your subscription rates with 'sent under plain cover' in case the postman sees what the readers are getting.

## B Stern

## Northwood, Middlesex

He came from Northwood. At first he seemed normal enough, friendly even. But the tell-tale signs were there. Why did he need a nurse? Affer all, he was only suffering from a mild case of fogeyitis. Finally, the full horror downed but by then it was too late. 'Mr' Stern removed his mask and revealed himself to be... a dentist| Ed

I'm still reeling from the YS cover illustration of issue 3.
Now every time I see my Spectrum, I imagine a hand ripping off the rubber membrane to reveal... oh, it's too too horrible... a BBC computer!
I know Tom Stimpson was the culprit, although his name was written so small at the bottom of the contents page, you would hardly let him take the blame.
Why wosn't the identity of this man much bigger, so everyone could see what a devilish genius he is. The roscal hos a mighty talent for artwork if he can stun me like that.

## J Hayes

## Bushey, Herts

Glad someone liked the cover - even if, as many of you pointed out, our visiting reptilian had human eyes and didn't speak with forked tongue. But how could Tom Stimpson tell - for once in her life, T'zer refused to stick her tongue out of someone. Ed

## CLEESED OFF

"95pl 95 flippin' pa month we pay for YSI I mean, what has $Y S$ ever given us?*
Well, there's Frontlines,
T'zers, QL News...
"News ${ }^{2}$
There's Letters, Doodlebugs,
Trainspofters, Hack Free Zone... "Apart from Frontlines, T'zers, QL News, Letters, Doodlebugs, Trainspotters and Hack Free Zone us? ${ }^{*}$

Hex's Heroes, Reviews with some pretty hot scre in tpols. Hit List, Previews, Me of q, $/$ I
Task Force, Maps, Hack ing Away, Microdrivin', He
Hartnell, Cartoons, QL Software, Hard Facts, Adventure Pages.
"If's too smalli" Input/Output, Backlash, great compos, listings...
"There aren't any advertsl"


Zigzag, Spot and Nik?

## MY BRANE HURTS

Recently my Speccy keyboord gave up on me (well, it was only four of the keys actually) but that was bad enough. I thought I'd have to pay $£ 20$ to get it fixed but, in fact, all it cost me was 95 p. I dismantled the Speccy and found the problem - the membrane. So, I wedged a piece of, yes you guessed it, YS under it and now it works perfectly.

## D A Rogers

Ruislip, Middlesex
And this is because YS reaches the parts other mags cannot reach. Ed

## CHEAP HACK

Bonjour gringos (or do 1 mean comrades?). I just had to tell Peter Pan, YS's mild mannered shootin' man, as well as amaze and enthroll the paying public, with my true story (soon to be made into a major TV dramal).
'Twas a Friday evening as it happened, and as we all know, Friday evening everybody gets the urge to do summat really freaky (like build an RS232 lead out of an egg carton). Personally, I went completely loopy and did a bit of the old GBH on me piggy bank. After an hour in Boots which I have no recollection of (what d'you
expect after an hour in therel) I ended up outside three quid worse off. And for this paltry sum I received a MAD game called Spellbound.

What made me defy the laws of tight-fistedness? You yes it was the old smack between the user ports with a screen shot ploy. Anyway on , with the story. This game as it appens was so hard that I ended up committing Sincloir sacrilege and in a fit of rage... Aacoargh... the old Speccy got an exploding fist in the rubber keyboord.

Now at this point things really start to hot up. Suddenly before my eyes oppears the Bosic looder - mysterious eh? Then after a poke around, instead of rejoining the onscreen frolics, it happened. The top of the screen was spewing pixels all over the shop and before my very eyes appeared this messege: "Hello Hockerl"
Well, Spellbound I certainly was. And at $£ 2.99$ that was the cheapest way that I've heard of becoming a hacker. So, in order to prevent undue stress and excitement on those with dickie hearts here is a warning: Status Warning - YS can seriously affect your unhockerliness.

Think the mag is all the usually creepy comments and a few more. Oh yes, and was that 'From Czar Hip' that I sore in ish 3 . I'm shaw that Mr Shore should be informed of what a commie machine is...

## Richard Tucker

## Canterbury, Kent

PS Did you know that the PM's a hacker? (Beeb 2, 9pm)
Yes, you have all the makings of a true hacker in the style of our very own Chris Wood. He too is prone to random acts of violence and to telling naff jokes. Which come to think of it, is well on the way to qualifying the pair of you to become politicians, Gulp. Ed

## NOW YOU SEE IT...

Well you've finally cracked it... the ultimate unfinishable game. Space Invaders without the invadersl Are you trying to start a new craze like crosswords - a page full of

LETTERS
gaps that you have to fill in with the right letters? Your latest attempt at the do-ityourself game trade was Battle Fleet Orion in issue 3. All human life was there - except for the graphics. It's great shooting invisible lasers at invisible invaders - you can't losel

A Trainspotter Award - hal - more like the York Railway Museum!

## P J C Sutcliffe

## Worcester Park, Surrey

PS Could you possibly send me an amendment sheet so I can cheat and see what I'm doing.

Fiendish, isn't it. Of course, we can't claim that the idea's totally original - Elite did have invisible aliens first. It's just that we've taken the concept one stage further and given them invisible lasers. But as usual, all modern art is misunderstood at first, so for all you traditionalists who can't enjoy a good game unless you can see something, an sae will secure a version of Battle Fleet Orion with visible aliens. Just how boring can you getl Ed

## A HUNDRED LINES

What about the Bock To Skool review? The safe isn't where Rachael says. It's on the other side of the room - yes, that thing with the cross on it is no First Aid box. Then there's a real mess on 'how to conker Albert.' You have to drop a stink bomb near a window, not near the tree. And when you knock out Albert (from the top window, incidentally) he doesn't give you any lines. The Ed must've been pressing Rachoel too hard (No such luckl Ed), because she doesn't seem to have played the game for more than an hour or so.

## Jim Routsis

## Athens, Greece

PS Since you'll start making some very clever remarks when you see where I live, here's some help: moussaka, ouzo, sirtaki, Zorbo, opal How about Troubleshootin' Petros for next month?
Ah, Greecel Cradle of civilisation. The wine-dark seas lapping the sun-drenched shores. You may have lost your marbles (for the time being) but think of all you've given to the world besides moussaka, ouzo and those squelchy squid thingies that taste like a Speccy keyboard. Yeuch! Homer gave us the nod, Archimedes the screw, Plato invented the cross-your-heart bra and Demis Roussos the one-man tent. But

TRANSPOTTER AWARD


You are the Ed and I claim my Trainspotter Award. On page 17 of March's issue of (woit for it) fabulous Your Sinclair (pause) in the review of Raiders Of The Lost Ring (1) know where to look) the highly significant overall figure calculated from graphics, playability etc etc has been PRINTed INK white OVER PAPER white. This mokes it
above all we must sing the praises of Greece, the home of... Nana Mouskouril Ed

## RASPUTIN RIP-OFF

I'm writing to you about tape piracy which may not be known in England but it's a way of life to Portugeuse salesmen.

This has its 'advantages' since I never have to pay more for any game than you have to shell out for Finders Keepers. But don't jump to conclusions too soon. Very rarely do we get any playing instructions. Can you image playing a game like Elite without knowing what's going on.
But if this wasn't enough, the weirdest thing happened to me this week.

Two weeks after your exclusive review of Rasputin I saw it in a shop so I rushed in to buy it. It was a good buy, excellent graphics, good animation and so on, just as it was mentioned in your review but... something was wrongl

When I completed the fourth screen, guess what? Where was the fifth screen? Imagine my face when I realised I'd bought a copy of the demo program that came along with the first issue of Your Sinclair. I'd just like you to print something to show the dealers who sold me this game that their attitude is not on.

Oh, before I go, could you let me know if the signature Ed stands for a name? I'm a little confused as I seem to remember an English film on
difficult to spot at a glance which review is worth reading immediately and which to leave till after your tea's raady. Christopher I Sutcliffe Halifax, West Yorkshire PS Why on page 4 of the same ish is there a picture of Esther Rantzen in From The Hip instead of You-know-who? I think we should be told.
That's life, I suppose. As for the Trainspotter Award, I'm afraid you've disqualified yourself. It was indeed printed white on white but you'll find that if you look of the page in a dark room the number appears black Okay, so does the rest of the page, but you can't have everything. Ed

Do you think that this letter deserves a YS Trainspotter Award? (What d'you mean $\mathrm{NOI})$ (What d'you mean by putting comments in brackets? I'm the only one allowed to do that. Ed) After reading through YS 3 for the umpteenth time (nothing much else to do on a

Sunday really, except clean the car, mow the lown, take the dog for a walk etc etc), I suddenly realised what it was that was giving me large brain pains (and no it wosn't my SpecDrum playing at full blost1). Looking of Rachael Smith's article on the drum synthesizer I couldn't help wondering if she has somehow got her menu's in a muddle. Shouldn't the so called Edit menu be renamed as the Pattern Menu, and the so called Pattern menu be renamed the Real time menu (or perhaps my version of the SpecDrum is different to everyone else's?)

## Tim Jarrett

South Norwood, London

> Now I know it looks bad but there's a simple explanation for all this... just give me time to make one up. In the meantime perhaps a Trainspotter Award will keep you happy. And do us o favour - next month mow the dog and take the lawn for a walk. Ed
the telly all about Mr Ed, the talking horse...
Jose Pedro

## Portugal

You're confusedl How d'you think we all feel working on a magazine that's got a talking horse for an editor. Explains a bit about the magazine though, don't you think?
Troubleshootin' Pete. Nayl Ed

## FRIDAY 13TH - PART TWO

Bleeeuurgh! That word just about sums up my thoughts on the Friday The 13th poster in YS 2.
Being too young to see the film, I also consider myself too young to pin this gory poster to my wall.
I don't mind the blood splattered face too much - it's the photo of the Ed in the top left hand corner that revolts me.

## Chris Buxton

## Keighley, W Yorks

PS Why the candles Ed? Had the money in the electric meter run out?
No, it was the Ed's birthdoy!

Well, we've always said he's a real 'Edcase. But now someone wants to kick him up the bum. He can borrow my bootl Troubleshootin' Pete

I most strongly protest about the Friday The 13th feature in YS 2 . I don't know what 'idiot' was responsible for its inclusion but whoever it be, he needs a jolly good kick up the backsidel
I've been a devoted reader of your mag for a long time but if you're going to keep pulting disgusting and horrific items like this in, I'm offl And furthermore, I don't think I'll be alone either! Think about it.

## Anthony Mayers


slap T.P's logs for not noticing your little slip.

## Nic Walde

## Bracknell, Berks

live told him not to mention my slip in the mag. What I wear is my own affair. Ed
What are the qualifications needed to become editor of YS?

## T Dalziel

Aberdeen, Scotland
Genius, pure genius. Oh, and modesty. Ed

Ithink that YS is very rude, cheeky and full of 'sex'. I love it
Simon Woolcott
Glasgow, Scotland
Sext Are you sure it's YS you're reoding? Perhaps the subscription department has started sending it under a plain brown wropper. Ed
By the way, it's still the best mag on the market and I suggest you


Orpheus Ltd., The Smithy, Unit 1, Church Farm, Hatley St. George, Nr. Sandy, Beds. SG19 3HP Tel. Gamlingay ( 0767 ) $51481 / 91$ Telex 817117 ETHGEN G


## Weil fake you beya

## SPECTRUM INTERFACE

...2\%

## ond the Spectrum.

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

## TURBO INTERFACE-NEWLOWPRICE

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 ll's fast action, and with its unique power safety device and a new Reset button, it's even more amazing value at just $£ 1850$.

## 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 16 K Spectrum micro, this handy and inexpensive add-in kit boosts the RAM memory to a powerful 48 K , 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 GUI3 ORE 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 2I or 3口)
$+£ 1$ per order $P+P(£ 3$ Overseas) TOTAL $£$
$\square$ lenclose cheque/postal order $\square$ charge my Access/Visa


Expiry Date $1-1$
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 (Fieet) Ltd (Dept YS), Unit 8, Redfelds Industrial Park, Redheld Lane, Church Crooikham, Aldershot, Hants GU13 ORE, Tet: 0252850085.


LETTERS
there was no Congratulations message upon beating Tenth Dan in Way Of The Exploding Fist. Well this time the gripe is Yie Ar Kung Fu and stand by kiddies, this one's a dingerl

I played the game fos twenty minutes before I reached stage nine, the Grand Master himself, Blues. Now it took quite a bit of pounding before I finally squished his grapes for good and he fell on his back waving his legs in the air (which seems to be a custom amongst defeated people). So, I sat back and waited for maybe a fanfare, a couple of beeps... anything. "So, what did happen?" I hear the entire readership of YS rise up as one man and ask. ("So what did happenf" The YS Readership As One Man). Zilcho, that's what. The game goes on to stage ten which is really the fat guy from stage one in disguise with a few more kicks up his sleeve. So I battled on, and on, and on, and on, and yawn until I reached stage 1011 At which point I saw no reason for prolonging the agony and pulled the plug.

I'm coming round to the opinion that games just aren't worth playing if you don't get anything out of them. I'm not asking for our Cliff singing Congrafulations af the end of each game. But what's wrong with a simple beep. I ask youl Andrew 'when will he stop beating gomes' Hunter Baftersea, London
Okay, let's have a reader's poll on the best ending to a game. Is it Willy with his head down the loo? Or the evil Elvin Atombender at the end of Impossible Mission? Or the ghostly ghoulies going to ground in Nightshade? Or maybe you reckon that it's only ghastly Commie owners who need a pat on the head and a constant accumulation of brownie points to keep 'em concentrating. Remember there's a YS badge waiting for the best letter on the topic. Ed

## LIZARD LIMERICK

There was a young reptile from Ocean,
Who made a great fuss and commotion:
The reason - a silly one, She'd been called an amphibian,
And she'd fold them that she was reptilian.
Yes, I claim a Trainspotter Award for this inexcusable boob. (You'd better get some red dust quick or Diana will probably ensure that there are no more issues of YSI) I am, of course, referring to the $V$ preview in which Diana is described as 'the amphibian who'd been the Visitors' three fingers of firewater later and what did I shee - Ishvar One and Ishvar Two. And boy were they moving - shwaying all over the shop. Can't undershtand it meshelff Ed

## KUNG FU BLUES

To whoever can read properly of YS. (Bring in the cat someone... Ed). Hi there guys and gals, it's me again. Y'know, the kid who wrote in groaning about the fact that
 $\qquad$
$\qquad$

## John McCleave

Yesh, I've done exshactly as you inshtructed and at firsht I had no luck. I'll have a drink to posh the time, I shed. Well,
ambassador'. Now come along, everyone knows that you can't be both a reptile and an amphibian and the Visitors are definitely reptiles.

Having got that off my chest - ugh, don't know what it was doing there in the first place oi'd loike tuh say 'ow much oi enjoyed yur mag. 'Twere first toime as what oi'd bought it, 'twill not be the larst. (Dun wonders for yur Inglish too, oi'm 'appy t'seel Ed).
Garry Lancaster
Downend, Bristol
You're right about the reptile But stop and think for a while, If you look at me,
I think you'll agree,
Amphibians are much more my style.' Ed.

## slegert delay

I'm one in ten million 'cos I have won a Trainspotter Award. My friends all think I'm a superhero. "Wow" they say, "We've seen your name inYS. Cor, bet you're dead chuffed sitting there just looking at the spot on the wall where you've got it framed." I just um'n'arr. And d'you know why I um'n'orr. (A speech impediment? Ed). 'Cos I haven't got a certificate to look at!

Is all this sham I have to suffer part of the test to prove that I'm truly fit to have the award bestowed on me?

Please, please, please send me my certificate. The postie is getting sick of me grabbing him by the scruff and accusing him of popping it through the wrong door. If I have to wait any longer the doctor's going to take me off the tablets. I can't go on like this - life's getting on top of me. I'm starting to take it out on my Speccy and it's not its fault. My
hands are all of a shake, my typing is suffering, my family is suffering, I'm suffering. HELP.

## M Sleight

## Bentley, South Yorkshire

PS Do you want me to send the postage or summat?
Well, every little helps, of course . . . l'd like to blame this terrible delay on your Trainspotter Award Evaluation Department, but we haven't got one. I wouldn't mind laying the blame on the recent postal strike . . . but there hasn't been one. Even British Rail would do as a scapegoat but for the life of me I can't think why it'd be their fault. No, there's only one thing for it - I'm gonna have to bite the bullet and lay the blame on the one person who is responsible. That's right I'll have to come clean. It was . . Troubleshootin' Pete. Why haven't you sent out the Trainspotter Awards, Pefe? Ed. Um, Arr... T.P.

## BOUGHT IT SKIPPER

Has anyone else come across the annoying bugs that probably make Spitfire 40 impossible?

The flying hours that are displayed never get past 59 minutes - the hours always remain at zero. Also, in 'practice' mode, the flying hours aren't added on as it says in the instructions.
Since medals and ranks probably depend on flying hours, I can't see any way of climbing the ranks. Is it just my copy or a standard bug? I've been aloft for hours without so much as a rise in rank.

## David Leitch

## Methilhill, Fife

Cer-ikey. Sounds like Gerry's sent in the gremlins, skipper. Befter get on the jolly old


Keep on doodling - it's a doddlel Send your cartoons to Doodlebugs, YS, 14 Rothbone Ploce, London WIP 1DE. There's a prize of a new game for each cartoon prinled.

blower to Mirrorsoft, what? Crackle, hiss, Roger, hiss, hiss, crackle, over, hiss and out. Seems that the first batch of 200 to wing its way out of Mirrorsoft did contain a fault. The hours displayed on your instrument panel show only the minutes, not the hours - until you've clocked up four hours flying time. But although it doesn't show them, the program is aware of your progress and should reward you with a higher rank when you've earned it. Medals, by the way, are dependent on the number of kills you make.

If the bug bothers you, send your copy back to Mirrorsoff, who've promised to replace it for you. Okay, old chap?
Briefing over. Ed

## 12 ATE

l've just bought a Spectrum 1281

I'm quite satisfied with the improvements except (here we go) for one or two 'bugs'.
There's still no joystick port and in 128 K Basic mode, you can't use the Basic command keys.

Other than that I find that the sound quality is on a par with the (spit, spit) Commie 64 - really fantastic. And the onscreen menu with its five modes (tope loader, 128K Basic, calculator, 48K Basic and tape tester) is really something.

If Sinclair keeps up this standord, what will come next?

## D G Ward

## Sinfin Moor, Derby

PS The looding time for D.T.'s 128 Supertest took only thirteen minutes.
PPS Are there any books on the 128 yet?

It's good to hear from a satisfied customer. Everyone at Castle Rathbone is equally keen on the 128 with one or two qualifications. At $£ 180$ it's too expensive, especially for anyone considering upgrading from a 48 K Speccy.
Compatibility is a problem. Besides Elite which we mentioned last month, many more incompatible games have come to light. Poor old Firebird's come in for an especial pasting - not only will the 48 K version of Rosputin not work, but the 128 K version, which was written on a Spanish machine, wouldn't run on the British version. Or at least it wouldn't of the launch of the machine. And yes, there should've been a joystick port - ofter all, the computer's
being marketed here as a games machine. Sinclair Research argues that there's no industry standard but that's just not true. It's just that the standard is not the one set by Sinclair but by Kempston. Anyway, here are a few of the things other readers would've welcomed. Ed

I've just seen Uncle Clive on the telly grinning with his 128 K Speccy. Hmmm, could have been improved, I thought to myself when I read about it in the paper the next day. How about pixel attributes? That was the major let-down of the original Speccy. It would've only taken 18 K which is (quick calculator out) 14.0625 per cent of the new Speccy's memory. And shock, horror the keypad's sold as a peripheral for £19.95. That's grossly overpriced for something that's almost useless.

## D Garner

## Harrogate, Yorkshire

Hos Clive got it right? By this I mean the Speccy 128. What every self-respecting owner clamours for are the following - professional keyboard, Centronics and RS232 ports, dual 9 pin joystick ports, RGB output, disk drive storage os standard, mouse and touch tablet connections, proper hires screen with no colour attribute problems, massive one megabyte RAM, multitasking capabilities, true hi-fi sound, midi interface, full extended version of Basic, other languages available on ROM, CPM compatibility, dual processor, user definable keys, direct modem communications, text to speech conversion, voice recognition, full control of processors via assembler/ disassembler/monitor ROMs, bubble memory, GEM type management system, anologue port, reset switch, light pen connection, user port, various packages such as business and ort programs (Uncle Tom Cobbley? Ed); of course, not necessarily in that order.

## Darren Starkey

## Worthing, West Sussex

And all for under fifty quid, eh? Ed

When I read your review of the Spanish 128K Spectrum I dreaded the thought of something like that coming onto the British market - and now it has! As the Spectrum is a games computer how could it benefit from a separate numeric keypad, an RS232 or a midi port, or a connection for an RGB monitor? Okay, so Sir Clive's got some things right, like the sound coming out of
the television speaker, but here's a picture of what l'd have rather seen.
Alexander Liddell Edinburgh, Scotland

Now I wonder where you got that idea from? Perhaps it should be called the Specstrod! Still, it's interesting that no-one's asked for a built-in monitor. Ed


## BABEY TALK

I'm writing because of on itty bitty problem with Rambo. Every time I get to the despicably dirty commie copter I shoot it and the game crashes or NEWS itself. Please can you help?
Stevey Babey V.c.
Hawick, Roxburghshire
I have a copy of Rambo and when I try to shoot the Russian helicopter the game crashes. I returned the copy to the shop and the new copy does the same. What can I do?

## Chris Walker

## Thurcroft, S Yorkshire

I dunno, some people are never satisfied. First you want an ending and then when you get one you're still not happy. This one does sound like a Commie plot - perhaps the next 'reader' had a hand in it. Ed

You may be surprised to know that I'm not a Spectrum owner. In fact, I'm the exact opposite, a Commodore 64 owner and damn proud of itl I don't make - habit of writing to or even reading Spectrum magazines but as I was flicking through my Speccy friend, Craig
Gallagher's copy while I was waiting for one of his games to load (yawn) I came across the most slanderous, offensive and deeply disturbing letter I have ever seen. Or rather it was the reply to the letter that shocked me.
Briefly there was this boy who didn't know whether to buy a Spectrum, a C64 or a

Beeb, so his friend wrote to your magazine asking for advice on how to persuade him to buy a Spectrum. And that moron who's in charge of the letter section (Who he? Ed) dared to say the choice was easy as the Spectrum had the best graphics, the best games, in fact the best everythingl This is completely untrue - have you gone completely bonkers?

I will now simply state some facts that no-one can argue with.

1) The Commodore has a SID chip which can create the most amozing sound effect...
2) Commodore graphics and colours are among the most outstanding, if not the most outstanding in the home micro market, while the Spectrum has jerky, flickery sprites.
3) The Commodore moy not have as wide a selection of games as the Spectrum but it makes up for this in quality. I draw your attention to Hypersports, Way Of The Exploding Fist and Monty On The Run while the Spectrum can only boast such games as Horace Goes Ski-ing and Chequered Flag... (That's it. Pass the red pen... there's another three pages of these 'facts'. Ed)
Mark Devlin age 14 Troon, Ayrshire
I'm stoying out of this but you can thank me for not printing your full address. You never know, you may just reach 15. Unless, of course, your Commie friends see your shiny new Your Sinclair badge. They'll think you're a defector, not just defective. Ed


## SUBSCRIBE NOW (OR WE SHOOT THE EDITOR!)



Ed's days are numbered! Masked marauders burst into the YS office and carried him off to a grotty room somewhere in the Isle of Dogs. We've recelved a ransom note saying that YS readers must subscribe to the magazine or the Ed gets it:
Now £15 is not much to ask for a man's life - even if it is only our Editor - so please, send in your subscription or the post of Editor will shortly become vacant. How can you resist with this picture tugging at your purse strings?

Send your subscription (sorry - ransom money) to Your Sinclair Subs, 14 Rathbone Place, London W1P 1DE.
(Then again, but only if you send in enough subscriptions and ask nicely, we could just get them to shoot him anyway.)



> Hex is back with a humungus number of hints ' $n$ ' tips for hack free heroics.

click, bzzzzt. (Hello, this iz the Indernational Operador, what number please?) Gimme Rathbone Hill 631 1433.
England. (Puddin' you through.)
Hello, fruitcakes! Here I am in sunny Barbados. Ahhhh. The hot sun on me IC's, the warm smell of seaweed and sunoil in me olfactory receptors...the sand betwoxt me jolly old tentacles. This is the life. It's about time those folks at Rathbone Hill gave me a holiday. They had to really, 'cos my circuits don't work in the cold and atter it snowed four inches my tentacles froze up. And there's nothing more painful than frozen tentacies...

Anyroad-up, here I am again, by the wonders of satellite communication, live and geo-stationary from sunnier climes. Plunging right in there, I have here the truly final solution to Marsport, Frankie Goes To Hollywood, Tau Ceb, Monty On The Run, Yie Ar Kung Fu plus por'nhints on Saboteur, Transformers and Rambo.

But first ir's Marsport - solution 3 supplied by my pal Paul Harkin. Here we'gol The home stretch. Hit it "Phase II. Now you can enter all the 'restricted' doors and you'll find the codices $T, W$, $E, 1,6$, and $N$. To unlock the BAR on Farr E3 you need the Mars Map - Mars Bar - geddit?" Tchl Groan... "You'll find within the tea and strainer. Take the tea, the insect from Gill D4 and the pointe from the Oratory on Byer level. Put them all in a factor unit to get the antidote. This'll allow you access through the Danger room on Coma E2. To get through the plant room on Joly H4, use the geranium from the Hothouse. To enter the Boller room on Joly 14 use the kettle as a key. Get the heimet from in here and the topee from Byer level.
"Because these are alien items, the
heralds come after you too! Put them both in a factor unit to get the artifact which is actually a Starlord's Power Booster. Put this and the power gun Into a factor unit to receive the hyper gun. (This shoots blue bolts of energy Instead of red ones.) The hyper gun kills Sept Warlords as well as warriors, so kill both warlords (one on laxa and one on Elis) to get two more codices, D and U . The sentry in the sanctum needs five pairs for entry. Follow this procedure:-
Factorise -
mute and manifesto strainer and sun chart projector and charcoal cake and lead sult

## $=$ e-token

 = $n$-token $=\mathrm{t}$-token $=r$-token earmuffs and eyeshield $=y$-token e+n+t+r+y = ENTRY, see?Now factorise all the tokens to get the sanctum key. Then go to the sanctum, put the key in the unit and phase II is complete.
"Phase lll - the home straight. To finish the game, you have to make use of the codices. If you search around you'll find a Vidtex screen which says 7 from 10 makes BIGHEAD'. This is a cryptic clue to your escape route. The codices are found on these levels: Alba - N, Byer - H, Coma - I, Daly - W, Elis - U, Fart - T, Gill - 6, Hale-G, laxa - D and Joly -E.
"Now when you take the letters of the word BIGHEAD, you get the initial of one of the levels:
codex
$B$ (Byer) H
1 (laxa) D
$G$ (GIII) 6
H (Hale) $\mathbf{a}$
E (Elis) U
A (Alba) N
D (Daly) W
"Therefore the clue is H D6 GUN W. This means you should go to D6 on Hale level, with plans of course, and use your gun to shoot the west wall. The wall will then flash and prestol an up tube appears. Go from here to Coma Level sector $\mathbb{D}$. The spacefield is just around the comer, The Siege Of Earth Continues - Forward to Fornax!' And that, as they say, is that."

Well done, Paul, a truly comprehensive solution. Give him a big hand. What's that? You've only got small hands? Never mind!

Frankie's up next next, that's to say the golden boys of hype-rock Frankie Goes To Hollywood, as played by Nik Taylor. (You oughta be a rock star with a name like that!) Relax 'cos here we go. (Tingl Hmmmmmmmmmmml)
"The Murder - the body is always at the end of the street. Look for a house with a moneybag on the table between doors, then the body is in the room to the right.
"The wedding ring will stop your pleasure points draining in the war and cybernetic breakout rooms. The flak jacket will protect you from the bullets in the ZTT room. The security pass and the floppy disk will allow you to complete the terminal room, but you may need more than one floppy disk to boot the information into the computer. If you boot the disk, use the pass to gain access to the other terminals. Terminal One $=$ Shooting Gallery, Terminal Two = Raid Over Merseyside and Terminal Three $=$ Cybernetic Breakout.
"The Corridors Of Power - the important thing to remember is that you are not in a conventional maze. The doors to the rooms are normal at the top of the end of the corridors. You can only depart from the corridors of power

If you're hit by a fireball or you enter a room.
"The War Room - when you enter this room move to the far right. As soon as the symbols appear, shoot at them. The first time you hit a symbol you haven't hit before then the pleasure bar relevant to that symbol goes up.
"The ZTT Room - either wear the flak jacket or proceed as follows.
Move the far left of the room and start shooting. Miraculously the wall will be shot away even though you aren't facing it. If you complete the purzle you can go to the Shooting Gallery or Talking Heads by pressing one of the three buttons at the bottom of the screen.
"Talking Heads - just shoot out the top blocks and shoot through them until you've to move to avoid being shot... Just a minute. Isn't this the biggest video chestnut hint of all time? You remember Space Invaders? Ha ha ha ha ha ha ha ha... "... Then move to the bottom of the screen and quickly back up to the top and start shooting. By alternating between the top of the screen and the bottom It's possible to slowly chip away the Russian's points."

Thanks Nick and now it's back to my little Pleasure Dome.... phzzzzi! Okay, my petite vegetable samosas, my tiny lifte cheese on toasts.... that's all the megahints, now over to a few smaller letters. Hellocoo doowwn thereeeeel Andrew Ostier of Somerset (pro. Zummerzet) tells me that Tau Cett is a piece of.... let's say cake for the sake of argument, shall we? Here's ze tips. "Dock with supply centers as often as posslble and save the game to tape after equipping. Travel at top speed if you can, but it something starts shooting at you, stop and shoot it before you run into trouble. For hexample..." (chortie!) "...if Hunters start shooting at you when you come off a jump pad, don't run to the city, 'cos you'll probably run into a fortress or something. Don't shoot at harmiess
bulldings or they won't let you dock. Don't risk flying at night, just dock and use the walt command a few times. If you're going to use missiles against Fortresses or Hunter mark III's, make sure you're very close, so they can't use their AMM's. Use the notepad to keep a check on what reactor substations you've visited. Beware that City up in the far Northill" Thanox Andrew. Incidentally, the name of the game is pronounced 'Tou' as in 'ouch' and 'Set-eye'. Amazing. English lessons tool is there a limit to what this chummy can do in one column? (In a word, YesiEd.) Andrew Proctor? Of Glasgow? "Dear Death..." Huh? "Ghostbusters. I can't get into the temple of Zuul. Please help." You call me Death and you expect me to help? Well you're right, I will. Edge your man up to the Marshmallow Man's feet, until he's as close as you can get without touching. Then move with him when he hops back. Simple eh, Deathbreath?

And finally a quick punch from Karl Winterbottom (snowing hard in Clywd is it?) and Richard Price of Clywd, who really know Yie Ar Kung Fu. "I finally beat blues by jumping to the right as soon as the game started; then I kept doing squat punches to the stomach. This does the job, so my hi-score is 308,500 . "Nice going, Kart, but no cigar because you didn't send your picture with your hi-scorel No pix, no Hex's Heroes!
Puh-lecse, when you send in a hiscore, send me a picture to print with it. Look, I don't care what you look like, and neither do the other readers, but il you want to have your hi-score registered on Hex's Heroes, you musi send me a pic.

Okie dokie, it's time to go. But keep those arcade hints coming, let's keep the information moving. You know the address. Do it now

Oh, by the way my fave games of the moment are Transformers, Tau Cets, and Elie, and I won't hear a word said against them.
Oh and another thing... (Click bzzzt)

## HEXS HEROES

Bzzzt Click... Look, so's not to waste the International Operator's time III make it briet. Here are Hex's Herces (tootly toot-toott).

First we have an outsider... sorry, The Outsider", Gavin Sneddon. On the 20th of January 1986 at 4.55 pm , not a hack or poke (sharp intake of breath) in sight, Commander Gavin has reached - Elite - status on the game of the same illustrious monika, and by legal means, tool He says "the main requirements for aspiring Elite Commanders is perseverance, it takes a lot of playing to reach this status." Excellent. Tm sending a squad of Thargoids over to see you. Sort that lot outl

Pedro Pinto (Que?) of Portugal has a hyperscore on Hypersports. It's about time we had a scorer on that game. Bit of a tough nut to crack is it, chummies?

And finally Andrew Carter has 34-0 on Match Day...Yknow, that reminds me of a funny story. Sir All Ramsey, one-time manager of Man Utd and England was asked by a customs official what he did for a living, and his diction was so relaxed the man wrote down "Fruit-bolee" Ha ha ha ha ha... Ahem.

Well done chaps, tune in next month for more hints and tips, comment and acid tongue and pen, plus a funny story involving the time when me, George Best and this Swedish laserprinter...
(Sorry sir, your time is up.)
(click, brmmermmertir...)


Gavin Sneddon
Elite/Eite status' reached


Pedro Pinto Hypersports/450,536


Andrew Carter Match Day/34-0 (amateur)

## RAMEO

## Counter-intelligence by Phil Golders of Piddletrenthide

Run like blazes and you may not have to fire a shot. Serpentine running (zig-rag to you, smartses) is the order of the day. Top $0^{\prime}$ the world, Na!

Watch for a big H, as this is where the chopper'l land. You've got to make your way back here with your buddies and wall for a lift outa here. Memorise this spot when you find it - that's not too taxing. musclehead!

Hoy, guass what? When you get a rocker launcher you can nuke the trees as well. Big deal. No really, it can be handy it there's a slimy Commie (no, not a 64 silly) hiding behind one!

- Ratty-tat-tat The machine gun is an essental plece of kit for any aspiring Rambo. Find it north and east from your start position. Neutralise them Commies, soldien!


The POW camp is to the north. Thar's where your buddies are being held.

Don't shoot everything that moves, as you'll attract attention to yourself. (Somebody tell that to Stallone!) One shot and the whole flippin' army will be on your case! Gung-Ho!

Ubilise the grenades carefully, as their trajectory is a iltie hard to range accurately. Not for close combatt Who is this Schwarzenegger anyway?

The rocket launcher is good for posing after you've olled your muscies. But it also comes in quite handy when you're in the chopper. Find it to the north. Go for it. blockheadl

## TRANSFORMI;S

Tints ' $n$ ' hips by your everlovin' Hex himself.

Flying up and over the planet's surface is faster and sater than trying to walk out. Fly whenever you can, especially up and right - youll find a pumbe plece on top that way!

Deploy your troops with care. Spread 'em around the surface so you stand more of a chance of finding purzie pieces.

Recharge regularly - your shields will soon wear down if you don'ti li's also nice to have a breather occasionally, or change characters.


Beware low flying - you can easily bump into a plece of plattorm hiding just out of screen. Many's the time I bumped into one of those fliating ones by not concentrating!

When faced with two adversaries trying to sandwich you, transform into a vehicle and barge through one of them to freedom. That way theylishoot over your head.

When you're recharging or reloading in a defensa-pod, the timer stops. Haht A good time to rearrange your forces or concoct a fresh strategy You betchal

## SRBuIsir

## Intelligence by James Slater from York

Big brother's watching you. The video cameras follow you around and fire at you.

Here's the wespon you're carrying. Athough using a weapon to kill a guard scores fewer points, ir's safer than punching or kicking tim!

Energy level. Ir's best to keep an eye on this, especially with those guard dogs roaming around. To restore your energy, go to a room where there are no hazards and your unergy will build up.


Here's looking at you, kid. As soon as you come into the room, watch the guard hell come towards you and either kick you or throw something, But il he holds up his arms, duck 'cos he's ready to take a potshot at you.

Watch the top or bottom of a ladder before climbing onto it - there may be a door blocking it. You can eventually open these doors by accessing the computer.

Ir's the cash that counts - your score is measured in sponduliks. You score points for kllling guards, but you'll get nothing for knocking off the dogs. Still, if you want the RSPCA after you, press Down and fire.
ance sane tou ve Bees
Waltina For Walting For KLEINS
CENTRAL WAREHOUSB OUILET
Under ONE gisent roof, hundreds of nationally advertised Household Appliances.

## NEW SAMPL.ES

Vecuum Cleaners
Salesmen'o samples
all makes from $\$ 5.95$
Wathers A froners New family size only $\$ 19$ ABC Spinnes. Sensational at only $\$ 35$ OA heatert

- frec installstion - from $\$ 30$

Odds and Ends. Famous makes. Fredelivery
No finance company to deal with
300 N Madivon Rd Wabesh 5148

## OPEN SUNDAY

Buy direct $\quad$ Factory sumples
Bedroom sets . . . . . . . . . . . $\$ 29$ up
Putorn $\$ 19$ up Bedroom sets . . . . . . . . . . . . . . . . $\$ 19-\$ 19$ up Trade-in a repossessed formiture vvallable
Schwan \& Co 4077 Cottuge Rd w.
CHEV '39 Seden $\$ 400$
Trunk, heates, vecuum gear shif, bumper guands, original fin. Priced far below matket. Pifivate

Krueger
Humboldt 9226
CODE numbers seeded for Whrelle
plopes.
Reply Box 63980
St. Louis \$4.75 Detrolt \$5 Ft Weyne \$3 Columbut $\$ 6$

De Luke Motor Staget 210 Millwaike N Whe Central 3131

Wil exchange dental work for ased cat. JF Bell

Dresel 4113
ALL AMERICAN BUS
TRAVEL CO.
Free pillow
Fire meals

Atlants $\$ 10 \mathrm{o} / \mathrm{m} \quad \$ 14.50 \mathrm{mh}$
LOWEST ROUND TRIP FARES IN THE STATE

SPGCLAL SALE
Now - from enly $\$ 29.50$ New, de luxe, water heaters.
217 w Washingtonens. Fst. Frenklin 1300
Net tetponsible for debts except thove contrected by myself.
JSchaeffer
3351 Wanhlington

## bargans

Fluffy Fork Ple Sport Fels.
Regalar $\$ 1.49$ Values. The all purpose
cavul fele te Riteck, Breen, Soldies Wine, Red, Kelly Beige,
Four head slas: $21 / 4223$. No= ONLY stc

Ethowet
200 N Oak - Sheridan Rd Sheriden 8641
5000 SINCLAIR CSa, for me
Going cheap. Batteries not included.

## aUTO LOANS

CASH IN TEN MINUTES ON YOUR aUTO OR TRUCK 20 MONTHS TO PAY
Deal direct with owners. Private consultation roems. HIRSCIH-DAVIS 20 yean in the ame location
6213 WSTALLWORTHSTHarrison 2217
VISIT Paula'n Puppyland - Air
Conditioned. All pop. breeds. 100 s to pick from,

6162 N Herlem Av.
STENOGRAPHERS
Complete secretarial courses. Learn by sctual work on switchbourds.
Free catalor
Alse 'Brush up your Complometer'
'Complete X-ray Course'
american bus college
20 E Michigan
Would anyone having knowledge of the
whereabouts of Joe 'Hag Nose' Morell
please tell his mum cos his tes's resdy
watTZ, fos trot, rhumbs. Private lessens. 7 for $\$ 5$. No appt. nec.
Rm. $21 \quad 316 \mathrm{~N}$ Clarksen Whdeys $10-5$

## ALLIED BEAUTY ACADEMY 32E LAKEST

MANICURING COURSE $\$ 17.50$
jobs writint Itarn in 3 weeks.
Incly
CONFIDENTLAL ENQUIRES
UNDERTAKEN
Contser Sam Cruise Fairfan 1337
PENTHOUSE - fiving room + kitchenet
odrooms Al private roof tandra,
Ice wates Complitetivike.
Asan address of distinction.
35 w Delaware Franklin 3911
Sinclair CS Sedan. 4 doot Fally silr conditioned. Running boards cutre. This cay will pass for nex, Any coloer poe like, as long as it's white

Reply Box 63980

## WINTER CONT SALEI

Hood conts, wrap arounds, warm fleeces, hewvily interlined, couts with lined snew panta to match. Sites $12-20$
From \$14.98. Vhlue \$25

## EMERSON COAT CO.

2342 W CENTRAL AW.

## $\$ 1,000,000$

In dimmends WNNTEDI
The Vrry Highest Prices will be pald *Tre alse purchese Ofd Gold \& Puwn Tickets*
YOU RECEIVE CASII IMMEDIATELY US Dismond Syndicate, 35 N Pulaski Rd.

Fsumonavic coivenienuy rocatea,
Excellent cuisine. Aftrsctive monthly tates. Every room with private bath. Coffee shop. Barber \& besuty shop, 4100 La Salle Nth Fairfax 6265

CASABLANCA nite-spot needs planlats. Apply Rick: Box 63980

I290 PINE GROVE PLAZA Modern de luse 6-7 rm apts. Newly decorated. Electric elevator. Le closets, $x$. lite

ARTIFICIAL Iet - Man's; left,


## PART share in 1938 Cab-505. Fy sole

 $\$ 150$ Dual $\$ 3.50$ Evenints.Ont Lame 1904
FOR SALE 20 Left ahoes, size $\mathrm{J}^{\prime} / 2-8$. Going chesp. Offert Delsware 7173

LABORATORY equipment for sute - chemicals, scales ete. Perf. cond. Calumet 2071

4 yr old saddle horse, Weft mannered.
Sacrifice. Quick sale. Offers.
Mr Edere
Onk Park 1397
TEETH lost - partial plate.
WT9h St. Reward Wellingten 2354
DRIVING to Deaves, Chejenne vif
Oklahome shortly. The 2 share expersaes
Kedfle 4031
Gas driven calculaton; adding machloes: cash registert \& ZXBIs. No ressomable offets refused.
Miker Second Hand Bargains.
15 Grand Av (nr Fisna)
OLDSMOBILE 38 Del. Thk. Sed. $\$ 550$
4 door inodel. Hestes, very clear.
545 down.
Mayerling Motons 680024 th \& Michlgan
ALESMAN - 44. Agretsivg.
Tide-fine to work into full-ai>
Heve car Andersoke frulig 4519
TrOODL_AWN $1362-2$ rins. Pri. entrance. Newly firm. A decer Frigifeirs.
Get fand. 53-56
Quick drying cement supplied.
No questions ssked. Apply Box 1142
Yigg hi-sch grad. desires off. wk or
reception. Hollycourt 7313

## STUDEBAKER

1940 President Sedsa.
Gleaming grape-tone maroon finish. Equipment includes radio, climatizer ete. Exceptonally low mileage. Like new $\$ 895$ 2435 需 WAAASH Independtner 3310
City Officials bought and sold Boz 2217

## INDIGESTION

MAY AFFECT THE HEART
At the firt sign of distress, simart mea and women depend on CESERS FAIENI REMBDY mafr of fastent acting medicine for acid indigeation, If the first dose doennt prove cifesi and teceive DoURIL.E moner hack. 25

New it used violins A cases. Bargain prices. Telescopic sights optional. 423 SClerk Eive.

Opea eves.
PACKARD "40 delaxe Seden $\$ 750$ Used 5 mithe. 4dr trunk. Rellio \& hestes, Liftrter fakevic= 307

## Bewty Operators Trained at

 DE VERE UNIVERSITY sre In the Scate's letding salons. We take pride in their wuccess. fates, terms cetaleg en requert. No abliguelon.Deyfevening clates
De VERE 50 E RANDOLPH ELVD.
7h Floor
BLACKSTON PK $3125-1 / 2 / 3 \mathrm{rm}$ Hitg
well furn. newly dec. $\$ 3.75-55 \mathrm{up}$
HAYLEY, thw e. Erle xums
PS. Will you help me with my lines Replr Bes 63950
Elis i535 - 2 mm basement apt. Kit elec frig. Frice ges \$5-59
LAUNDRESS Good shirt irooet Cleaning, Fast morkes. Triangle 4200
Can't get scross river in Omnicale? You need the Extennion Kit.

Reply Boz 63980
Mens Vests \$1.98 Cordurogs French backa; moleslin fabaics. Dark colours, all creeliendy inilored a strongly reinforced for mal writ Sires 10-42
No Mall or Fhone orders - none delivered.
DACRES BARGAIN BASEMENT
139 N CLARKST
BANT, papec \$3 up per rmincl. papes.
Bathe ensmelled. Fiater; patch.
Independence 7666
1809 ased theater Beati. Atso thester

CATAFULT recofred for Skpoldaze plajer Reply Bos 63980



 SLOPERS MytaLqoges EARLSNOODMIEY
(back of foes Drus Stete)

FULLY FASHIONED RAYON
ouTsize tiosi
All well reinforced, anit to fit, whit atreich tops Iriegularn of 39 cyaloe
5 pairs Si. Sites 9 to 11

## THRUFTFOODMART

Diced frulat - per ib .....
Surat pest, ifind. 6 cans.
Sugar pest, sihind. 6 can
Teisballs -100 in box.
Prestarn hams - per lb
12S LКSALLEST: $9-9$

Le roems;
ot ahower thewes 200 N Onl
$\begin{array}{r}5009 \\ \text { Goteg ches } \\ \hline\end{array}$

CASH W

Elite/27.95
Rachael What sort of being is Bomb Jack? He doesn't so much fly as leap around. And he's no more than knee high to a grasshopper. Come to think of it, a grasshopper's what he most resembles. So what sort of hero is this bounding, bomb collecting midget? The answer is an arcade hero - and now he's let loose in your micro courtesy of conversion kings, Elite.

Let's just say that Bomb Jack probably shouldn't be as addictive as it is. After all, arcade games are designed not to last too long because they're always greedy for the next meal of ten pences. But then again, they're also designed to make you want to play again .... and again and again and again. And that's where Bomb Jack scores, because each time you lose your final life you're convinced that next time you can clear that screen.

Here's how it works. Your caped crusader bounces all over a world provided with convenient plafforms. You launch him into the air with a quick press on the fire button, trying to pass over bombs as you fly. Clear a screen of explosives and on to the next,
more difficult location. The forces of evil are out to stop you though, from the first flapping bird to the little soidiers who eventually reach the ground to metamorphose into something much nastier.

All of which neglects to mention the scoring. There's a fine bit of strategy involved in maximising your points - and If ever there was a high score freak's dream, this is it The first thing to know is that a bomb that's fizzing is worth 200 rather than 100 points. Collect one of these and it sets off the next one in the sequence, so a row of four can be worth 400 or 800 points depending on whether it's ignited or not. It's up to you to plan a route. There are special bonuses for collecting 20 or more sparking bombs and there are also Bonus coins that float in for you to snatch, plus Extra lives coins and Power balls. These paralyse the nasties for a while letting you eliminate them very useful when air space becomes too full to fly with comfort!
Bomb Jack, it must be said, isn't the easiest little critter to control. Getting him up is simple, but then you'll need your wits about you to steer him as he speeds around. Left
and right swerve his flight while an extra boost of height comes from pressing up and a speedier descent is aided by down. If you need an immediate halt while in the air just hit the fire button again, and rapidly tapping it will make him hover. You'll need lots of practice to get your pilot's certificate though - and a joystick won't do any harm ether! While Elite has considerately included a turbo mode for the keyboard player - it simulates a constantlypressed fire button - a stick makes life much easier.

There you have it, then - a simple idea that's one hundred per cent addictive. The graphics are great with an amusingly animated sprite for your heroic mite, even though the monochrome figures are sometimes a little hard to see against the coloured backgrounds. Amplify the sound to get the most from the spot effects and you too will soon be battling to get your name in the high score table. Bomb Jack is most certainly a blast!


When you reach the ground the guards reveal themselves for what they truly are - woms. And inluckily they can fly. Eves worse are the bouncing
balls. The only thing to do at a time like this is to pray for a power pili thatil froeze them so you can eat them.


To halp you get started here's a route round the firat screen to maimise your esgere. Row A manns bounding from between the bombs below to lave them till later. Don 1 go 100
high for row B or youll get the bomb in the top right hand corner too early. Getting across to C can cause probiems- best bet in to weit for a Power Pill and eliminate the
enerny. Simlar probloms will occur with D but Enemy. Simiar probbems wil occur with D but forces on row f though and then up, up and ansy to Q, collecting the bombs from right to
left. Achieve all that and your score wil be doubled, plus bonuses, so you'll be surrounded by people manting to know you, asked out to perties every night, Kok sand in
people's faces.


The gamesplayers they couldn't tame

- Max Phillips, Rachael I Smith, Rick Robson, Luke C and Gwyn Hughes - return to review all the latest releases.


## Melbourne House/E8.95

Rachael Hey, boss, come quick - I tinks I got news for you. You know dey said Mugsy was expected back in town. Well, here he is. An' you said you toit he was never comin' back.

Seems he ain't exactly got smart while he wuz in de slammer. Oh sure - yes - he still looks great as ever. A real snappy dresser - but, boy, does he take forever to look pretty as a picture. You'd tink nowadays that they could hide all de time he takes to appear in public. Reminds me of how dat Hobbit gang used to just sorta get filled in whenever dey came on de scene - hey boss? Hur - hur - hur!

Yeah, but lookin' good don't make up for a lack of brains, like you always tell me, and Mugsy's commands remain strictly monosyl.... monyslyb. one word at a time. You see, he tinks de smart ting to get into is booze, and he's got dis henchmen who says tings like 'How many boys da ya wanna hire, 0,1 or 2?'. Ha, da dummy can't even speak good English! So Mugsy sits dere, mumbling dese answers wid all de chutzpah of Marlon Brando on downers, an' dependin' on his decisions he can watch his fortunes grow or go.

Of course it's never so simple as dat and dere are rival gangs to be considered and booze parlours to buy and molls to keep de customers... satisfied. And even though he's payin' off de Feds he'll still get trouble if they're not satisfied. Seems dis sidekick of his ain't too hot wid a rod, so Mugsy has to do all his own shootin', and' hang me, if it ain't like some penny arcade amusement, and none too difficult at that. Then it's back to de day to day of deciding

whether to rub out the opposition an' de rest.
Well, in no time a year's gone by and the financial report comes in, then it's de edited high spots on the annum's quota of capital offences. No, sorry, boss even dat ain't so good as it sounds. In fact it was the same
as last year an' the year before. Hey - I tell ya, after da first few times I got really bored wid it.

Hey, boss, I can't help feelin' old Mugsy ain't really come that far. Maybe we should go show him de error of his ways - if you follow my meaning. He may have had a novel type of

business strategy once but now it's just as mechanical as any board room decision makin'. And like youse always says - rubbin' out people an' booze an' everything is lacking in couth. Now where's dat new modem youse got so we can hack into da Federal Reserve and make some real money, kid?


## Budget/E2.99

Luke It's back to the atac on the atic with this game.

Based very roughly on the concept of Ultimate's game, the idea is to move your man about a maze of rooms, avoiding the usual crowd of nasties. You're able to fire what look like sea-gulls at the oncoming masses, but it does little good as they re-generate instantly and throw themselves back into the fray. Doors lock behind you and then just as suddenly re-open; little electronic pings announce that you have found a rare treasure - oh yes, the excitement fair plods along!

The basic plot revolves around the search through a maze for nine parts of a scroll that provides the route to the exit. The maze is split into five sectors and certain objects are required before you can pass

between these sectors. Various controls are available for protection, but by far the most useful keyboard control is the 'Pause' key.

The main problem with the game is that the area of action is just too small - trying to sort out your character's sprite from the fluttering mass of enemy followers is just ridiculous.
With a lot of patience and a meagre wallet, of course this game is adequate - indeed, with a 256 -room maze to explore, it should keep the most avid map-maker happy for hours. But, with so much well-conceived software around of this type, Labyrinthion stands little chance of becoming a classic.


# Devron YOUR SINCLAIR SPECIALIST 




CURRAH
MICROSPEECH \& SOUND AMP $\& 16.95^{\substack{\mathrm{SNLV}_{5}^{2}}}$


SINCLAIR TV $69.95^{\circ 00}$ QUICKSHOT II JOYSTICK \& SINGLE JOYSTICK INTERFACE


CHOOSE SIX TITLES FOR $£ 9.95$ PESESEGNE OR TEN TITLES FOR £16.95 $\begin{gathered}\text { 4altemalive } \\ \text { Chicices }\end{gathered}$
 - POOL - SCRABBLE \& BUBELE BUSTER * ERIC S FLOATERS \& VUD - CAR JOURNEY * BALLOONNO \& SPECML AGENT \& KNOW YOUR TABLES \& FIAST NUMBEAS \& STARTER PACK I
 - ZP ZAN - MSSICN MPOSSBLE - CTBER RATS - EXTERMYATOA - THE GREAT SPACE RACE O LNKWORD GERMMN \& LOOWORD SPANESH \& EMBASSY ASSAUUT \& REVERSI \& JONAH BAARINOTON SOUASH \& TLL \& CYCLONE \& MAGIC ROUNOABOUT - WUCNC * CLUB RECORD CONTROLER \& COLLECTORS PACK \& SPDERMMN \& TECHNICAN TED - AR TRAFFIC CONTROL - WHEELE - SKMPANGER - SOFTWARE STAR • BACK PACKERS QUIDE

## Devron Computers

## ROTRONICS WAFADRIVE <br> The dual 128 K tape drive configuration plus RS232/ Centronics <br> ports provide professional system flexibility? 2

| SPECTRUM PLUS | £99.95 |
| :---: | :---: |
| RAM QUSPECTRUM 128 |  |
| CENTRONICS INTERFACE | c29.95 |
| MICRODRIVE CARTRIDGES | ع1.99 |
| PACKS OF 4 CARTRIDGES | ¢7.50 |
| MICRODAIVE CARTRIDE |  |
| STORAGE BOX | ع4.95 |
| KEMPSTON CENTRONICS E | C39.95 |
| SPECTRUM 48K ON/OFF SWITCH. | C4.95 |
| 56 WAY EXTENSION LEAD. | ¢9.95 |
| MICRODAIVE EXT. LEAD | E7.95 |
| CURRAH MICROSLOT | ¢6.95 |
| BATTERIES FOR SINCLAIR |  |
| TV - PACK OF 3 | c9.95 |
| POWER SUPPLY FOR |  |
| SINCLAIR TV | ¢7.95 |
| BOWTHORPE SURGE PROTECTOR | £12.95 |
| CHEETAH RAT INFRA-PED JOYSTICK | £14.95 |
| RAM TURBO JOYSTICK |  |
| INTERFACE | 17.95 |

SPECTRUM PLUS
c29.95

CENTRONICS INTEAFACE
$\varepsilon 1.99$
PACKS OF 4 CARTRIDGES
MICRODRIVE CARTRIDE
MICAODAIVE CARTRIDE
STORAGE BOX
ع4.95
SPECTRUM 48K ON/OFF SWITCH
£4.95
56 WAY EXTENSION LEAD
ع9.95
MICAODRIVE EXT. LEAD
CURRAH MICROSLOT
6.95
BATTERIES FOR SINCLAIR
POWER SUPPLY FOR
SINCLAR TV
.95

INTERFACE

## MAIL ORDER COUPON

I want to take immediate advantage of your special Devron prices. Please send me the following:

## Name

Address

Tel No.
I enclose Cash/cheque $\varepsilon$.
Access/Barclaycard No.
Signature
All orders over $£ 100$ carriage free
Please add $£ 2.50 \mathrm{P}$ \& P for orders under $£ 100$ To: DEVRON LIMITED, 155 MOORGATE, LONDON EC2

## SPOT THE DICK <br> Richard III got the hump with ZX Basic <br>  <br> Escape the same fate

 with YS MegaBasic and ...

50 New Commands Named Procedures On-Screen Windows

64 Column Text
Full Screen Editor Smooth Moving Sprites Programmable Function Keys Machine Code Monitor
Multi-tasking Subroutines Background Sound Line Number Tracing AUTO Line Numbering REPEAT...UNTIL Loops DELETE Line Range
Full Machine Code CALLs Double-Length POKE Break Key Control Three Fonts User-Defined Character Sizes Downwards Printing Character Stipples Attribute SWAP, FADE and CHANGE Window PAN, SCROLL and INVERT Improved Line Editor ...And 22K User Memory and of course everything that's in $\mathbf{Z X}$ Basic! PLUS FREE Sprite Designer


## communications.



## PRESTEL

FREE Electronic Mail . . . International Telex . . . 10 National Chatlines (Interactive Bulletin Boards) . . . 70,000 users across the UK . . . Teleshopping . . . Multi-User Interactive Strategy Games

Instant computer news . . . Hardware and software reviews . . . Technical features . . . Hints and tips . . . On-line business advice and features

FREE and discounted quality software to download direct to your micro- $\mathbf{2 4}$ hours a day

300,000 pages of information on the huge Prestel database
for just 20 p a day



## What's rising to the top? What's bubbling under? Chart stats ' $\boldsymbol{n}$ ' facts from Steve Colwill.

## Chart Chat 5

Looks like the bottom's dropped right out of the market! Or at least, the bottom five from last month have dropped right out of this month's chart and last month's top four have all taken a tumble downwards. And it's interesting that all of last month's top four have dropped by the same number of places and so retain their rank order within the top ten.
This month's number one, Movie, has taken the chart by storm, coming straight in from nowhere to take the pole position. The only riser from last month is Mastertronic's cheapie but goodie, Spellbound. And other new entries include Barry McGuigan World Champions, Zoids and Guntright. Imagine's Hypersports makes a welcome return, propping up the rest of the chart at number ten.
This Month's Top Ten Titles

| 1 | - | 1 | $\bullet$ Movie/Imagine |
| :--- | :--- | :--- | :--- |
| 2 | - | 2 | - Barry McGuigan World <br> Champions/Activision |
| 3 | 5 | 6 | $\bullet$ Spellbound/Mastertronic |
| 4 | 1 | 7 | $\bullet$ Winter Games/US Gold |
| 5 | 2 | 8 | $\bullet$ Rambo/Ocean |
| 6 | 3 | 11 | $\bullet$ Commando/Elite |
| 7 | 4 | 10 | $\bullet$ Yie Ar Kung Fu/lmagine |
| 8 | -2 | $\bullet$ Zoids/Martech |  |
| 9 | - | 2 | $\bullet$ Gunfright/Ultimate |
| 10 | re | 8 | $\bullet$ Hypersports/Imagine |

## Imaginative Games

Imagine's back - and how! Okay, it's just an Ocean label now but the company name's riding high at the moment with three titles in the top ten. This chart shows the highest positions attained by Imagine's last four charting tities.


This chart is based on the MicroScope chart as compiled by. Gallup


MicroScope is the weekly trade paper of the microcomputer industry. If your computer store doesn't display the latest MicroScope chart, ask the manager to call Mark Salmon on 01-631 1433 we'll send a copy every week.

| 12 Months Ago |  |
| :---: | :---: |
| Positio | - Tile/Pubisher |
| 1 | - Ghostbusters/ Activision |
| 2 | - Day/ Ocean |
| 3 | - Airwolf/ Elite |
| 4 | - Technician Ted/ Hewson |
| 5 | - Daley Thompson's Decathlon/ Ocean |
| 6 | - Knightiore/ Ultimate |
| 7 | - Zaxxon/ US Gold |
| 8 | - 3D Star Strike/ Real Time |
| 9 | - Select $1 /$ Computer Records |
| 10 | - Blockbusters/ Macsen |
| 18 Months Ago |  |
| Pasition • TilielPublisher |  |
| 1 | - Sabre Wulf/ Ulitimate |
| 2 | - Full Throttle/ Micromega |
| 3 | - Match Point/ Psion |
| 4 | - Daley Thompson's Decathion/ Ocean |
| 5 | - Monty Mole/ Gremlin |
| 6 | - Micro Olympics/ Database |
| 7 | - Jet Set Willy/ Software Projects |
| 8 | - Lords Of Midnight/ Beyond |
| 9 | - TLLI Vortex |
| 10 | - Mugsy/ Melbourne House |

Slicing The Company Cake Take a look at this pie chart and you'll see how the number one honours over the past five months are shared. US Gold, Elite and Ocean take the biggest slice - each of them has had titles at number one for five weeks.


## BOMARICRESOI present

56 K Spectrum extension? Instant back-up of any program? Joystick \& video interfaces? YES All this \& even more with W01 SPECTRUM MULTIPURPOSE INTERFACE
UNPRECEDENTED - UNPARALELLED - UNBEATABLE
at $39.95!$ all types of peripherale with axtrs aK at user's disposal and with a full poek s poke facility covering the ontire SoK. MULTIFACE ONE does not take any part of Specinum RAM A does not need any additional softwars. Just puah a button to fresas a program, seve it and restart from the same point next time. Pesk/poke facility and BK RAM (say with a monitor disassembier) are also ideal for studying, moditying, developing programs.
*Menu-driven with prompts a one-louch commands: 11 Pueh button 2) Seiect function: exit/return/save/poke 3) input name 4) Save to : tape/cartridge/wafer/opus/bete

革 Extremely poverful a efficient compressing for fast re-loading a using minimal room on cartridges. tapes, waters, disks A $7 K$ scresen can be compressed to a few hundred bytes, the whole RaM into a few $K$ (depending on aprogram). \% Option to save a full 24 -line screen only $\quad$ \#Pressing the button s return can restart a "crashed" computer \% Through axtension bus for connecting other peripherais \% User friendly, fully arror trapped, simply magic
*Users must ensure the copyright laws are not intringed
Expand your Spectrum to 56 K and stretch its capabilities even further with

## enviticee: eqe: ESSENTIAL SPECTRUM COMPANION

 An jegenjous plece of software
esest (Flaturse ceco- Martbrmanoe PCN TOP SOFTWARE AT BOTTOM PRICE

## Wrigeler

Vher of ilv Act gumes fir aps manhior fir uve for om has dime
 Tiercal game, good movic, well recommended:



 tNOW FOR AMSTRMO:'SPICTRUM wermior at Kmas PDICE! enclose a cheque/PO for \& (UK \& Europe orders please or debit my $x$ No
$\qquad$ add $£ 1$ overseas $£ 2$

Name $\qquad$ Card expiry. $\square$

Please send me (tick as applicable): MULTIFACE | Please send me (tick as applicable): | MULTIFACE | £39.95 |  |
| :--- | :--- | :--- | :--- |
| TRANS-EXPRESS cartridge | £ $9.95 \square$ | tape (for m'drive) | \& 7.95 | Address disk (Opus Discovery) Mag TMPEWRITER Complete Spectrum mukic syatem for writing, editing. pleying.

printing is sforing music its
 stot to offer in serious use (trensposing.dot matres printout etc)


MIDI compatible with MIBI MUSICIAN parthar New overlay for Spectrum. Now at Xemats price New overiay
 WRIGGLER Spectrum tape $£ 4.95 \square$ or cartridge \& $6.95 \square$ WRIGGLER Amstrad tape £7.95 or disk version £ 11.95


## QUAL-SOFT

"A real challonge to the thinking football fan... Bobby Robson could do worse than have a crack at this in his preparation for the World Cup".

AMSTRAD ACTION REVIEW Jan ' 86

QUAL-SOFT COMMENT: At last an INTELLIGENT management game for the knowledgeable soccer enthusiast।

# TAPE 1 QUALIFIERS 

## A WORLD CUP MANAGEMENT SIMULATION

Summer 1984 and English International football is at its lowest ebb. We have failed to qualify for the European Nations Cup, and had a string of very poor International results. In a few months we will set out on the ' 86 Worid Cup qualifying trail. You have been given the most important job of restoring English pride in their football. You heve a match in Paris, the USSR at Wembley, and a South American tour, to assemble a team, first to qualify, and then to beat the world's best in Mexico.

## TAPE 1 (Quallfiors)

* Current squad of 16 pleyers +20 user defined players.
* Friendlies in Paris, at Wembley + South American tour.
* ANY team formation you choose. 2 from 5 substitutes.
* In match tactics; any no. of individual player adjustments.
* Your qualification group: full results and table.

TAPE 2 (Finals)

* Choose a 20 man squad to take to the finals.
* Group of 4 prelims. 16 to final knockout comp.
* Extra Time, PENALTY SHOOT-OUTS, where relevant.
* Formation and strength information on opposition.
* 2 from 9 substitutes (the FA tells us so).


## ENGLAND'S GAMES: FULL PITCH, 22 MAN, 3D GRAPHICS \& SOUND EFFECTS

QUAL-SOFT comments: With 5 levels of play, 12 depths of sophistication, and "fun" graphics, this game can be enjoyed by an 8 year old youngster as a "fun" game, and by the most sophisticated as a tactica/strategy challenge of the highest order.

$$
\begin{aligned}
& \text { PACKAGE: Tape } 1 \text { plus Tape } 2 \text { plus } 20 \text { Page Manual in "Video } \quad \text { QUALSOFT GUARANTEE: Sent by 1ST CLASS POST on day of } \\
& \text { Cassette" style pack. Only } C 9.95 \text { /9OK RAM usaga Some would call } \\
& \text { this a MEGAGAME. YES } I T \text { WILL RUN ON YOUR } 48 \mathrm{k} \text { \& } 128 \mathrm{k}
\end{aligned}
$$ this a MEGAGAME. YES IT WILL RUN ON YOUR 48 k \& 128 k

SPECTRUM.

- The use of the name MEXICO '86 does not imply any association with FIFA


## QUAL-SOFT, <br> Dopt. YS <br> Tel: 0438 <br> 721936

18 Hazelmere Rd.,
Stevenage, Herts SG2 8RX.

Please supply: MEXICO ' 86 48K/128K SPECTRUMSPECTRUM

Name:
Address:
Access No. (if applicable)

## Mirrorsoft/E7.95

Gwyn There is probably an ancient Japanese proverb that says a man with a big stick can have more fun than a man without a big stick. And that is the philosophy behind Combat, a marriage of the unarmed martial art with broom handles, that Mirrorsoft is using to make a late bow into the arena.
Sal is more like Fighting Warrior than Exploding Fist, owing to the use of weaponiry. But while the ancient Egyptian game of clobbering each other with staves (or were they supposed to be swords) boasted a plot - albeit a fairly feeble one - this is much more pure combat. Your aim is to attain the highest dan via three falls.
Control is the pretty well standard eight points of the compass with or without fire. which makes joystick control preferable to keyboard. Some of the moves will be recognisable from kung-fu games, including everybody's favourites, the roundhouse and flying kick. The new dimension comes from the jabs and sweeps with the pole, which gives you extra reach plus an additional form of defence. It always takes a while to learn the capabilities o your fighter but when the controls are sensibly arranged as these are, it soon becomes second nature.
So far, so good, if a tritle unexceptional. What sets Sai Combat apart from most of its predecessors is the size of the
combatants. While not quite so large as the figures in the first of the martial arts games, Bug Byte's Kung Fu, they are bigger than usual. And yet there doesn't seem to be any loss in speed and the animation is excellent. You don't even feel cramped with relatively less horizontal space and I found that involvement was greater.

The finish of the game is superb, with detailed shadows below the figures and a nice oriental tune, plus different backgrounds for different belts Blows are accompanied by a suitably hard 'thwackl' sound and a coloured starburst of pain - well hard. If you lose a series of bouts you don't need to go back to white belt pressing space starts you again at your previous level. The various dan are well graded, starting easily enough but getting tricky around grey belt. Naturally there are one and two player options - the latter is useful for practice against a static opponent.
Sai Combat is a good, if belated, entry into the genre Whether you want it will depend on how keen you are on the type of game. If you don't reckon you've had too much already it'll certainly present some welcome variety without risking any unpleasant bruises.




Aliligata/̌7.95
Rick What do you get if you cross a kangaroo with a sheep? Yeh, a woolly jumper. But there's nothing woolly about this show jumping game that'll leave the family hoarse with delight.

The game is simplicity itself and works precisely because of that. You and your sturdy mount must negotiate a jump ring. You're given a choice of eight mounts, two levels of difficulty, the game has six different courses and up to eight players can take part. Pre-jump you are given a course map - worth remembering when best speeds are wanted. You're then given one hundred seconds to complete the

## Mastertronic/£1.99

Max Ahem, how can I put this? If you're tired of gaudy, chunky sprites that furn funny colours when they pass over each other ... if the very thought of forty rooms stuffed with killer fish makes you want to run and put your head down the toilet
if you've been collecting objects since your grandmother learnt to suck eggs ... if l've already put you off, then a little polite advice. Push off ... this is a great game.

Legend has it (the sort of legend you get on Mastertronic inlays) that pirates, having secured the Devil's Crown, try and remove the seven jewels thereon and are suddenly struck down by the devil himself. Their ship and its many treasures lies untouched until you, as a diver-comesubmarine, attempt to recover the goodies. And just in case seven jewels is too easy, you've got to grab all sorts of stuff first to prove that you're up to the job.

You plunder and blunder your way round the brightly coloured and crowded rooms, avoiding the nasties or shooting them with any pistols you pick up. Keep a watch on your oxygen ... replenish it from ye olde pirates' oxygen tanks that are scattered around. Pick up a lantern to light the darkened rooms. Collect the treasure and try and figure out what all the other junk does. And so on. reckon you'll need a joystick and probably a colour set as well ... it's just too hard in B\&W or from the keyboard. Being able to carry only one object at once is the real clincher though ... the game is hectic to say the least but not so hard it's impossible. At £1.99, it could just be another jewel in your crown!


## Domark/ 88.95

Gwyn A blood curdling scream rings from your Spectrum then... silence! Not even the drip, drip, drip of blood. Just a message saying that owing to memory restrictions sound and music are missing from this version.

Still, that leaves the terrifying silence as you play with only the hum of the power supply. the wind rustling the trees, whistling through the emply house.... the creak as you slide from your chair, not stiff as a board but bored stiff. Yes, undoubtedly Domark has created a computer nasty though not in the sense it undoubtedly intended.

Anybody who has ever seen a Friday the 13 th film will know the plot - mass slaughter with a variety of novel weapons. So do Domark allow you to play Jason and massacre the allAmerican brats in the summer camp? They do not! They oxpect you to save this bunch of butch bozos and highly strung wimps. This you do by running round the camp site and moving over them. They will then make for the place of
sanctuary that you initially established with a cross - only Jason may come and scare them off so you'll need to round them up again. Ever felt like a sheep dog?

The reason this sort of movie never scared me was that cared less than zilch about the victims. Well, if you thought the cardboard cut-out casts were bad, wait till you see their sprite equivalents. Am I really supposed to sympathise with a badly drawn silhouette in a landscape that looks worthy of Sinclair Basic's finest?

At heart there was the idea for a decent strategyadventure here - Argus did it with Alien. Instead Domark's managed to create yet another program to match the ineptitude of A View To A Kill. You get the chance to use a chainsaw, knife or other weapon on Jason who is disguised as a friend - but by then the only thing you'll want to kill is the program cluttering up your ROM!


 number of faults) if you wish to move on to the next course. The game is keyboard defineable but it works best on the joystick. Speed (walk to walloping gallop) varies enormously and with the possible control of your horse through 360 degrees your tactics will vary between the Schockomole school of slow and steady and the Harvey Smith hell for leather theory.
The course doesn't scroll but unfolds over several screens. The facility to 'walk the course' as in the real McCoy is a distinct advantage. The only unrealistic facet is that you can go behind jumps - normally
faulted - but your average gamer would probably never complete without it.

Having done the hard part well - horse and jump simulation - Alligata falls at the final fence by failing to recognise the thrills of the original sport. The crowd graphics are tinny, no one falls off and the paraphernalia of the ring are missing - why aren't real horse, rider or tournament names used? Three faults for this refusal but a clear round for a game as sweet as a (pony) nut.


## 50 COMPUTER <br> GAMES ON

 ONE CASSETTE YOURS FO E 9.95

20 KEY, MULTIFUNCTION CALCULATOR WATCH with every order - Normal 12 and 24 hour time mode

- Alarm mode
- Calculator
mode

CASSETTE 50 IS AVAILABLE ON BBGeis ATARI dRAGON Electron VIC: 20 ORIC-1 EXBI Ctapple Atmos Spectrum commodore os AMSTRAD
 Cassette 50
EXPRESS DELIVERY-ORDER NOW! - ONLY £9.95

WORTH OVER E10

## TROJAN CAD-MASTER ${ }^{\circledR}$

 THE ULTIMATE IN GRAPHICS TOOLS
## $\mathrm{C}^{\mathrm{O}_{M}}$ SUPERB GRAPHICS SOFTWARE $\mathrm{M}_{\mathrm{M}}$ PLUS A TOP QUALITY $64{ }^{\mathrm{D}_{\mathrm{O}_{R_{E}}}}$ LIGHT PEN

iscover the exciting world of creating your own graphics on screen.

- FREEHAND DRAW - 5 pen thicknesses incl. Quills
- PAINT BRUSH - for the artistic touch
- FILL ANY SHAPE - use all colours and patterns
- GEOMETRIC SHAPES - circles, boxes, triangles, lines $\&$ banding
- DYNAMIC RUBBER BANDING - on all geometric options
- PIN-POINT FUNCTION - for pixel accuracy on all functions

Plus many more too numerous to mention in this ad. All these features in the Program + a top quality Light Pen and an Instruction booklet in one reasonably priced package. Easy to use for creating colourful pictures or technical drawings. Ideal for use by all ages of micro users. Full back-up service from manufacturers. Available at good dealers or direct from Trojan Products.
Please state which Micro.


SPECTRUM TAPE AND

## DRIVE TRANSFER UTILITIES

TUB is ESSENTIAL for ALL Spectrum owners - our recently updated tape utility is a REAL MUST for tape beck-up and drlive updated tape Send SAE for FULI DETAILS. You will be amared cond you can't tone with oul money back guarantee. and you can't lose with our money back guarantee.
*New simple option to deal $100 \%$ ACCURATELY with MOST very long programs (over 47 k ).

* Includes BAUD RATE (speed) and tone measurer for fat loaders - can save at normal speed for possible drive transfer.
*Manages nerly all clicky leaders - can convert totally to normal for tape load OR converts with all information required for EASY drive transfer with our Transfer pack. *So many extra features we can't possibly list them here Just try it and see. As the market leader we can't afford to let you down
COST only $\mathbf{C 6 . 9 9}$ on tape OR E 7.99 on m/drive cart.


## TRANSFER PACK 2 - FOR TAPE TO DRIVE TRANSFER

A sophlaticated package of programs INCLUDING TU8, other utilities, sllows drive transfer of many programs.

* Includes header reader, bytes chopper, bytes mover
* Extra utilities (REM kill, VAL creator, a RUN program for mídrive owners).
* Five information sheets giving details on drive transfer of 40 popular programs.
* Manages virtually all clicky leaders to drive.
* FULL manual, technical information, etc., etc. Have fun transfering and learning at the same time.
State name of your drive system (e.g. m/drive, Wafs, Opus, ete.). ONLY C11.99 on tope OR £12.99 on m/drive cart. UPDATE SERVICE: Send OLD program + LARGE SAE to claim the following REDUCTIONS: Old TC to TC8 E2. Old TP1 to TP2 £6.50.
OVERSEAS: add E1 Europe, f2 others for each product. SAE for anquiries.
ALL OUR PROGRAMS CARRY A MONEY BACK GUARANTEE (not updates).
LERM, DEPT YS, 10 BRUNSWICK GDNS, CORBY, NORTHANTS NN18 9ER


# W <br> A F A D) D 


#### Abstract

This month YS has come up with a real cracker of a money off offer - a Rotronics Wafadrive for under fifty quid. At that price it's a real steal. But if you still need some convincing, you'll find all the facts below. We went to Rotronics and asked all the obvious questions that a prospective buyer would put. Can you afford not to find out more...


## What does a Wafadrive offer me that I can't get from my cassette?

Speed's the obvious answer - it takes just 40 seconds to load Spectral Writer, the free wordprocessor that comes with your Wafadrive from a 16 K wafer. But the really big advantage is that you can store programs as files on a wafer. It's a real chore finding where you've put a particular program on a cassette, especially if you've got loads and loads of them on there.

## So just how fast is a Wafadrive?

 Well, it all depends. It depends on the position of the tape in the wafer and it depends on the size of the wafer. But as an average, Sheriock on a 64 K wafer takes 43 seconds to load. You can usually reckon on about 2 K of bytes going in every second plus the access time.
## So it's not as fast as a microdrive?

That depends as well. You're right, it's not as fast at loading in the data. But, if you take into account the Wafadrive's more friendly operating system and its easier command syntax, you'll probably find it takes you no longer to load in a program. All that " $m$ "; $1 ;$ stuff goes straight out the window. It's just LOAD * "filename" and you're away.
Yes, but what about reliability? The reason I've been put off microdrives are all the stories about how unreliable the cartridges are.
Microdrive cartridges do have a finite life but there's no way you're going to wear out a wafer cartridge. There's more tape in a wafer than in a microdrive cartridge so it's under less stress. And the protective cover that slides across when the tape's not in use stops people putting their grubby fingers all over your tape.

## What other advantages are <br> there over microdrives?

Other than performance, you mean? Well now there's price. £49.95's what you'd pay for a microdrive without the Interface 1-the Wafadrive plugs directly into the back of your Speccy, of course. And remember, you get two drives on a Wafadrive just like on a professional system.
Why are there three different

## sizes of wafer cartridge?

That's so you can choose the most appropriate size for the job you want it to do. The larger the memory, the more tape in the cartridge and the longer it'll take to access the files. So, there's no point in choosing a 128 K wafer to store programs that you're loading frequently. Much better to develop your programs on a small wafer and then transfer them onto a 64 K one that has plenty of storage and medium access times. The 128 K wafer is really only useful for archiving because of the longer access times. But when you do want an old program, you can quickly find it by CATing the wafer - try that with all your old cassettes.
Is the capacity of the wafers exactly 16,64 and 128 K ? No, that's just for convenience. On average you could expect to get about 75 K on a 64 K water and anywhere up to 140 odd K on a 128.
Can I connect any full size printer via the Centronics and RS232 interfaces?
Yes - with the one exception of the MCP 40.

I'm used to word-processing
with Tasword II and I'd like to continue with it - is it possible to transfer it to Wafadrive?
Yes. You can get an information sheet that shows you how to do it direct from Rotronics. For anyone who hasn't used a word-processor, Spectral Writer will fulfil all your requirements.
Is it easy to transfer programs from cassette onto wafers? If the programs are in Basic, you've got no problems. Just load them in, then save them onto the Wafadrive. Machine code programs can present more of a problem, especially if they're very large and don't leave around 2 K for the Wafadrive Operating System. You'll find the transfer utility on the Rotronics Toolkit wafer very useful. It also includes routines that let you COPY to Epson printers, print graphics from Basic, a printer channel driver, a de-initialise routine and a file utility.


All this can be yours for Just C49.95. The Wafadrive is a smart black box that sits neatly behind your Speccy. With its twin drives and free word processor you're now the proud owner of a really professional system.

## WAFA OFFER

At this price, how can I fail to take advantage of your offer. Please send me:
...Rotronics Wafadrives including Spectral Writer and one free 64 K wafer at $£ 49.95$ each. including postage and packaging. (Overseas $£ 51.20$ including $p$ and $p$ ).
...16K wafer(s) at $£ 2.49$ each. ...64K wafer(s) at $£ 2.79$ each.
...128K wafer(s) at $£ 2.99$ each. ...Toolkit wafer(s) at $£ 9.95$ each.
Name
$\qquad$
Name
$\qquad$photocopy) and send it with your payment to YS Wafadrive Special Offer, PO Box320, London N21 2NB. Please allow 28 days for delivery.


For the show that's out of this world come to the Spring Microfair. Send now for the reduced-price advance tickets on the coupon below.

# THE SPRING MICROFAIR 10th May 1986 

At the Horticultural Hall, Greycoat Street/Elverton Street, London SW1. 10am-6pm Admission: £1.75 (Adults) $£ 1.25$ (Kids under 14 years)


Are you finding
programming a real
task? Then may the
force of lan Hoare
be with you!

$G$et your blank tapes and cartridges at the ready 'cos we've absolutely zillions of really useful routines for you this month. Ian Thompson from Ripon sent in a helping hand for all those people just aching for an absolute draw facility. Whassat I hear you cry? Well, if you want to draw a line on the Speccy you have to specify how many pixels it's to go up and across the screen. Absolute draw enables you to choose where the line is to end in screen pixel co-ordinates. If you enter 999 for the $\times$ coordinate in lan's program you'll exit it, you can alter this If you wish though.

```
10 INPUT "xt "tMy" ys "sy
20 If x=999 THEN STOP
30 DPAM r- PEEK 20677 ,Y-P
EEK 23678
40 00T0 10
```

lan also provided an interesting snippet that'll fascinate those who like seeing pretty patterns on the screen.
PLOT 127,87: DRAW 10,10 n Where $n$ should be a fairly large number. Why not try these values for $\mathrm{n}: 1871$, $6669,3343,991,2512,6974$, 778,8440 , lan also suggests you set OVER to both 1 and 0 to see what happens.

## Pete Craig from

Chesterfield has answered my call for a machine code routine to do graphics dumps that'll work with the Interface 1 RS232 port. The way it's written, it'll work with all compatible printers. If your HR5 doesn't do line feeds in
graphics mode of $\mathrm{n} / 72^{\prime \prime}$ from ESC;"A";n, then you can alter both the code, and the number of linefeeds, by changing the DATA near the beginning of the source code. The fourth byte in the line labelled "DATA" counts the number of line feeds sent.
I've found that some HR5 printers send a $1 / 36^{\prime \prime}$ while others send a $1 / 18^{\prime \prime}$ line feed, so you'll have to experiment if you don't get the perfect image first time. Don't worry, you won't do any harm so long as you keep the same number of DATA bytes. Once you've got the routine working as you want it, you'll be able to use it at any memory location, provided it's called from Basic. And it's relocatable so long as the BC register pair contains the address of the start of the routine - but that's usual when it's called from Basic.

| 0000 |  | ORO | 40000 |
| :---: | :---: | :---: | :---: |
| 0010 | Esc | EOU | 27 |
| 0020 | PIXEL | EOU | 22aAH |
| 0030 | OPENE | EOU | 1601H |
| 0040 | Beand | JR | START |
| 0050 | Y ADD | DEFB | 175 |
| 0060 | DÂTA | DEFB | ESC, "A", 8 |
| , 1,10 | , ESS, | "K", 0 , |  |
| co70 | START | LD | HL, 2 |
| 0080 |  | ADD | HL, BC |
| 0090 |  | Push | HL |
| 0100 |  | POP | $1 \times$ |
| 0110 |  | INC | H2, |
| 0120 |  | 10 | A, ${ }^{3}$ |
| 0130 |  | Push | HL |
| 0140 |  | CALL | OPEN8 |
| 0150 |  | POP | HL |
| 0160 |  | LD | B,3 |
| 0170 | INIT | 10 | A, (HL) |
| 0180 |  | RST | 16 |
| 0190 |  | INC | H2, |
| 0200 |  | DJNZ | 1NIT |
| 0210 |  | LD | (1x+0),175 |
| 0220 | NEHLN | PUSH | HL |
| 0230 |  | LD | B, (HL) |
| 0240 |  | INC | H . |
| 0250 | LFEED | LD | A, (HL) |
| 0260 |  | Rat | 16 |
| 0270 |  | DJNZ | LFEED |
| 0280 |  | INC | HL |
| 0290 |  | LDC | 8, 4 |
| 0300 | NEWLP | LD | $A,(\mathrm{HL})$ |
| 0310 |  | RET | 16 |
| 0320 |  | INC | HL, |
| 0330 |  | DJNZ | NEWL.P |
| 0340 |  | XOR | A |
| osso |  | LD | D, A |
| 0360 |  | 10 | B,A |
| 0370 | NXTBT | PUSH | BC |
| 0380 |  | LD | E, 0 |
| 0390 |  | LD | B, (1X+0) |
| 0400 |  | 10 | C, D |
| 0410 |  | CALL | PIXEL |
| 0420 |  | LD | c, 8 |
| Oa30 |  | LD | B, A |
| 0440 |  | INC | B |
| 0450 | BYTL | PUSM | BC |
| 0460 |  | LD | A, (HL) |
| 0470 | POINT | Rtca |  |
| 0480 |  | DJNZ | POINT |
| 0490 |  | AND | 1 |
| 0500 |  | OR | E |
| 0510 |  | LD | IE, $A$ |
| 0520 |  | RLC | E |
| 0530 |  | INC | H |
| 0540 |  | POP | BC |
| 0550 |  | DEC | $c$ |
| 0560 |  | JR | NZ, BYTE |
| 0570 |  | LD | A, E |
| 0580 |  | RST | 16 |
| 0590 |  | INC | D |
| 0600 |  | POP | BC |
| 0610 |  | DJN\% | nxtbi |
| 0620 |  | pop | HL |
| 0630 |  | LD | $A,(1 X+0)$ |
| 0640 |  | SuB | B |
| 0650 |  | 10 | ( $1 \mathrm{X}+0), \mathrm{A}$ |
| 0660 |  | 3 P | NC, NEWLN |
| 0670 |  | LD | A, ESC |



To use this routine with your interface 1, just do the usual FORMAT "b"; baudrate: OPEN \# 3; "b" to set up the RS232. It's now ready to send data to the printer. Whenever you want to do a screen dump, RANDOMIZE USR address will work just fine. Oh and don't forget to close the channel afterwards.

One last thing, one of my Micronet friends Colin Maclaren has discovered that this routine prints the top pixel line at the bottom of each line, though it works fine for me. If you do experience this, his solution is to put in RRC E at line 565.

- Now, do you remember in issue 2, I asked if anyone had found a use for VAL\$? Well, Stone me if Jim Green-
vood hasn't come up with one. Let me quote from his letter. "I was writing a program for recording details of software that involved holding several arrays. These contained such data as title, author, publisher and each of them was a different size with elements of a different length. Now I found that when I was extracting an entry to modify it I ended up with several commands like IF $\mathrm{n}=$ ? THEN LET w\$="?\$(?)". But the subsequent coding for operating on the workspace $\mathrm{w} \$$ was the same.

But if I set up an extra array containing only the identifying letters of the actual data arrays, I could then use a VAL\$ function to extract a line from any one of the arrays with a single command. Have a look at this listing. It's pretty trivial but it'll give you an idea of how it works.

$$
5 \text { DEF FN as (as, a)=as (a) }
$$

$$
\begin{aligned}
& 10 \text { LET } 2 s=* a b c d e " \\
& 20 \text { LET }{ }^{2}={ }^{2}=A B C D E=
\end{aligned}
$$

$$
20 \text { LET as="ABCDE* }
$$

VWXY=
70. FOR $a=1$ TO $5 t$ FOR $b=1$ TO 5 i PRINT FN as (VALs $(z$ B(a) $+=s=)$, b) : NEXT bI PRI NT I NEXT 90 STOP
"There are two restrictions though. Firstly, you can only use this technique as a parameter in a function call - try to use it as a direct
command, and you'll get a 'Nonsense in Basic' error message. Secondly it can only be used one way - you can't use it to put data back into one of the arrays, because an FN statement can only appear on the right hand side of an equation."
Ah, but what about DEF FN $a(b)=b-256 \cdot F N c(b)$ ? Jim has also sent in a solution to my puzzle about the bug in Peter Craik's scroll routine from issue 2. In fact, he pointed out two bugs, though I must admit, one of them was a slip-up on my part - in line 30 , the second ' ' should be a - -' sign! His solution to the problem is to change just two lines, 110 and 130 as follows: 110 FOR b=8 TO 1 STEP - 1 130 PRINT AT a+1, 0;c\$;AT a, $0 ;$ b\$
But he also goes on, "At the risk of being a spoil-sport, I've got a quicker way of doing it that uses string slicing. I use it in a word processing program I wrote.

```
200 DIM as(32*44)& LET asc
673 T0 70d)=-The fastest B
AgIC scroll around!*
210 FOR a=1 TO 705 STEP 32
& PRINT AT O,OIas(a TO a+7
03): NEXT a
lol
```

"Quicker? - 'that's not any quickerl', you cry! But the above routine is scrolling 704 bytes not 32, so it's 22 times faster! Plus it has one advantage that's essential in a word processor - it's not messing around with CHARS (system variable) so the text remains readable all the time. And the technique can be used for scrolling backwards or forwards, simply by changing the value of the pointers."

What can I say to that lot? Except, thanks Jim. I'm looking forward to hearing a lot more from you in the future. But that's all we've got room for this time. See you next month.


# 肘INDIN 

## If you've slipped through the Micronet, now's the time to find out what you've been missing. Rachael Smith is a recent recruit who's been caught hook, line and sinker by the system.

Hey-you! Yes - you -the lonely little Spectrum lurking in the corner. Spending all your life alone, with only a games cassette to keep you company? Didn't you know that you could be talking to other Spectrums, flying space missions . . . even getting a job?
Micronet's the name - a lonely hearts club for Speccies (and their owners) all over the country. It started as a cordoned off corner of Prestel, the mainly-for-businesses service run by Telecom - as a web of communicating computers forming a club courtesy of the telephone lines, with its members tapping in messages late into the night. In January of this year it boasted nine million frame accesses and it's become a major part of the system, with foreign countries using it as the basis for their networks.
Okay - so I'm interested . . . but I'm still not sure what it is, so: A) How do I get involved) B) Will I need a degree in electronic communications? C) A PhD? D) Does it hurt? The answers to questions B, C and D are No, Nein and Nej. For A - read on

## Dear Rachael ...

Can you tell me how to 'log-on', as I believe the 'hip types' call it?

Dear Dave - You don't want to remain the silent-but-puny type forever. Well, you can't just go plugging your Spectrum into the telephone lines, you know. First you'll need a modem (another expression to casually drop into conversations if you want to look trendy) which shoves your computer communications down the phone line. Luckily the price of these little black boxes (or thingies, as we call them in the trade) has plummetted recently so they needn't cost an arm and a leg.

Then you're going to need one of those ever-so-up-to-the-minute phone sockets to plug into, because honestly, Dave (I can call you Dave, can' I, lovey) the old accoustically coupled types just didn't cut it. Then you plug the computer into the modem, the phone into the modem and the modem into the phone socket and simple, wasn't it?
But you're not there yet. You still need to open your wallet and say (after me) 'Take your subscription'. Go on - you can do it - and it won't hurt too much. In fact it's only $£ 16.50$ per quarter, which is only $£ 1.26 .92307$ a week or just over $18 p$ a day - the cost of a Mars bar, and Micronet doesn't rot your teeth. Dial strategically after 6 pm or at weekends when it's local cheap rate and avoid the Prestel charges of $6 p$ a minute so that being 'on the net' need cost no more than 50p an hour - which is pretty cheap compared with that other little 'hobby' of yours, isn't it, sicko?! And for that you get access to Prestel and its related services, plus the other main network - Compunet and a host of smaller scale bulletin boards.
Follow my advice, dearie, and you'll truly be à la mode-m.

- Let us Spray ...

Graffiti is more like those ongoing
conversations you find on tollet walls - only not quite as obscene and without the phone numbers promising a good time! Instead there are running jokes and a friendly swopping of insults between members.


The Exclusively Clive Club
No computer club would be complete without its special members section. So, it cemes as no surprise that Micronet caters for its Spectrum subscribers in a big way. The Spectrum Microbase is filled with news, views, reviews for the machine, plus a help-line for anybody who's having machine specific problems. One of the great advantages of electronic pubtlshing is its speed, so new spectrum developments can be on screen in a matter of hours.

- Here's another example of Micronet's nested pages. Following the dedicated Spectrum trail could leod you to the Gailery and a ipecialist mogazine there. And if you're looking for a porticular peripheral or program there are even Spectrum Swop Shops.


## - Exchange and Mart

Ever spent a happy five minutes browsing through the cards in a newsagent's window? You'll be able to spend rather longer looking at Micronet's small ads and won't get cold feet into the bargain. Anything from micro specific items to general goods could turn up in the Swop Shopand if it's people and not possessions you're looking for there's even a Contacts sections. My ad's the one for tall, dark handsome millionaire with own yacht - because I'm looking for both!


## MICRONET Midnight Micronetters

 Club
## Thriller

It's after midnight. . . Okay, it doesn't have to be club, but the activisy is at its use this club within the

The real high spot of the MMC has to bater In the day. Agony Aunt. She Invites you to has to be its very own line and then proceeds to soothe it in front problem on the audience of voycurlstic computer it in front of an
aren't just an option - anonymity buffs. Pseudonyms complete to get me on anonymity would have to be
seem to have thelr tongues. One or two of the troubled that's their problem) but others are their cheeks (maybe chat's their problem) but others are just the sert of
things a tralned taatie Boyle could lance. Katie Boyle could lance.

- The generol friendly, silly chattiness of the MMC - where
members have their own mailtores night locol rodio progrommes.


## - You said How Much?

If you're afraid that those all night attempts at the Round Britain Race may be breaking your bank, you can consult your current bill on page 92 . Be warned though - that'll only be the bill for the computer that you're connected to. Other services from the business end of running Micronet include a Letters to the Editor slot, Security and Password changing and, of course, Help desks, should something go terribly wrong.

- Get Ed-ew-kat-ied

Those of a more serious disposition will be well pleased with Micronet's educational opportunities. There are sections to learn the basics of Basic, or other languages for that matter, or maybe you'd prefer to be naturally intelligent about the artificial variety - there's a specialist section for you too, full of news and information on the ever developing world of A.I. And while Micronet would be the first to admit that you'll never le m everything from screens of text, it provides for this with comprehensive book lists. So the old technology wins out in the end!


MICRONET Logging On Box

## Welcome to the friendly world of computers!

Getting onto Micronet is easy - providing you're supposed to be there.
The way in is via Prestel, and to reach that you'll need your personal Identity Number and Password. Prompted by the modem simply type in your lid. then the password, which you're advised to change on a regular basis. You'll also have to dial the local computer, of course - a three digit number.
You're into Prestel now, and if it's your first time you'll find a message already waiting in your personal mailbox, Just to make you feel welcome. But probably you'll be in a hurry to look at the wonders of Micronet. 800 is the number to remember. That's the front page, and providing you're a fully paid up member of the club who's not been breaking the rules you'll be able to walk right in.
At first the best way to find your way is just to walk around. Single numerical key strokes take you forward by different routes, or Enter - shown as *-simply moves onto the next page.


## - Sprouts from your Spectrum

Pundits tell us that in the future we'll do all our shopping from in front of the TV, ordering via the telephone lines. In a limited fashion it's already available from Micronet - in fact you may already be able to buy your weekly groceries if you live in some areas of the country (but quite how do you check those avocadoes are ripe with a micro?).


## MICRONET

(+t+** dirtiest 1 am it exuld ten)

##  cero o owntrict wert

Chatlines


Can You Hear Met
Idling away an hour or two in conversation is an important part of any club - and Micronet's no exception. There are two different types of Chatline. On the Daisy Chatline messages are held in a daisy chain arrangement, so that previous contributions to on-going debates can still be accessed by leafing backwards. The debates can stiles have the slogan 'Blink and you'll miss it' Quid at peak hours you won't be able to dawdle over the long words.
At first it's probably wise to sit back and watch what happens. The Chatlines include specialist areas as well as general ones. There's Music, or Adventure hints and tips and even a highly used Gayline.
Once you feel ready to join the great debate just tap the number option for sending a message then type it in the number option kor shard. Don't worry - you'll be given the opportunity not to send it before you press Enter and consign it to the public gaze.
of embers often use nicknames on the Chatlines, but Mailbox numbers are shown if you want to continue a more discrete text a fete. This is known as MBX-ing - yes, Micronet too hes its own body of slang.

## - Soft Shopping

One advantage of belonging to Micronet is the chance to download free software. That's right - I said free! - and while the programs aren't likely to set your micro on fire there are some useful and varied things over the year. You can also make respectable savings on commercial programs, including chart toppers, if you download then save to tape.


MICRONET Starnet

## Captain's Log . . .

Like Elite Ever wished it was blggert With actual opponents to play against? Then sign up with the
Starnet, Captain. Starnet, Captain.
Starnet is a game of space trading and conquest. It's mall game. Of course to that age old Idea, the play by your turns as yours it costs a bit to register and take cheese in the you zoom around trying to become big these in the galaxy. There are Starnet Chatlines and Malboutines in the Gallery pages, and you can always and trading links. As with the plan secret alliances Is Incredibly friendly, so you only of Micronet, playing your strategles.

- Starnet innit only
like the Round Britain Race game. There are also competitions need to leave your armchair. A series of clues in which you never cursor round a mop of Britain, and there's a cosh prize at your of it all.


## - Find Yourself a Job

A new-ish service on Micronet is its Job-Search, which is attracting a good number of advertisements - even if they are primarily for work with computers. If you fancy going it alone, instead, there's Bizznet, which provides an information and advice service for small businesses, with experts on line to offer advice.



# SHOMT 

The Basic Loader
Type this in and save it onto tape with SAVE＂sc＂LINE 0
10
$2 e$
$3 e$
$\mu e$

10 REM Short circuit loader
30 REM © David Green 1986 AO BRIGHT 1：PRPER O：INK 7：E OROER 0：CLERR 36000

50 DATA $17,34,68,136,17,34,68$ ， 136

60 FOR $n=$ USR＂a＂TO USR＂a＂+7 READ a：POKE n，a：NEXT $n$ 70 POKE 23659，0：PRINT＂TMIMIMIM，
 $\mathrm{n}=\mathrm{e}$ TO 21：PRINT＂$/ /$＂；TRB 31；＂$/ / \bar{\prime}$









 WIII，TIINII，\％
100 BRIGHT Q：PRINT AT 17,$5 ;{ }^{-H I}$ GH＂；AT 18,5 ；＂TECH（0）D．Green 1 986＂；RT 19,5 ；＂SOFT＂
110 DATA $0,0,3,4,3,4,3,4,12$
120 FOR $\mathrm{n}=1$ TO 9：READ a
130 BEEP $, 1, a$ ：BEEP ，1，a -12
140 NEXT $n$ ：BEEP 5,0 ：BEEP $-12$
150 DATA＂．．．．．Ready to fight？
160 DATA＂．．．．COmbat in progres
s．．．．
170 DATA＂．．．．Opponent destroye
18 ． A DATA＂RLL destroyed－Kill bonus
199 DATA＂．．．．．．．t＊defeated＊＊． 200 DATA＂．．．．．．．．．game over．．．

210 LET as＝
220 FOR $n=1$ TO 6：READ bs：LET $a s=a s+$ CHRs $22+$ CHRs $22+$ CMRs $32+{ }^{\prime \prime}$ ．＂＋bs＋＂．．．c＂；NEXT n
230 FOR $n=1$ TO LEN as：POKE 371 $19+n$, CODE as（ $n$ ）：NEXT $n$
240 INK 0：PRINT AT 20,$3 ; 1$ LOAD ＂CODE ：PRINT RT 20，3；：LOAD

250 REM

## The Hex Loader

Enter this loader if you haven＇t already done so for a previous YS program and save it to a different tape．

1 REM General Hex Loader
2 POKE 2365B，B
3 INPUT＂Start Address＂ 1 star
4 POKE USR＂a＂，INT（start／256 ：PDKE USR＂$a$＂＋1，start－256＊INT （start／256）

CHOUTIT
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 $T O$ start +1 ength STEP 8
20 LET $\mathrm{CS}=0$
30 PRINT AT 0， 0 ；＂Address＂；i
40 INPUT＂Hex 8 Bytes＂，LINE a
．
60 IF LEN a＊＜＞16 THEN GO TO 10
00
Bø LET $f=\emptyset!$ FOR $j=1$ TO 16
90 IF（a＊（j）＜＂め＂OR a＊（j）＞＂9＂）

EN LET $f=1$
100 NEXT 1
105 IF $f=1$ THEN GO TO 1000
110 FOR $n=0$ TO 7
120 LET $y=C O D E$ a $=(1)-48$ ：IF $y>9$ THEN LET $y=y-7$
130 LET $z=C O D E$ a＊（2）－48：IF $z>9$ THEN LET $z=z-7$
140 LET $v a=16 * y+z$
150 LET cswcstva
160 POKE i＋n，va
165 PRINT AT $2, n * 3$ ；as（ TO 2）
170 LET as＝a\＄（ 3 TO）
180 NEXT $n$
183 INPUT＂Checksum＂；LINE a＊ 184 PRINT AT 2,25 ；a＊
185 IF VAL a＊$\langle>$ CS THEN GO TO 10 ロロ
187 CLS
190 NEXT
200 CLS ：PRINT＂SAVE CODE AFTE R BASIC LOADER．＂＂＂REMOVE EAR LE $A D^{\prime \prime}$
210 SAVE faCODE start，length 220 CLS ：PRINT＂VERIFYING＂ 230 VERIFY＂nCODE
240 CLS ：PRINT＂ALL OK＂：STOP 1 100 PRINT AT $15, \varnothing$ ；＂ERROR＂：GO T 020

## The Hex Data

Run the Hex Loader and answer the three questions with 40960,1750 and shortcode respectively．Now type in the Mex Data as prompted and save the code after the first Basic part．
$40960 \quad 16$ OC IF $10 \quad 07 \quad 13 \quad 01 \quad 35=161$ 4096 C5 DS ES DD 21 Ø日 AC DD $=1274$ $4097670 \quad 01$ DD $71 \quad$ D2 DD $77 \quad 07=796$ 40934 उE 02 CD O1 16 DD ES D1 $=951$ 40992 Q1 0日 00 CD 3C 26 E1 D1 $=740$ 41000 C1 C9 C5 DS E5 11 F2 OS $=1295$ 4100 AF ED $\begin{array}{llllllllll}52 & 11 & 21 & 58 & 06 & 15 & =659\end{array}$ 41016 CS D1 15 ED ED BO AF $=712$ 410240009 E5 21 ØB 0日 19 EB $=542$ 41032 E1 C1 10 EC E1 D1 C1 C9 $=1498$ 41048 C5 E5 D5 $3 E$ O2 CD $01 \quad 16=931$ 41048 D1 01 24 00 CD JC 20 E1 $=768$ $41056 \mathrm{C} 1 \mathrm{C9} 21 \mathrm{EE} \mathrm{AC}$ O1 DE $03=105$ ？ 41064 E5 D1 $13 \quad 36$ I日 ED B6 $16=970$ $41072 \quad 50 \quad 1 \mathrm{E} \quad 01 \quad 06 \quad 14 \quad 36 \quad 18 \quad 23=250$ 41 שen 10 FB 78 FE B9 28 19 gE $=732$
 $41096 \quad 36 \quad 06 \quad 23$ OD 20 FJ 06 0810399 $41104 \quad 36 \quad 00 \quad 23 \quad 10 \mathrm{FB} \quad 1 \mathrm{C} \quad 18 \quad 09=417$ 41112 Of 50 I6 OB $23 \quad 10$ FB IE $=480$
> by David Green
> Short Circuit is an amazing Tron grid－style program but it＇s the meanest and toughest of them all．You＇ve only a small window to look through so you really have to guess what your opponent is up to．The program is a little tricky to enter so follow the instructions carefully．

$4112001 \quad 1520$ CF ES D： 13 36 $=772$ $\begin{array}{llllllllll}41120 & 01 & 15 & 20 & \text { CF ES D } 1 & 13 & 36 & =772 \\ 41128 & 18 & \text { DI } & \text { F2 } & \text { OS ED B } & \text { C9 } & \text { ES } & =1113\end{array}$ 41136 11 $\begin{array}{llll}41 & \text { ø } \\ 419 & \text { TE EI FE } 50 & =728\end{array}$ $4114428 \quad 19 \mathrm{ES}$ 11 FF © 19 7E $=717$ 41152 E1 FE S0 2日 OE ES $1164=959$ 4116000.19 7E E1 FE 5028 03 $=753$ $4116 \mathrm{~B} \quad 11$ 9C FF 36 OO 19 7E FE $=\mathrm{BB7}$ 411765029 FG AF ED $5278 \mathrm{FE}=1239$ $41184 \quad 64 \quad 28 \quad 09$ FE 9C $28 \quad 05 \quad 11=621$ $41192 \quad 64$ 00 $18 \quad 83 \quad 11 \quad 01$ 08 $19=170$ 412007 FE FE 50 DE AF ED $52=1216$ 41208 ES 21 Øض D0 AF ED $52 \mathrm{~EB}=991$ 41216 E1 19 TE FE SO CO IB CB $=1129$ 4122421 E2 B6 OE 日B ES ©6 $50=772$ $41232 \quad 11 \quad 64$ Ø日 TE B7 $20 \quad$ 日2 $36=514$ $41240 \quad 08 \quad 1910$ F7 E1 $1109000=547$ $41248 \quad 19$ OD 20 E9 21 FA B3 OE $=779$ 4125608 ES 06 S0 7E B7 $20 \quad 02=66 \phi$ 41264 36 08 23 10 F7 E1 $1184=734$ 41272 03 19 0D 20 EC C9 ES $2 A=781$ 41280 ण6 70 23 7C FE 37 20 07 $\quad 1657$ 41288 2A 78 SC TC E6 IF $67 \quad 22=776$ 41296 06 96 TE E1 C9 C5 ES $21=1161$ 41304 05 90 ES TE 3C FE OA 20 20860 41312 QS उ6 Øた 28 1日 FS 77 EI $=715$ 41320 ण1 1D D6 7E C6 30 C5 日6 $=611$ 41328 OA CD OB AO C1 OD $2810=64 B$ 41336 F2 E1 C1 C9 IB 7A B3 $\quad 20=1221$ 41344 FB C9 CB 7 CD CD C5 D5 ES $=1618$ 41352 CD B5 03 E1 D1 C1 C9 CD $=1422$ $\begin{array}{lllllllllll}41360 & \text { B2 A1 } & 25 & 25 & C D & \text { B2 A1 } & 24 & =897\end{array}$ $\begin{array}{lllllllllll}41368 & 24 & 28 & 10 & \text { F3 C9 CD B2 A1 } & =1035\end{array}$

 $41392,00 \quad 37 \quad 30 \quad 1431 \quad 30 \quad 01=221$ $4140021 \mathrm{AB} A 1 \quad 110090 \quad 01 \quad 0 D=540$ 41400 QD ED $B D C D$ JE A1 Q6 IE $=877$ 41416 C5 $21 \quad 64 \quad 0211$ 03 0n CD $=557$ 41424 日F A1 C1 16 日S CD 7C A1 $=1014$ 41432 7B D6 02 47 20 EA CJ $51=949$ 41440 A2 DE ED DE FF O7 20 DE $=722$ 4144801 FF 6459 ØE 01 07 El $=691$ 41456 QE FF QE 20 日E 01 日 $07 \mathrm{E}=561$ 41464 FF 84 S日 日E D1 OF 20 FF $=792$ 41472 92 5B DE FF DE 20 QE $01=564$ $41490 \quad 07 \mathrm{EQ}$ DE FF FF 44 SA ØE $=927$ 41488 ＠1 ©7 E OE FF Q7 EQ OF $=747$ $41496 \quad$ D 1 FF $84 \quad 58 \quad 07 \quad 20 \quad$ 日E $01=530$ 41504 णो Eण णF 20 FF B4 58 日E $=767$ 41512 01 07 20 日E FF 日E 01 07 $=331$ 4152020 OF FF FF $84 \quad 58$ 日E 01 $01=792$ $41520 \quad 97 \quad 20$ 日E FF $07 \quad 20$＠F $91=363$ 41536 FF BB 58 of 20 FF B4 SE $=1004$ 41544．QE－D1 ØE 20 QE FF QE EO $=568$ 41552 © 11 ต0 91 CD 50 A0 $C D=812$ 41560 62 A 21 OD O2 22 日2 $50=549$ $41568 \quad 21 \quad 52$ SA $2214 \quad 90$ JE $38=521$ $41576 \quad 32$ B1 SC 21 SD CB CD $2 A=936$ $415 B 4$ AD 21 E1 A1 7E B7 CA CB $=1293$ 41592 A2 FE FF 20 31 E5 11 Q3 $=1001$ $41 \mathrm{b0e}$ Q0 Q6 $\quad 32 \quad 2 \mathrm{~A} \quad 82 \quad$ SC ES CD $=754$ $\begin{array}{lllllllllll}4160 日 & 9 D & A 1 & E 1 & 1 E & 32 & 19 & 22 & 82 & \text { m日12 }\end{array}$ 41616 SC 21 SD ．CD CD $2 A$ AD E1 $=1842$ $41624 \quad 23$ SE 23 S6 23 ED $53 \quad 14=625$ 41632.90 3A 81 SC 32 4B SC EE $=975$ 41640 日B 32 日1 $5 \mathrm{SC} \quad 18 \mathrm{Cb} \quad 47 \quad 23=607$ 41648 SE 23 ES 16 Ø0 CB $7 B \quad 2 \mathrm{~B}=746$ $41656 \quad$ Ø2 $16 \mathrm{FF} \quad 2 \mathrm{~A} \quad 14 \quad 90 \quad 3 \mathrm{~A} \quad 81=672$ $\begin{array}{llllllllll}\text { A1 } 664 & \text { SC } & 77 & 19 & 10 & \text { FC } & 22 & 14 & 96 & =702\end{array}$ 41672 E1 18 A9 AF 32 48 SC CD $=1012$ $4168 \theta^{62}$ AQ 21 SD CD CD 56 A $6=1033$
 41696 C5 $16 \quad 32$ CD $7 C$ A1 $\mid 21 \quad 00=792$ 41784 OS 1101 OD 06 A6 CD $9 \mathrm{CD}=459$ 41712 At C1 10 EC 11 O1 00 CD $=829$ 41720 9D A1 CD BF A1 CD 日F A1 $=1336$ 41728 JA OC 90 FS C6 $30 \quad 320 D=768$

4173690 O1 1D 10 CD OB AO $21=596$ 41744 FF FF 22149021 FA 1000991 $\begin{array}{llllllll}41752 & 22 & \text { QE } 90 & C 1 & 21 & 16 & 90 & 11\end{array}=601$ 41760 OE B2 $73 \quad 23 \quad 72 \quad 23 \quad 36 \quad 01=546$ $\begin{array}{lllllllll}41768 & 23 & 36 & 06 & 23 & \text { ES } 21 & 84 & 03 & =521\end{array}$ 4177619 EB E1 10 ED CS 71 AS $=1209$ $41784010100 \mathrm{CB} \quad 43 \quad 28 \quad$ 日2 $0 \mathrm{E}=328$ $41792 \quad 64$ CS D1 CD उE A1 CB $47=120 \mathrm{CD}$ 418002009 ES 21 E0 AF ED $=715$ 4180852 EB E1 ES 19 TE E1 B7 $=1338$ 41816 CB FE CB CB ES 21 © © 0924 41824 AF ED 52 EB E1 ES 19 7E $=1334$ 41832 E 1 B 7 CB FE OB CB $1 \mathrm{E} 00=1100$ 41840 C9 3 A OC 9047 2A OE $90=686$ $41848 \quad 22 \quad 10 \quad 9021 \quad 16 \quad 90$ CS ES | 10 | 21 |
| :--- | :--- | :--- | :--- | :--- | 41956 SE $\quad 23 \quad 56 \quad 23 \quad 4 E \quad 23 \quad 46 \quad 7 A=555$ 41864 B7 CA $0 \subset$ A4 EB CS D1 $36=1256$ 41872 SO CD 3E A1 E6 7F FE D1 $=1120$ 4189820 0C DS CD 38 AS $78 \quad$ B7 $=987$ 4188820 øउ D1 18 日1 C1 19 7E $=613$ 41896 B7 CA ©4 A4 FE Ш⿺ CA ©4 $=1021$ 41904 A 4 AF ED $52 \mathrm{CD} 3 \mathrm{AB} 7 \mathrm{AB}=1205$ 41912 B7 $28 \quad 04 \quad 19$ C3 04 A4 $11=632$ 419204891 CD 50 AD JE ØF $32=789$ 41928 B1 SC SE $10 \quad 32 \quad 48$ SC $36=567$ 419360 ES CD AF AD EI CD AF $=1374$ 41944 A6 CD AB A1 06 05 CD $55=835$ $41952 \mathrm{Al} 10 \mathrm{FB} \quad 21 \quad 1405 \quad 22 \quad 10=536$ 41960 O JA OD 90 JD 01 1D $10=466$ 41968 CD IC A4 32 OD 96 FE $30=966$ 41976 20 OS C1 C1 CJ BA A5 16 ＝B15 41984 פ0 CJ טC A4 36 38 00 00 $=481$ 41992 DO．DS C1 EB E1 73 $23 \quad 72=1130$ $420002371 \quad 237023 \mathrm{Cl}$ as $23=722$ 420087 E AS 18 O6 FS CD 9日 $\mathrm{AO}=937$ 42016 F1 C9 2 A 12 Y0 ED SB $14=994$ $42024 \quad 90 \quad 7 \mathrm{~B} \quad 32 \quad 76 \quad 50 \quad 36 \quad 2 \mathrm{~B} \quad 3 \mathrm{E}=683$ 42032 F7 DB FE CB $67 \quad 20$ 03 $11=1078$ 42040 FF FF CB 4720 03 11 9C $=992$ 42048 FF उE EF DB FE CB $\quad 67 \quad 20=1367$ 42056 03 $11 \quad 64$ 00 CB $5 \mathrm{FF} 20 \quad 03=453$

42064 11 9C FF CB $57 \quad 20$ 03 $11=770$ 42072 Q1 00 उE FB DB FE CB $47=1061$ 4200020 O3 116400 JE TF DB $=560$ 4208 FE CB SF 20 ब3 11 FF FF $=1114$ 42096 CB $\quad 57 \quad 200311$ 01 00 $19=368$ 42104 TE B7 28 DA FE DB 28 D6 $=667$ 42112 AF ED 52 C3 D9 AS $3678=1245$ 42120 3A 7B SC 47 3A 7B SC BB $=795$ $42128 \quad 2 \mathrm{FA} C D \quad 2 \mathrm{~A} \quad \mathrm{AO} \quad 22 \quad 12 \quad 90=893$ 42136 ED $53 \quad 1490 \quad 3 A$ B1 $5 C \quad B 7=946$ 42144 2B 0D 3D 32 B1 SC B7 $20=600$ $421520611 \quad 2491 \mathrm{CD} 50 \mathrm{AQ} \mathrm{ED}=\mathrm{BB} 6$ 42160 SB $10 \quad 90$ 3A $09 \quad 90 \quad 67 \quad 2 \mathrm{E}=611$ 42168 E® DS $21 \quad 14$ 日0 11 03 $=515$ 42176 D日 CD BS 03 D1 DS CD $7 \mathrm{C}=1146$ 42184 A1 D1 E1 AF ED S2 CB 7C $=1416$ $42192 \quad 2 \mathrm{E}$ E $3 \mathrm{BE} \quad 07 \quad 32 \quad 4 \mathrm{~B} \quad \mathrm{SC} \quad 2 \mathrm{~A}=596$ 42200 0E $90 \quad 2 \mathrm{~B} \quad 7 \mathrm{C}$ B7 CC BF $\mathrm{AS}=1068$ 42208 उA 76 SC 47 JA $14 \quad 90=561$ 42216 BE 2B 12 CD उE A1 E6 $1 F=931$ 42224 Cb ØA SF 16 ＠D 19 7C FE $=728$ $\begin{array}{llllllllllll}42232 & 02 & 20 & 02 & 26 & 01 & 22 & \text { 0E } & 90 & =267\end{array}$ $\begin{array}{llllllll}42240 & \text { C3 } & 71 & \text { AS C5 } 71 & 19 & 10 & \text { FC } & =1074\end{array}$ 4224 Cl C9 Ø6 46 QE Ø0 21 Ø0 $=517$ 42256 Ø4 CS ES 21 4A 59 Ø6 © $\quad=634$ $4226411 \quad 01 \quad 00 \mathrm{CD}$ 03 $A 5 \quad 11 \quad 20=440$ 42272 ø0 CD 03 AS 11 FF FF CD $=1105$ 422 DD ØJ AS 11 EQ FF CD QJ AS $=1037$ 4228811 DF FF 1979 C6 ØB $4 \mathrm{~F}=926$ 42296 00 00 04 D4 7B FE 16 20 $\quad 20436$ 42304 D7 E1 01 96 00 $11 \quad 07 \quad 00=615$ 42312 AF ED 42 CD 日2 A1 AF ED $=1366$ $42320 \quad 42 \mathrm{CD} \quad \mathrm{B2}$ AI AF ED $42 \mathrm{CD}=1245$ 42326 82 A1 $09 \quad 09$ 7C FE 日1 $20=720$ 42336 ØJ 21 00 04 C1 78 E6 $07=590$ $\begin{array}{lllllllllllll}42344 & 17 & 17 & 17 & 4 F & 10 & \text { A3 AF } & 32 & =552\end{array}$ $42352 \quad 4 \mathrm{BC} \quad 11 \quad 6 C \quad 91 \quad C D \quad 50 \quad \mathrm{AD}=\mathrm{B} 79$ 42360 Ø6 ØA $21 \quad 64$ C5 Ø6 ØA $=362$ 42368 CD 55 A1 19 FB O6 $14 \quad \mathrm{C5}=941$ 42376 Ø6 IE 11 01 Q0 ES CD BF $=631$ 42384 A 1 E1 C1 $10 \mathrm{~F} 211 \mathrm{FB} \mathrm{FF}=1360$

42392 19 C1 10 E1 $21099035=698$ 42400 7E FE 10 20 01 $34 \quad 23 \quad 23=551$ $42408 \quad 23 \quad 34$ 7E FE ©A $200135=563$ $42416 \quad 2 \mathrm{~B} \quad 2 \mathrm{~B} \quad 34$ TE FE $3 \mathrm{~A} \quad 20 \quad$＠ $40=612$ $42424 \quad 36 \quad 30 \quad 23 \quad 34 \mathrm{CB}$ C6 A5 7D $\quad$ 䒑872 42432 FE Aø $20 \quad 01 \quad 23 \mathrm{C9} \quad 21 \quad \emptyset A=726$ 4244090 D1 LF DE 7E CD D日 $A D=689$ 4244823 OD 7E CD ØB A C3 CB $=945$ 42456 A2 CD $2 A$ A 11 90 $91 \mathrm{CD}=1000$ 4246450 AD D6 CD CD A1 $6 \mathrm{CF}=785$ $42472 \quad 26$ 01 11 日1 00 CD 82 A1 $=553$
 4248010 EA $18 \quad 30$ CS ES $79 \quad 32=919$ 4249648 SC 11 EI FF CD ©3 AS $=1034$ 425041121 00 CD 03 AS 11 1F $=471$ 4251200 CD 03 AS 11 DF FF CD $=1073$ 4252003 AS $600605 C D \quad 3 E$ A1 $=703$ 42528 6F 1101 06 CD B2 A1 $10=641$ 42536 F4 E1 C1 C9 O4 2B OE $30=972$ 42544 CD FC A5 OE OD CD FC AS $=125$ B 4255278 FE $0 A 20$ EF 21 日B $90=840$ 42560 － 34 TE © IF QC CD ©B $A \varnothing=595$ 42568 TE FE 35 CA BB A6 16 FA $=1212$ 42576 CD 7 C A1 C3 CB AZ CD $2 A=1297$ 42584 AO $22 \quad 12 \quad 90 \quad C 9 \quad 06 \quad 15 \quad 21=617$ $42592 \quad 21 \quad 58 \quad 11$ ض日 日日 DS C5 $06=562$ 42600151101 00 CD 03 AS $11=429$ 42608 日月 19 C1 D1 ES DS $21=913$ $42616 \quad 02$ ט日 EB CD 日2 A1 24 CD $=974$ 42624 82 A1 D1 E1 7B C6 BA SF $=1151$ $42632 \quad 10$ DB C9 11 B4 $91 \mathrm{CD} 50=1863$ 42640 A OE SO CD SD A6 OE S0 $=732$ 42648 CD SD A6 Ø6 32 JE $50 \quad 32=712$ 42656 4B SC $21 \quad 00 \quad 0211 \quad 03 \quad 00=219$ 42664 CD B2 A1 AF $32 \quad 48 \mathrm{SC} 26 \mathrm{~m} \quad \mathrm{~m} 23$ 42672 OH CD 日2 A1 $10 \mathrm{EF} \mathrm{C9} \mathrm{eg}=948$

 42696 00 00 00 00 00 00 00 0
 stap

The user defined graphics key will help you when entering the graphics symbols in Short Circuit

## The Main Basic Program

 Type in the main Basic program and save it after the first two parts with SAVE＂！2＂LINE 0．And away you go！170 NEXT $n$
180 BRIGHT 1 LET $z=$ USR 41400 BRIGHT
190 BORDER 0：POKE 23659， 2 200 DATA $-5,7,11,19,7,11,0,7,12$ $19,7,12,2,9,14,18,9,14,-5,7,11$ 210 RESTORE 2อe：FOR $\mathrm{n}=1$ TO 21： READ a：BEEP ， $1, a$ ：BEEP ， $1, a-12$ NEXT $n$ ：BEEP $4,-5$
220 FOR $n=0$ TO 250：NEXT $n$ a30 PRINT AT 11,3 ；＂Press any ke

240 IF INKEVS $3 . .$. THEN GO TO 24 －

250 IF IMKEY $\$=*$ THEN 00 TO 250 260 PRINT RT 11,3 ；

BEEP ．01，20：GO TO 120
a7e REM Control pokes etc．： 41399 －no．of opponents 41396 －start speed inot a good idea to change） 41877 －opponent turning probabitity＝use 1 15，31，63，127 or ass
280 REM Code approximately 1750 bytes long fron address 40960. Att sortware，busis，audio－visual effects（0）Dave Green（NTS） 1986. Thanks to：Rachet，steve and Ruth． 290 REM music data
30e DRTA－3
310 DATA $-3,9,12,9,-8,8,-3,9$ 320 DATA $-3,9,12,9,-8,8,9,9$ 330 DATA $-3,9,12,9,16,9,11,9$ 340 DATA $16,12,14,16,12,14,12,1$ 350 REM next 4 lines are the
sane as the previous 4
360 DATA $-3,9,12,9,-8,8,-3,9$ 370 DATA $-3,9,12,9,-8,8,9,9$ 380 DRTA $-3,9,12,9,16,9,11,9$ 390 DRTA $16,12,14,16,12,14,12,1$

400 DATA $9,9,9,8,9,-3,9,9$ 410 DATA $8,4,8,9,11,4,11,14$ 420 DATA $12,14,12,11,9,9,9,8$ 430 DATA $8,4,8,9,11,4,11,12$ 440 DATA $14,12,11,8,9,8,9,8$ 450 DATA $11,4,11,12$ 460 DATA $14,4,11,11,12,9,12,14$ 470 DATA $16,9,9,9,11,4,11,12$ 480 DATA $14,4,12,14,16, a, a, a$ 490 DATA $17,16,17,16,14, a, a, a$ 500 DATA $16,12,16,12,9,3,3, a$ 510 DATA $14,11,14,11,6, a, a, a$ 520 DATA $9,11,12,9,8,9,11,9$ 530 DATA $9,11,12,9,8,9,11,9$ 540 DATA $9,-3,9,-3,9, a, a, a$ 550 REM same group of 4 lines 560 DATA $-3,9,12,9,-8,8,-3,9$ 570 DATA $-3,9,12,9,-8,8,9,9$ 580 DATA $-3,9,12,9,16,9,11,9$ 590 DATA $16,12,14,16,12,14,12,1$

600 REM and again
610 DRTR $-3,9,12,9,-8,8,-3,9$ 620 DRTA $-3,9,12,9,-8,8,9,9$ 630 DATA $-3,9,12,9,16,9,11,9$ 640 DATA $16,12,14,16,12,14,12,1$

650 DATA $16,17,14,16,12,14,12,1$
669 DATA $-3, a, a, 8,9, a, a, a$
670 DATA $-3, a, a, a$
680 RESTORE 300 FOR $n=0$ TO 264
690 RERD a BORDER $(a+8) / 3.5=$ B
EEP ，05，a－5 EEEP ，08，a－17
700 IF INKEYS,$\cdots$ THEN RETURN
710 NEXT $\cap$
720 BEEP ．6，－8：BEEP ． $2,-20$
730 PRUSE O RETURN
740 REM Save as
SAUE＂\＃a＂LINE ©
by Christopher Herbert
Mooniron is a basic platform style game that＇ll have you at your keyboard for hours．Some evil rogue has stolen the crystal of Mooniron and good ol＇RoBoD has been ordered to get it back from the Starship where it is being kept．But first he＇s got to travel through a five room complex collecting three light packages that must be taken to the light lock．He＇ll have to be nimble＇cos there＇s also a horde of nasties waiting to send him to his peril．Mooniron comes complete with full joystick compatibility and bonus lives．
The user defined graphics key will help you when
 entering the graphics symbols in Mooniron．


| 1 INK 日：PAPER ©：PRINT AT 20 0；GO SUB 6の日 LET F $\mathbf{S}={ }^{* *}$ ，LET |  |
| :---: | :---: |
| $K E Y=1:$ LET JOY $=0$ ：GO SUB 1200：D | ［ FOR G＝0 TO 21： |
| IM MS（3）：LET $50 \mathrm{~N}=1$ ：LET MS（1） $\mathrm{m}^{-}$ |  |
| $1^{\prime \prime}$ LET M\＆$(2)=" 2$－LET HS $(3)=$＂L＂ | ，30；＂11＂NEXT |
| LET HI＝40：GO TO 50 | 52 PRINT AT 0,0 ；＂E＂；AT 1,0 ；＂回 |
| 2 LET $T=0$ LET $\mathrm{S}=166$ RESTORE | ，AT 0，30；＂E＂；AT 1,30 ；＂E＂；AT |
| 12：GO SUE 3：LET $\mathrm{T}=11$ RESTORE | 20,0 ，＂n＂；AT 21,$0 ;$＂－AT 20,30 ； |
| 12：LET $\mathrm{S}=166$ ：GO SUB 3：LET $T=$ | 21，30；＂n＂RETURN |
| 24：RESTORE 12：LET $S=166$ ：GO SU | 53 RETURN |
| B 3 LET $T=-7$ RESTORE 20）LET $\$$ | 60 POKE 23650，6：PRINT AT 1，10 |
| ＝30－GO SUB 3：LET $T=21$ ：RESTORE | INUERSE 1；＇MOONIRON＂；AT $20,8{ }^{\circ}$ |
| 12．LET $5=166$ ：GO SUB 3：RESTOR | （3） 1985 E |
| E 20：LET Sme日，LET $T=6: 60$ SUB | 61 PRINT AT 5，8；INK 5；BRIGHT |
| 3：GO TO 11 | 1；＂1 INSTRUCTIQNS＂；AT 8，8；INK |
| 3 FOR $9=1$ TO | 4，＂2：DEFINE KEVS＂；AT 11，8；INK |
| 4 READ D：EEEP ，1，D＋T | 6）ERIGHT 1，＂3，KEMPSTON＂；AT 14 |
| 9 If INKEYS 3 ¢ ${ }^{\text {a }}$ ．THEN GO TO 30 | ，8；INK 4；BRIGHT 1；＊ 4 K KEVBORRD |
| 10 NEXT G）RETURN | ＇，AT 17，B，INK 7；ERIGNT 1；＂0 P |
| 11 GO TO 30 | LAV GAME＊ |
| 12 DATA $-12,0,-12,3,7,7$ | 62 IF KEV $=1$ THEN PRINT AT 14，8 |
| 12，3，7 | ；ITHK 4；BRIGHT 1；FLASH 1；＂4 K |
| 13 DATA $-24,5,5-12,8,12,-24$ | EVBOARD |
| 5－24，8， 12 | 63 IF JOY $=1$ THEN PRINT AT 11,6 |
| 14 DATA－24 | INK 6．ERIGHT 1；FLABH 1，＂3：K |
| $-2,-2-24,2,5$ | EMPSTON＂ |
| 15 DATA $-24,3,3-24,7,10$ | 64 GO TO 2 |
| 3，3－24，7，10－24 | 100 REM EHETM 50.01 |
| 16 DATA $-24,-4$ | 101 FOR $\mathrm{G}=2$ TO 19：PRINT AT G，2 |
| －4，－4－24，0，3－24 |  |
| 17 DATA $-24,1,1-12,5,8,8-12$ | NEXT G |
| 1－12，5， 8 | 102 LET L $\$$＝＂GET READY FOR YOUR |
| 16 DRTA－24，－5，－5－12，－1，2，2－12 | MISSION ${ }^{\text {H }}$ FOR G＝1 TO LEN LS PRI |
| 5，－5－12，－1，2 | NT AT 3，2＋6，BRIGHT 1；LS（G）BEE |
| 19 DRTA $-24,0,-24,3,7,7-24$ | P ，0009，55 BEEP ．0009，50 BEEP |
| $12,3,7,7-12,7-12,0,-24,-12,0,-24$ | ．0009，60 NEXT G |
| 20 DRTA $-24,0,-12,-12,7,7-12,0$ | 103 FOR $Y=1$ TO 7 BEEP ．07，6：B |
| －12，－12，7－12 | EEP，07，5－24 EEEP，07，6－12：NEX |
| 21 DATA－24，5，5－24 | T $Y$ FOR $Y=1$ TO 5 BEEP ．07， 1 E |
| 24，5，5－24，－12，12 | EEP ，1，0－24，BEEP ，D7，－11：NEXT |
| 22 DRTA $-24,-2,-2-24,-2-24,5,5$ | $\checkmark$ FOR $\mathrm{Y}=1$ TO 9：BEEP ，ف7， 6 ：EEE |
| $-24,-2,-2-24,-2-24,5$ | P ．07，5－24 BEEP ．07，6－12，NEKT |
| 23 DATA $-24,3,3-24,3-24,10,-24$ | $\gamma$（ $\gamma$ |
| ，3，3－24，3－24，10 | 105 FOR G\＃0 TO 21：PRINT AT G， |
| 24 DRTA $-24,-4,-12$ |  |
| $4,-24,-12,3$ | NEXT G：GO SUB SCR |
| 25 DATA－24 | 106 FOR $6=1$ TO 2 |
| $-24,-12,8$ | 107 PRINT AT $X, Y$ ；INK 4；BRIGHT |
| 26 DRTA $-24,-5,-24,-12,2,-12$ | 1；Es（G）；AT $X-1, Y$ ；INK -7 ；BRIGHT |
| 5，－24，－25，2 | O；H\＄（G）；AT $X, Y-1 ;{ }^{\text {a }}$ ，＂；AT $X, Y+1 ;{ }^{\text {a }}$ |
| 27 DATA $-12,0,-12,-12,7,-12$ | ；AT $X-1, Y-1 ;{ }^{\prime \prime}$ ；AT $X-1, Y+1$ |
| －12，－12，7 | 108 IF JOY $=1$ THEN GO SUE |
| 30 IF INREY $=^{*} 1^{\prime \prime}$ THEN GO TO 21 | GO TO 113 |
| 00 | 109 IF INKEYS $=14$（1）AND $Y>1$ THE |
| 31 IF INKEYS $=33$－AND JOV $=0$ THE | $N$ LET $\mathrm{V}=\mathrm{Y}-1$ ：LET RITE $=0$ ：BEEP ，$\theta$ |
| N EEEP ． 05,35 ：LET JOY $=1$ ：LET KE | 909，55 |
| $\mathrm{Y}=0$ P PRINT AT 11,8 ；INJK 6；BRIGH | 110 IF INKEYS H Hs（2）AND $\mathrm{Y}<30 \mathrm{TH}$ |
| T 1；FLASH 1；＂3：KEMPSTON＂：PRIN | EN LET $Y=Y+1$ L LET RITE\＃1：EEEP |
| T AT 14，8；INK 4；ERIGHT 1；FLAS | 9009，55 |
| H $0 ; 44$ KEVBORRD＂ | 111 If INKEVs＝14s（3）AND $Y+4 \times 31$ |
| 32 IF INKEY $\$=* 4 *$ AND KEY＝0 THE | AND RITE $=1$ THEN PRINT AT $X, Y-1 ;{ }^{\prime \prime}$ |
| N LET KEY＝1：LET JOY＝0：SEEP ，D5 | ＂，AT $X, Y+1 ;{ }^{*}{ }^{\text {\％}}$ ， 60 SUB 1050 |
| 351 PRINT AT 14，8；INKK 4；ERIGH | 112 IF INKEYs＝Ms（3）AND $Y-4$ ）$\theta$ A |
| T 1：FLASH 1；＂4：KEYBOARD＂］PRIN | ND RITE $=0$ THEN PRINT AT $X, Y-1$ ，＂ |
| T AT 11，8；INK 6；BRIGHT 1；FLAS |  |
| H O；＂3 KEMPSTON＂ | 113 IF SCREENS $(X+1, V)={ }^{\prime \prime}$＂THEN |
| 40 IF INKEYS＊＂2＂THEN GO TO 30 | GO SUS 200 |
| 0 | 117 IF BRLL $=1$ THEN LET $\times 1 \mathrm{~s}$ Y $1-1$ |
| 41 IF INKEYS＝＂0＂THEN GO TO 70 | 118 1F Y 105 THEN LET BALL $=2$ |
| 42 GO TO 30 | 119 IF BALL $=2$ THEN LET $Y 1=Y 1+1$ |
| 50 GO SUE SI：QO TO 60 | 120 IF $Y 1=23$ THEN LET SALL $=1$ |
| 51 PRINT AT 0，0；BRIGMT 1，＂nmermermer | 121 PRINT AT $\times 1, Y 1$ ；INK 5；BRIG |
| nmm | HT 1；＂4＂；AT $\times 1, Y 1-1$ ；INK 0；＂${ }^{\text {a }}$ ，$A$ |


5. BRIONT 1 ; "A"; AT $\times 1+$ INT, $\times 1-1$; INK 日;" ";AT $\times 1+$ INT,$~ \vee 1+1 ; "{ }^{\prime}$; AT $\times 1+$ INT $+2, Y_{1} ;$ INK 5 ; BRIGHT $1 ;-a$ ;AT $\times 1+$ INT + $2, \times 1-1$; INK 0;" "; AT $\times 1+\mathrm{INT}+2, \mathrm{Y} 1+1$;
124 GO SUB 400: NEXT GI GO TO 1 จह

## 

## 201 PRINT AT $X, Y-1 ; "$ "; AT $X, Y+1$

 ;AT $\mathrm{X}-1, Y-1 ;$ " "; AT $\mathrm{X}-1, \mathrm{Y}+1 ;$ "202 LET $x=x+1$ : PRINT AT $x-2, y$; ";AT $X, Y ; B \&(G)$; $A T X-1, Y ; H S$ (G) OUT 254,0 EEEP . O05,55-x: OUT 2 $84,63-x$ OUT $254,54+x$ OUT 254,7 BORDER O
203 IF SCREENS $(x+1, y)="$ " THEN 60 TO 202
204 IF SCREENS $(x+1, y)\langle j "$ " THE
N GO SUE 400: RETURN

## 300 REM ■OF त्यान हEFE

301 FOR $G=2$ TO 19 PRINT AT $G, 2$
NEXT G
302 LET LS="DEFINE KEYS", FOR Q $=1$ TO LEN LS: PRINT AT $3,9+0$; OR IGHT 1:LS(G) : BEEP, 0009,50: BEE P.0009,55: BEEP . 0009,60 : NEXT 0

303 LET MS (1) $\mathrm{m}^{* 7}$ : PRINT AT 5,6 INK 5; BRIGHT 1; "KEY FOR LEFT INK 7
304 PRINT AT 5,19; FLASH 1;MS(1
305 IF INKEVS ${ }^{3}$.". THEN PRINT RT 5,19; FLASH 1; BRIGHT 1; INKEYS LET MS (1) =INKEVS PAUSE 5: PRUS E 10: GO TO 310
306 GO TO Se4
310 LET Ms (2) $=$ "7" : PRINT AT 10 6; INK 6; ERIGHT 1;"KEY FOR RIGH T "; INK 7; FLASH 1; "?
311 PRINT AT 10,20 ; FLASM 1;HE 2)

312 IF INKEVS $<S^{* *}$ THEN PRINT RT 10,20; FLASH 1; ERIGMT 1; INKEYS LET M\$ (2) $=$ INKEVS PAUSE 5: PRU SE 10. GO TO 320

313 GO TO 311
320 LET MS (3) ="7" PRINT AT 15 6; INK 4; BRIGHT 1; "KEY FOR JUMP INK 7 : FLABH
321 PRINT AT 15,19 , FLASH 1, Ms
322 IF INKEVS 1$)^{\prime \prime}$ THEN PRINT AT 15, 19, FLASH 1; BRIOHT 1; INKEVS LET MS (3) =INKEYS PAUSE E: PAU SE 10: GO TO 330
323 GO TO 321
330 LET LS="HAPPY UITH THESE KE VS ?" FOR G=1 TO LEN LS PRINT RT $18,3+0$ : ERIGHT $1, L S(0)$ EEEP $.0009,50$ EEEP .0009,55: BEEP . 0 009,80: NEXT 6
351 IF INKEVS="Y" THEN FOR GNa TO 19: PRINT AT 6 .

NEXT Q: GO TO

## 60

332 IF INKEYS="N" THEN FOR $G=2$ TO 19: PRINT AT G, \&:

NEXT G: GO TO
300
333 LET KEY=1: LET JOY=0 GO TO 331
400 REM Wलनानलः
401 IF ATTR $(x+1, v)=70$ AND EULE a0 TMEN FOR $T=0$ TO 7 PRINT RT $x$ $+1, Y$; INK $T$, BRIGMT 1, "口" EEEP $007, T+45:$ EEEP .008,T-4 : NEXT $T$ FOR $5=1$ TO 40 OUT 254,54: OUT 254,0 NEXT 5 BORDER O LET BU LS=1 LET SCORE $=S C O R E+10$ PRINT \#0; AT 1, 8, SCORE
402 IF ATTR $(x+1, y)=250$ AND BUL $\mathrm{B}=1$ THEN LET UINsWIN+1 FOR $T=1$
TO 10: BEEP . ©05, $T+20$ OUT $254, T$
BEEP . 005, $T+25$ : BEER . 005,$T+30$
NEXT T LET BULE=D BORDER O
IF UIN=3 THEN GO SUB 500
403 IF ATTR $(x+1, x)=25$ AND BULE =1 AND UIN=2 THEN GO SUB Se0: LE

## T BULB=0: LET UIN=O

404 IF ATTR $(X+1, Y)=249$ THEN 60 SUE 1300
405 IF ATTR $(X+1, Y)=69$ THEN $G 0$ SUE 750: IF LIFE © THEN GO TO 700

406 IF ATTR $(X, Y)=69$ THEN 60 SU B 750: IF LIFE THEN GO TO 700 : REM $X \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times \times x$


 $x \times x \times x \times x \times x \times$ THEN THEN THEN THEN TH En then then then then then then THEN THEL THEN THEN THEN THEN T HEN THEN THEN THEN THEN THEN THE n THEN THEN THEN THEN THEN THEN THEN THEN THEN THEN THEN THEN TH EN THEN THEN THEN THEN THEN THEN THEN THEN THEN THEN THEN THEN T hen then then then then then the N THEN THEN THEN THEN THEN THEN THEN THEN THEN TMEN THEN THEN TH EN THEN THEN THEN THEN THEN THEN THEN THEN THEN THEN THEN THEN S TOP STOP STOP STOP STOP STOP STO P STOP STOP STOP STOP STOP STOP STOP XXXXXXXXX TO TO TO TO :., TO TO
407 IF ATTR $(x, y)=69$ THEN 00 SU B 750: IF LIFE 1 THEN GO TO 700 410 RETUAN

## 

S01 FOR G=1 TO 21: PRIUT RT G.0


## NEXT $G$

S02 FOR $\mathrm{H}=1$ TO 3: LET LS="BONUS FOR $K=1$ TO LEN LS PRINT AT 5 $11+K$; INK RND 4 ; BRIGHT RND;LSI K) NEXT K: NEXT H

503 FOR G=1 TO 7: PRINT AT 5,12 INK G; ERIGHT 1: "BONUS" BEEP $.009,25+Q$ : BEEP . $0009,40+G$ BEEP . $\mathbf{C O O Q}, 50+G$ NEXT $G$
SOS FOR I=1 TO 15 LET SCORE $=3 C$ ORE 1 1 PRINT \#\#, AT 1, B; SCORE BE EP . 005,45: NEXT I
507 LET BULE=0: LET UIN=0 LET $x=18$ : LET $\mathrm{Y}=2$
508 IF SCORESSO AND SCORE $<1000$ R SCORE $) 150$ RND SCORE CZ00 OR SCO RE) 250 AND SCORE (300 OR SCORE) 30 - AND SCORE (400 THEN GO TO 546


510 GO TO 549
546 LET Ls＝＂AN EXTRA LIFE：＂．FO A $T=1$ TO LEN LS PRINT AT $8,8+T$－ 1：INK 6；BRIGHT 1，LS（T）BEEP 0009,60 BEEP ． 0009,55 ：BEEP ， 00 09，50：NEXT T GO SUB 547：LET L IFE＝LIFE＋1：GO SUB 547：GO TO 54 9
547 PRINT RT 10,14 ；BRIGHT 1 ： HS （2）：AT 11,14 ；Bs（1），＂－＂，INK 5；LI FE BEEP ，009，50 RETURN
549 PAUSE 25
550 IF FUD $=1$ THEN LET SCR $=3 C R+1$ 00
SS1 IF BUD $=1$ THEN LET $S C R=S C R-1$ 00
552 IF SCR＝3500 THEN GO SUB 350 － 60 sub 500
560 FOR $T=7$ TO O STEP－1 PRPER T：CLS ：HEXT T GO SUE SCR：RE TURN

## 600 REH HणEIEMFनWत्या

S01 LET $C U=1$ ：LET $F=1$ LET $P=7$
LET RITE＝0：LET $X=19$ ：LET $Y=3$
602 LET $\times 1=5$ LET $\times 1=10$
603 LET HS＝＂P0＂LET ES＝＂訆
604 LET SCORE＝0：LET LIFE＝3
605 LET SCR＝3000 LET UIN＝0
605 LET $B U L B=0$ LET BALL $=1$ ．LET $3 C R E=0$
607 RETURN
700 REM हलझRT－ 50
701 FOR $\mathrm{G}=1$ TO 21：PRINT AT 0,0


[^0]0，8，＂OUERRLL RAT ING＂；AT 13,$7 ;{ }^{\circ}=$
708 IF SCORE 50 TMEM PRINT AT 2
0，11．FLASM 1；ERIGHT 1；PAPER 6
INK 4 ；＂PATHETIC
709 IF SCORE）50 RND SCORE 80 TH EN PRINT AT 20,11 ，ERIGHT 1；INF 5：＂NOT BAD＂
710 IF SCORE） 100 THEN PRINT AT 20，14；BRIGHT 1；INUERSE 1；INK 3．＂FAIR
711 IF SCORE， 150 THEN PRINT AT 20，14；ERIGHT 1；INUERSE 1；INK 6：－ 6000
712 IF SCORE， 200 THEN PRINT AT 20，11；FLASH 1；＂UERY GOOD＂
713 IF SCORE 300 THEN LET L $\mathrm{S}=$＂B RILLIANT＂；FOR G＝1 TO LEN LS PR INT AT $20,10+6$ ；INK INT（RND +7 ）＋ 2；BRIGHT 1；LS（Q）：BEER ．0009，50 BEEP ，0009，60 BEEP ．0009，55： NEXT $G$
714 IF SCORE 400 THEN PRINT AT 20，12：FLASH 1；＂EXPERT
715 IF SCORE 500 THEN PRINT AT 20，11；INUERSE 1；BRIGHT 1；＂CMPM PION
716 IF SCORE 600 THEN PRINT AT 20．12；FLASH 1；＂MASTER＂
724 RESTORE 72S：FOR $0=1$ TO 49 AEAD $D, F$ ：FOR $S=1$ TO D：BEEP ． 6．F
725 IF INKEYS $\quad$（．．．THEN 00 TO 73 6
726 BEEP ． $05, \mathrm{~F}-12$
727 NEXT 5：NEXT G
735 DATA $5,4,4,9,2,9,2,11,5,12$ $5,4,2,7,2,5,2,2,2,0,5,2,2,2,2,4$ $4,5,2,5,2,7,2,5,2,4,2,2,2,0,4,7$, $2,7,2,5,6,2,2,2,4,9,2,9,2,11,4,1$ $2,2,14,2,12,2,11,2,9,2,7,2,4,6,7$ $, 2,4,2,5,2,7,2,9,2,11,4,12,2,4,2$ $7,2,7,2,5,2,2,2,0,20,2$ 736 SO SUB 600：PAUSE 1000 FOR Q 22 TO 19 PRINT AT 6,2 ；

NEXT $G$
GO TO 60

## 

751 IF LIFE＜O THEN GO TO 700 753 PRINT AT $x-1, x ;{ }^{\prime} \quad$ FOR $s=1$ TO 15：PRINT AT $X, Y$ ；BRIGHT O，＇ 6＂，AT $X, Y-1 ; "$＂；AT $X, Y+1 ; "$＂．BE EP ，0009，50 PRIIT AT $x, V$ ；ERIGH T 1，＂b＂；AT $X-1, Y-1$, ，＂；AT $X-1, Y$ ， 5 next $s$ ：PRINT RT $x, y$ ；INK $a$ ：
＂）LET LIFE＝LIFE－1：FOR $5=15$ TO 2 STEP－1：PRINT AT BLO，5；INK 5；PRPER 7；ERIGHT 1：＂＂BEEP O04，45 NEXT 5
754 FOR $S=15$ TO 2 STEP－2：PRIN T AT BLO，s；INK Q；＂＂＇BEEP ．D0 5,25 NEXT 3
756 LET $X=B$ LO LET $\gamma=3$ ：PRINT A T 0，26：BRIGHT 1；LIFE，－－：RETUR

901 PRINT AT 0,0 ；BRIGHT 1；INU ERSE 1；＂I＂！FOR Fal TO LEN LS：$f$ RINT AT $0,0+F$ ；BRIGMT $1 ; L S(F): B$ EEP ．0009，50 BEEP ． 0009,55 ：BEE P ．0009，6日：NEXT F
ge2 PRINT AT $0,1+\mathrm{F}-1$ ；BRIGHT 1 INUERSE $1 ; " T$＂；PRINT AT 0,25 ； 1 NKK 5；＂0＂；INK 7；BRIGHT 1；LIFE；

903 PRINT AT 1，0；BRIGHT 1；＂Wm

## T 0，31；INUERSE 1；＂I

904 PRINT \＃0；RT 0，0 ；INK 7；PAP ER 1；BRIGHT 1；＂Winmminmmentm

905 PRINT \＃0；AT 1，8；INK 7；PAP ER 1；BRIGHT 1；SCORE；RT 1,$18 ; \mathrm{MI}$ ； AT 1，29；SCRE
906 RETURN
1000 REH RJMBE MFIT
1001 LET $x=x-1$ ．PRINT AT $x, y$ ；IN K 4；BRIGHT 1；BS（G）；AT $X-1, Y$ ；IN $K 7$ ；BRIGNT 0 ；HS（G）PRINT AT $x$ ，
$Y+1 ; "-$ ；AT $X-1, Y+1 ; "$ ；AT $X+1, Y$ ； AT $\mathrm{X}, \mathrm{Y}-1 ; \cdots \cdots$ ；मT $\mathrm{X}, \mathrm{Y}+1 ; \cdots$＂；AT $\mathrm{X}-1, \mathrm{Y}-1 ;$ ；＂；AT $\mathrm{X}-1, \mathrm{Y}+1$ ；
$10 e 2$ FOR $T=1$ TO 4 LET $Y=Y-1: \quad 00$ SUB 1003：NEXT T：GO TO 1010 1003 PRINT RT $\mathrm{X}, \mathrm{Y}$ ；INK 4 ；ERIGNT 1；Bs（G）；AT $X-1, Y$ ；INK 7 ；BRIGHT 0；HS（G）
1004 PRINT AT $X, Y+1 ; "$＂；AT $X-1, Y$ +1, ＂＂．AT $x+1, \gamma$
1005 BEEP ． $0009,55+T$ ：RETURN 1010 LET $x=x+1$ ：PRINT RT $x, y$ ；IN K 4；BRIGHT 1；BS（G）；AT $X-1, Y$ ；IN $K 7$ ；ERIGRT 0 ；HS（G）；AT $X, Y+1 ; \cdot{ }^{\prime} \cdot$ ；AT $x-1, Y+1 ; "$＂；$R$ T $X-1, Y-1 ; "$＂；$A$ T $X, Y+1 ;$ AT $X, Y-1 ; "$＂；AT $X-2, Y ; "$

> RETURN

## 1050 REM लगयाइस्सलता

1051 LET $X=\times-1:$ QO SUB 1053：FOR $T \neq 1$ TO 4 LET $Y \approx Y+1$ GO SUB 105
3．NEKT T QO TO loss

1052 PRINT AT $X+1, Y ;$＂＂；AT $X, Y$ ； INK 4；BRIGHT 1；Es（G）；AT $X-1, Y$ ； BRIGHT 0；INK 7；HS（ 0 ），AT $X, Y-1$ ； ！RT $\mathrm{X}-1, \mathrm{Y}-1$ ；＂＂； $\mathrm{AT} \mathrm{X}+1, \gamma$ 1053 PRINT AT $X, Y$ ；INK 4 ；ERIGHT 1）ESCO）；AT $X-1, Y$ ；INK 7 ；BRIGHT 0；H\＄（G）；AT $X, Y-1 ;{ }^{\prime}$＂＂，AT $X, Y+1$ ；
；AT $X+1, Y$
BEEP ，0009， $55+T$ ：RETURN
1054 RETURN
1055 LET $X=X+1$ ：PRINT AT $X, Y$ ；IN K 4；BRIGHT 1；BS（G）；AT $X-1, Y$ ；IN $K 7$ ；BRIGHT 0；HS（G）；AT $X, \gamma-1 ; \cdots "$ ；AT $\mathrm{X}, \mathrm{Y}+1 ;{ }^{\prime}$＂，AT $\mathrm{X}-1, \mathrm{Y}-1 ;{ }^{\prime}$＂；AT $x-1, \gamma+1, \cdots$ ；AT $x-2 ; \gamma ;-1 ;$ RETURN

## 

1200 RESTORE 1200：FOR G＝USR＂$A$ TO USR＂U＂＋7：READ 5：POKE 6，5 NEXT G：BORDER © PAPER O：INK 7．BRIGHT Q：CLS
1201 DATA $60,94,191,179,94,94,60$ ， 60
1202 DATA $0,60,94,191,179,94,94$ ， 60
1203 DATA $126,102,190,166,188,39$ ，231，224
1204 DATA $126,126,101,125,61,228$ ， 231,
1205 DRTA $255,0,255,255,170,85,1$ 70，85
1206 DATA $188,92,188,92,188,92,1$ 88，92
1207 DATA $193,171,163,183,181,18$ 9，255，255
1208 DATA $0,255,213,171,255,171$ 213，255
1209 DATA $60,44,94,90,191,191,25$ 5，102
1210 DATA $60,76,191,191,126,60,4$ 4，24
1211 DATA $24,60,48,126,127,247,2$ 18，92
1212 DATA $31,32,64,127,127,85,42$ ， 31
1213 DATA $255,0,0,255,255,85,170$ ， 255
1214 DATA $240,3,4,252,252,84,168$ ， 240
1215 DATA $255,129,129,129,129,12$ 9，129，255
1217 DATA $255,85,170,85,170,85,1$ 70，255
1218 DATA $126,249,241,225,197,14$ 1，129，125
1219 DATA $255,255,0,255,0,56,92$ $76,76,92,56,0,255,255,0,255,231$ 24，255，231，126，129，255，126
1220 DATA $255,127,122,84,44,40,4$ 6，48
1221 RETURN

1301 LET $Q=1$ ：PRINT AT $x, \gamma-1 ; "$ AT $x, y+1 ; "$＂；AT $x-1, y-1 ; "$＂；AT
$x-1, y+1 ;{ }^{\prime}$ ．FOR F $=7$ TO STEP $x-1, \gamma+1 ; "$ FOR $F=7$ TO O STEP
$1-$ PRINT AT $x, Y$ INK $F$ ；ERTGMT

；S（G）；RT $X-1, Y$ ；HS（G）：BEEP ． 099 ，45：BEEP ， $095, G+30$ ：NEXT F NT AT $X, Y ; \cdot{ }^{-}$；AT $X-1, Y ; \cdots$
1302 LET TRE $=$ INT（RND 43 ）：LET $Y=$
INT（RND +28 ）+2
1303 IF TRE $=1$ THEN LET $x=I N T$
1304 IF TRE $=2$ THEN LET $x=I N T+2$
1305 IF TRE $=3$ THEN LET $X=$ INT $* 3$
1306 IF ATTR $(X+1, Y)=69$ THEN GO TO 1302
1397 IF SCREENS $(X+1, Y){ }^{2}{ }^{\prime \prime}$＊THEN GO TO 1302
1308 IF ATTR $(X, Y)=71$ THEN GO TO 1302
1310 FOR $T=0$ TO 7：PRINT AT $X, Y$ ； INK T；ES（G）；AT $X-1, Y$ ；HS $(G)$ ：BEE ．009，55：BEEP ．O05，33－T：NEXT RETURN
1350 FOR R＝LIX TO 3 STEP－1：PRI NT AT R，YIX；＂＂：NEXT R：RETURN 1400 REM EमFERAKI
1401 LET $\mathrm{HI}=S C O R E:$ LET $\mathrm{FS} \mathrm{s}^{* \cdots} \mathrm{FO}$ R $6=$ 2 TO 19：PRINT AT 6,$2 ;$

PRINT AT 4，5；BRIGHT 1；INUERS E 1；＂YOU HAUE A HIGH SCORE＂；AT 1 6，4；INUERSE 0；INK 5；＂PLEASE EN TER YOUR NAME＂；AT 18,7 ，INK $6 ;{ }^{\prime \prime}$（ MAX 8 LETTERS）
1402 POKE 23617，238：INPUT Fs
1403 IF LEN Fs？ 8 THEN GO TO $140^{2}$ 1405 FOR $Q=2$ TO 19：PRINT AT 0,2

## NEXT G

1406 RETURN
2100 REM RFIRTMDEFENIF
2101 LET $\mathrm{R}=0$ LET Ls＝＂The ccysta MOONIRON has been stoten，and $R$ OBOD has been sent to steat it b ack fros the starship were it is being kept．Before he can res cue it he witl have to journey t hrough five rooms．In each coo m， 3 light packets will have to b e taken to the light tockjon the floor for somewhere elsex． ere are also many dangers ．．．．and surprises and．．．．．an extra life，I If deserved），and a bonus after each room，so．．．．．．OOOD LUCK！

2102 PRINT \＃®；AT 1,0 ；BRIGHT 1 ； mitt＂；RT 1,30 ；＂er＂：FOR $6=1$ TO 31 － 4）PRINT \＃0；AT $1 ; 1+G$ ；BRIGHT $1 ; L$ s（G）；AT $1,1+6+1$ ；＂国＂BEEP ， 0099 $45+G / 4$ BEEP ．$\theta e \varrho 9,40+6 / 3:$ NEXT G：PRINT \＃D；AT $1,1+G+1$ ；BRIGHT ＂需＂；FOR $G=1$ TO LEN Ls－31
2104 LET Ls＝Ls（2 TO）
2106 PRINT \＃ツ；AT 1,2 ；INK 7；BRI GHT 1；Ls（2 TO 29）
2107 BEEP ，005，45
2108 IF INKEY $s={ }^{\prime \prime} 1 "$ THEN FOR $T=30$ TO Q STEP－1：PRINT घQ；AT 1，T； BRIGHT 1；＂⿴＂BEEP ．0009， $35+T / 3$ BEEP ． $0009,40+\mathrm{T}, 5$ ：BEEP ． 0099 ， $45+\mathrm{T} / 4$ ：NEXT T：PRINT \＃；AT 1,0 ；

GO TO 2100
2109 IF INKEYs $={ }^{*} 2^{2}$ THEN PRINT \＃$\theta$ AT 1,0 ；

GO TO 3 －
2110 IF INKEV $\$={ }^{*} \theta^{*}$ THEN PRINT \＃ ；AT 1,0 ；

111 PA
2112 FOR $G=40$ TO Q STEP－5：BEEP ，005， Q ：BEEP ． $06, \mathrm{G}: \mathrm{FOR} \mathrm{H}=1 \mathrm{TO}$ 2：OUT 254，54：OUT 254，2：OUT 25 4，日：NEXT H：NEXT G：PRINT \＃®；AT 1,$0 ; " \quad$ ；AT 1,$30 ; " \quad$＂BORDER $\theta$ QO TO 60

3001 LET FUD＝1 LET BUD＝0：LET B LQ 20 ：LET INT $=5$ ：LET $\times 1=5$ ：LET SCRE＝1：LET L $s=$＂THE RECEPTION RO OM＂GO SUB 90e
3002 PRINT RT 21， 0 ；BRIGHT 1；＂
AT 21，10；INK 1；PAPER 7；FLASH
1；＂日＂；AT 21．15；FLASH 0；PAPER Q
INK 5；＂M＂；AT 21，20；＂M＂
3093 PRINT RT 21，28；INK 2；PAPE R 7：FLASH 1；BRIGHT 1；＂口＂

3004 PRINT AT 6，0；BRIGHT 1；＂ T 6，6；INK $5 ; " M " ;$ AT 6,$2 ;$ INK $6 ; \cdots$ ti＂；AT 6，B；INK 5；＂这＂；FOR $Q=11$ T 031 STEP 5：PRINT AT 6，G；INK 5 ERIGHT 1；＂ly＂；NEXT G：PRINT AT 6，11；INK 7；BRIGHT 1；＂E＂


FOR $6=11$ TO 31 STEP 5：PRINT AT 11，G；INK 5；BRIGHT 1；＂M＂：NEXT Q：PRINT AT 11,$11 ;$ BRIOHT $1 ;$＂E＂ RT 11，25；INK 6；＂t；＂
3006 PRINT AT 16,0 ；ERIGHT $1 ; "=$
 FOR $G=11$ TO 31 STEP 5：PRINT AT 16，6；INK 5；BRIGHT 1；＂ $\mathrm{al}^{2}$ ：NEXT Q：PRINT AT 16,11 ；ERIGHT 1；＂E＂ AT 16,12 ；INK $6 ; " t$＂＂
3097 PRUSE 5：RETURN
3100 REM ETAEAFIDMGET
3181 LET ELO $=20$ ：LET INT $=5$ ：LET $\times 1=5$ ：LET SCRE $=2$ ：LET LSo＂THE LA NDING BRY＂：GO SUB 900
3102 PRINT AT 6，0；BRIGHT 1；＂חE 6，2；INK 5；＂M＂；AT 6，6；＂M＂；AT 6 8；＂M＂；AT 6，28；INK 6；＂t＂；AT 6，2 3）INK 5；＂M＂
3103 PRINT AT 11,0 ；BRIGHT 1
AT 11,$15 ;$ INK $6 ;{ }^{\prime \prime} i^{*} ;$ AT 11,$12 ;$ IN K 5；＂M＂；AT 12，20；＂M＂；AT 11．27；I NK 7；
3104 PRINT AT 16,$0 ;$ BRIQHT $1 ; "=$

## คT 16,7 ；INK $5 ; " \mathbf{y "}$ ；AT 16,$1 ; " M " ;$ A

 T 16,19 ；INK 6；＂ti＂；AT 16,15 ；INK 5；＂MAd＂；AT 16,$23 ; " 2 A 9 " ;$ AT $16,26, "$ $\mathbf{M "}^{\prime \prime}$3106 PRINT AT 17,10 ；INK 7；PAPE R © ：ERIGHT 1．
16；＂＂，RT 13，24
3107 PRINT AT 21，0；INK 7；BRIGH
 FLASH 1；BRIGHT 1；＂D＂；AT 21．25； INK 1；PAPER 7；FLASH 1；BRIGHT 1；＂富＂
3108 RETURN
3200 LET BLO $=18$ ：LET INT $=6$ ：LET
$\times 1=6$ ：LET SCRE $=3$ ；LET LS $=$＂THE SI LICON FACTORY＂：GO SUB 900
3201 PRINT AT 7，0；INK 7；BRIGHT



## 3

3202 PRINT AT 13,0 ；INK 2 ；PAPER

 3203 PRINT RT 13,4 ；BRIGHT $1 ; " \boldsymbol{}$ F＂，AT 14,$4 ;=\boldsymbol{I I}$ ；AT $13,31-4 ; \cdots$ F T 8,$14 ; \cdots 1$
3204 PRINT AT 7,$0 ;$ BRIGRT $1, " \backsim$ ；AT 7，29；＂FOR F＝0 TO 31 PRINT AT 20，F；BRIGHT 1；＂픅；AT 2 1，F；＂\＃＂；NEXT F：PRINT BRIOHT 1； AT 19,$0 ;$

320S PRINT INK 5；BRIGHT 1；AT 7 5；＂M＂；AT 7，18；＂MA＂；AT 7，23；＂NW＂， คT 19,$28 ; " \mathbf{M}$ ；AT 7，10；＂M＂；AT 7，1， INK $6 ; " t \overbrace{}^{*}$ ；AT 7,$30 ; " t \cdot$
3206 PRINT AT 13,1 ；INK 6；BRIGH T 1；＂t；＂；INK 5；AT 13,3 ；＂W＂ 3207 PRINT AT 13,14 ；INK 1；PRPE R 7；FLASH 1；BRIGHT 1；＂m＂；AT 13．10；INK 5；FLASH 0；PAPER 0； MA＂；AT 13，19；＂MN＂；AT 13，22；INK 6；＂ti＂；AT 13，24；INK 5；＂MAd＂ 3208 PRINT AT 19，6；INK 5；ERIGH T 1；＂MM＂；AT 19，14；＂MA4＂；AT 19，12； INK 1；PRPER 7；BRIGHT 1；FLASH 1；＂回＂；AT 19，25；INK 2；＂口＂

## 3209 RETURN


3301 LET BLO $=20$ ：LET $x=B L O$ ：LET $\mathrm{Y}=2$ ：LET INT $=5$ ：LET $\times 1=5$ ：LET SC

| RE＝4 LET LS $=$＂THE TORTURE CHAMEE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| ；RT 16，0； |  |  |  |  |
| DRTin |  |  |  |  |
| 0）INK 3；PAPER 6；BRIGHT 1；＂पIT |  |  |  |  |
|  |  |  |  |  |
| 3303 PRINT INK 5；BRIGHT 1；RT 16 ， 5 ；＂ |  |  |  |  |
| 6，15；＂M＂；AT 6，17；＂M＂；AT 6，26；＂起＂ |  |  |  |  |
| ，AT 6，29；＂M＂；AT 11，4；＂L＂；AT 11，6 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| T 16,19 ；＂hatind＂；AT 16,$24 ;$＂M＂；AT |  |  |  |  |
| 16，29；＂M＂；AT 21，20；＂M＂；AT 21，24， |  |  |  |  |
| M＂；AT 21，29；＂M＂ |  |  |  |  |
| 3304 PRINT INK 6；BRIGHT 1；AT 6， |  |  |  |  |
|  |  |  |  |  |
| 3306 PRINT INK 1；PAPER 7；ERIGH |  |  |  |  |
| T 1；FLASH 1；AT 11，1；＂E＇；AT 11，3 |  |  |  |  |
| 日；＂至＂；AT 21，25；＂E＂；INK 2；PRPER |  |  |  |  |
| 3397 PRINT AT B，0；＂F＂，AT B，31；＂T |  |  |  |  |
|  |  |  |  |  |
| 11；＂F＂；AT 12，30；＂F＂；AT 12，22；＂F＂ |  |  |  |  |
| ；AT 17，2；＂F＂；AT 17，7；＂F＂；AT 17，5 |  |  |  |  |
| ，＂F＂；AT 17，10；＂VF＂；AT 17，26；＂F＂； |  |  |  |  |
| AT 17,$31 ;$＂F\％ |  |  |  |  |
|  |  |  |  |  |
| ；AT 16，14；＊＊；AT 7，5；＊＊＊AT 26 |  |  |  |  |
|  |  |  |  |  |
| 2，22；＊＂；INK 5；BRIGHT 1；FLASH |  |  |  |  |
| 1.2 |  |  |  |  |
| 3309 PRINT AT 2,0 ；INK 7；ERIGHT <br>  |  |  |  |  |
|  |  |  |  |  |
| TV7V |  |  |  |  |
| 3310 RETURN |  |  |  |  |
|  |  |  |  |  |
| 3401 LET BLOw20：LET $\mathrm{x}=20$ ：LET |  |  |  |  |
| ＝2：LET INT $=5$ ：LET $\times 1=5$ ；LET SCR |  |  |  |  |
| E＝5．LET L 5 ＝$=$ THE GOAL IS N |  |  |  |  |
| ＂）GO SUE 909 － |  |  |  |  |
| 3402 PRINT AT 6，0；INK 4；BRIGHT <br>  |  |  |  |  |
|  |  |  |  |  |

## geperes



FOR $G=1$ TO 31 STEP 2：PRINT AT 21，G；INK 4；BRIGHT 1；＂E＂NEXT Q：PRINT AT 21,31 ；BRIGHT 1，＂$"$ 3406 FOR $G=16$ TO 7 STEP $-2:$ PRIN


 F ${ }^{7}$
3407 PRINT INK 5；ERIGHT 1；AT 6
3509 GO TO 3504
3510 PRINT AT 11,30 ；THIK 4 ERIO 3511 LET LS＝UELL DONE，YOU HAUE IT＂FOR $3=1$ TO LEN LS：PRINT AT $16,4+5$ ，BRIGHT 1，Ls（3）हEEP ． 0 009,55 ：EEEP ． 0009,50 BEEP ， 000 9，60：NEXT 5
3512 FOR $G=1$ TO 2
3513 PRINT AT $X, Y i$ IltK 4 ：BRIGHT 1：Bs（Q）；AT $X-1, Y$ ，INK 7 ；HS（ 0 ）；R $3514 \mathrm{IF} \mathrm{V}=10$ THEN GO TO 3526 3515 LET $\gamma=Y-1$ ：NEXT G：GO TO 35 12
3516 LET LS＝＂YAHOO：＂FOR $\$=1$ TO LEN LS：PRINT AT $X-1, Y+B$ ；BRIGH T 1．PLASH 1，LS（S）BEEP ．De9，45 NEKT SI PAUSE 50
3517 RESTORE 3520：FOR $S=1$ TO 26 READ $A, B$ FOR $T=1$ TO $A$ EEEP 05，B BEEP ． $04, \mathrm{~B}-1$
3518 IF INKEVS $5 \gg$ THEN RETURN GO SUB 509
3519 HEXT T HEXT S
3520 DATA $3,5,3,5,1,0,2,5,3,12,3$
$, 5,3,7,1,8,3,8,1,5,2,7,2,10,1,10$
$, 2,8,2,8,1,7,2,12,3,5,2,5,2,7,2$
$8,1,8,2,7,1,7,2,5,20,5$
3521 RESTORE 12 FOR $\mathrm{P}=1$ TO 166
READ $Z$ EEEP $-1, Z+11,5$
3522 IF IHKEVS $\rightarrow \cdots$ THEN GO TO 35 352
30
3529

3523 HEXT
3530 PRIITT AT $X, Y$, INT 4 ，BRIGHT 1，Bs（G），AT $x-1, Y$ ，INR $7, H s(G) ; A$ 3531 LET $Y=Y-1$ FAUSE S
3532 IF $\mathrm{Y}=0$ THEN CLS RETURN 3533 GO TO 3530
 9009 IF IN $31=2$ AND $Y>1$ THEN LET $Y=Y-1$ LET RITE＝3：EEEP ． 099,50 9010 IF IN $31=1$ AND $Y<30$ THEN LE T $Y=Y+1$ LET RITE＝1：EEEP ，D日9，4

3011 IF ITH $31=16$ AND $Y+4<30$ AND ITE＝0 THEN GO SUB 1000 9020 RETURN

3508 NEXT $G$


## YSCOMPO WINNERS

## Barry's Boxing Compo

Boxing-eyed people:

 Whliegoborough Nothant Monchester Stephen Inper

 Jackion of Whitaen, Nons. AM. Garvie of Joppa, Edirburoh Bran Scurn of Wht fotrens, Devon: Chre



## Fly Me Compo

Scooping up the supersonic prizes in our Fly Me Compo, with are: $\quad 331.46$ metres/second
Fire prizen E
of Eliednoven, The Nethering
albyith of Dow Swan of tiochgiphead, Arget: Duvid Sineith

## Rambo Compo

No man, no law, no war could stop the winners of our Rambo get copies of the Rambo game. game.
Edinburgh, Scotand. Willim Tregie of Pctering Willians of Haltax. Wuhel of Chesangion, Suryy
?

## Robot Messiah Compo

No-one made a Messiah of this compo! Robot Messiah posters Savi Pnems way to these 200 winners:
 Canterburs. Kent A. Hootey Cof Burnat of Portuget, Stpphen OMahofly of Sandan. Ce Cork Aosnde



 Wooder of Duro, Comenat, C Zowery of Torworth Nompery Orace of Caidersiones. Liveroool si Fredse Bond of Carricationgas. Ce. Antim, Adam Soarket of Digsencer of Middestine Monetester Sotionule of Oman Sapten Colins of Farntarpugh, Hanti. Damon Shaw of the Broadthod of the



 Sacup, Lancs Davic Rose of Wick. Cather. A W. Watson of Loeds, W. Yokiker, Sohn Dempsey of
















 Shefled. Sean Rowe of Worthing, Wiephen fodd of Bangoc, Co Down, Nathen Tope of Minhousng.




 Wgatan Leicester Oary Walin of Sultonds in Asth Macke of Nition. Clacimannanuhirt. Mark Havitico



 Samantha Proctor of Stodier. Warks, lan Laddington thompson of Walked, Nivecatte upon Tyoe:









 Heath, Biminghams Oraham Mis of Northaliktion. N. Yorks Matinew Huriet of Noyton Davichon of Wast

 Strvenson of Reding. Fakirk

THE UTILITY SPECIALISTS

Mcat The moss of youn micnoonivi

## INTERFREE II


awry one mictince
 teet leote at theo foseres.



- verxingrernoman
cincolt ioverney jovicol.
wnemera untion


- rou have a michoonive roumust muve miteract m

ONLY £39.95 Inc. Pep smeryanerne -

Meproactisina
ctass cesines by Drawn

## DOURUSํ

UAVING PROBLEMS EACKING UPTHE UATEST LOADING TECHNIOUEST

DOUBLER Will solve ALL your problems

## THE tape backup "device".

After spectacular success on the CBM 64 After spectacuiar success we introduced and by public demand We Now we have Doubler for the Spectrum. Now we profesreleased cand and has greater tolerance to the sionally cased and hassette decks in use.
It includes hardware and software. This superb "device" allows you to make backup copies of software with all types of loader regardiess of length and speed. (Includes pulsing headers and different baud rates) In fact our tests have proved "Doubler" is capable of čopying with $\mathbf{1 0 0 \%}$ 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 Doubier may returnit along with $£ 4.95$ for the new version.


# HACKING AWAY 

## Chris Wood has hacked away－he＇s penned his ultimate POKEs！

welcome to this month＇s bundle of POKEs and programs．I＇m afraid l＇ve some bad news for you，this is the last time I shall be presenting this column，sob， sob．Stop it，I＇m getting drenched in all the tears． Anyway，now for the good news－ZZKJ our resident hacking computer＇ll be writ－ ing the column all by itself． So much for feeding it a copy of Tasword－I＇m now redundant．

## SIR FRED

If you＇re having trouble with this Spanish Mikro－Gen swashbuckler，then this program from that hard－ working pair A Brown and his printer－lending friend Chris Boland will give you limitless energy．And if you＇re having problems trying to do a Tarzan on the ropes try this tip．When swinging，flip Sir Fred to the outside of the rope at the last moment of each upswing to gain maximum height．If possible，take a running jump at it to get a good start．This program is a little long so it includes a checksum to pick up any mistakes．

```
```

5 REM SIR FRED POKES BY

```
```

5 REM SIR FRED POKES BY
18 CLS: LET A=23296: FOR
18 CLS: LET A=23296: FOR
Fug TO Q % % FOR Nu= TO O:
Fug TO Q % % FOR Nu= TO O:
28 LET T=B: FOR Nwg, TO 9:
28 LET T=B: FOR Nwg, TO 9:
T=T+8: LET A=A+1; HIEXT N
T=T+8: LET A=A+1; HIEXT N
3e READ B: IF T<\B THEN
3e READ B: IF T<\B THEN
Me READ E: IF T<)B THEN
Me READ E: IF T<)B THEN
*ilबE+Es1E: STOP
*ilबE+Es1E: STOP
4g HEXT F

```
```

4g HEXT F

```
```




```
```

68 RANDOMIZE USR 23296

```
```

68 RANDOMIZE USR 23296
188 DATA 6,3,197,82,255,5
188 DATA 6,3,197,82,255,5
5,221,33,9,9,932,
5,221,33,9,9,932,
lig DATA 17, 5,0,205,66,5,
lig DATA 17, 5,0,205,66,5,
128,DATA 214, 1,9,243,221,
128,DATA 214, 1,9,243,221,
138, bATA 4,265,108,5,62,2
138, bATA 4,265,108,5,62,2
138 DATA 4,285,108,5,62,2
138 DATA 4,285,108,5,62,2
14ह DATA'J6,94,82, 203,5e,
14ह DATA'J6,94,82, 203,5e,
53,181, 62,255,50,1946,50,
53,181, 62,255,50,1946,50,
53, 181, 62,255,56, 1946, 位,18
53, 181, 62,255,56, 1946, 位,18
8,17,97,255, 1, 142, 1131,
8,17,97,255, 1, 142, 1131,
8,177,97, 255, 1, 142,1131,
8,177,97, 255, 1, 142,1131,
91,17,225,255,\frac{1}{1,}1125
91,17,225,255,\frac{1}{1,}1125
175 DATA 8, 2,237, 175,49,2
175 DATA 8, 2,237, 175,49,2
18\& DAYA 64,17,67,191,62,
18\& DAYA 64,17,67,191,62,
255,55,195,88,285,1268
255,55,195,88,285,1268
19g DATA \&2,261, 59, 14,183
19g DATA \&2,261, 59, 14,183
198 DAIA 52,261,58,

```
```

198 DAIA 52,261,58,

```
```


## GUNFRIGHT

Here＇s a small but thorough program from E Bennett of Southend on Sea for

Gunfright．It＇ll give you infi－ nite lives，surprise，surprise， lots of money and the ability to change the starting ban－ dit．I＇m not quite sure how you change the two POKEs in line 70 if you should want to but you can always experiment．
 BO PRINT USR 23446

## SPELLBOUND

A Brown＇s back again without his other half Chris Boland．Have you bought your own printer＇A＇？This＇Il give you infinite time and energy in this Mastertronic Macintosh lookalike．
5 REN SPELLBOURID POKES
10 CLEAR 2606ө：PRIMT
$\begin{aligned} & 10 \text { CLEAR 26a6es PRI PRI } \\ & \text {＂PLAY TAPE FROM START：}\end{aligned}$
28 LOAD UNDOMIZE USR 2329S 16394 ：
RANDOMIZE USR 2329S
39 POKE $55 \$ 66,0!$ POKE
SON78，PORE 55971 ，B！
TINE 55072 ：
TINE
35133,0
S9 RATIDOMIZE USR 26527

## LOCOMOTION

Another Mastertronic game bytes the dust（sic）．Not that A Brown has anything against Mastertronic，he just ran out of current games． You＇ll get infinite stopclock time with this．Tactic：freeze train，build track，unfreeze train．This program incorpo－ rates＇A＇s usual checksum routine．

[^1]65， $8,33,80,24 \mathrm{~A}, 1254$ 30 DATA $34,107,92,195,8$, $14 \mathrm{c}^{2} \mathrm{DAFA} 19,52,957$ ， $95,232,195,0,9,8,1219{ }^{152}$

## SWEEVO＇S WORLD

Hacker Bilk of Crosby has sent in this natty bit of code to give you infinite lives， okay，so we had that last month，but it＇ll also allow you to save off the screens from Sweevo＇s so you can dump them to a printer and make a map if you want．I＇m looking forward to getting POKEs for Sweevo＇s Whirled on the Spectrum 128，or rather ZZKJ is，so get cracking！


In order to use this program you must first run it and save off the code that it produces．When you＇ve done this MERGE in the first bit of Basic from the game and add another LOAD＂n CODE in front of the RANDOMIZE statement． Then change the start address from 24800 to 23296 and away you go． Well，almost．．Run the Sweevo tape now and when there＇s nothing left on the tape to load，swop the tape for your one with the code on and it＇ll load．Now it＇s away you go！
You can freeze the game with symbol shift and 5 and ＇$S$＇saves the screen．As an added bonus，Hacker has included a little program to give you a full screen copy i．e．the bottom two lines get
copied as well．Very useful but re－run it every time you want to do the copy，as it actually gets destroyed in use．

```
19}\mathrm{ FOR I=23296 TO 23384
20. READ A; POKE 1, R; NEXT
I
495,179,14
58 RANDOMIZE USR 23296
REN NEU COPY.
```


## FRANK BRUNO＇S BOXING

＇$A$＇and Chris are still pull－ ing the punches with this program for Frank Bruno＇s Boxing．This＇ll give you infl－ nite energy and the ability to use a knockout punch as soon as you meet your opponent．You can also select your opponent＇s energy though this program won＇t protect you against speciality punches so watch out！


Well，that＇s about it for this month and this is the last you＇ll hear from me．But don＇t despair，ZZKJ＇Il be back with your POKEs and tips next month so give him a good start and send all your hacking hints to ZZKJ， Hacking Away，YS， 14 Rathbone Place，London， W1P 1DE．


# E'lite anything..... including the last Wimpy in Walsall. E as out to lunch with Karen and Nigel, the team that signed 

never knew the Editor hated me so much. 'We need somebody to go to Walsall to interview a couple of programmers,' he said as he tapped his barometer absentmindedly. 'Rachael!' Which is why I found myself on a train speeding north into an increasingly snowy landscape with the growing realisation that I wasn't just being sent to Coventry (which is several stops earlier - Geographical Note) but Siberia itself!

I arrived at Elite's Aldridge HQ around lunchtime, camera round my neck and tape recorder in my hand. Karen Trueman, the graphics half of the duo was out of the building. But Nigel Alderton, the man responsible for the coding was sitting drinking coffee in front of a row of arcade machines, all looking like the victims of some crazed disembowelling. This violation allows difficulty levels to be set so that the games can be closely analysed in the quest to create accurate, licensed copies. And there, yes, is a Ghosts And Goblins machine, the title the two are currently converting.

I dragged Nigel off to a side room, sat him firmly in a chair and set up the camera. If this was Siberia, l'd be conducting the interrogation.

## Nigel Alderton

RJS: What... hey, is this thing working? Nigel: I think it is now.
RJS: Right - I'm here in the snowy home of Elite software. (Pause to think of question.) Well - tell us something about yourself. Hobbies?

Nigel: Hobbies? I play snooker, tennis - mmm - I do a bit of weight-lifting.
RJS: But nothing to do with computers at all?
Nigel: No.
(Laughter)
RJS: How old are you?
Nigel: Nineteen
RJS: And how long have you been programming?
Nigel: Two or three years. (Camera
clicks) Do you want a smile?
RJS: No. just carry on talking. Do
you just program for the Spectrum?

Nigel: I've written for the Spectrum and Amstrad so far.
RJS: So you're Z80.
Nigel: Yes.
RJS: How did you get into machine code?

Then I just sort of messed about on the Nig
Spectrum and wrote a game, Chuckie a nic
Egg, and that sold. Then I went to wort
for Ocean - worked for them for a yes in-house. And then I went freelance anTe: l've done Commando for this place. Desi RJS: Right. So you're totally freelancetrain now?
to r
Nigel: Yeah - completely freelance. dive RJS: So, talking in generalities, how abot much could you expect to make as a RJS freelance?
you't
Nigel: Anything between three the v thousand and ten thousand a programbase Assuming that program takes three or Nig four months to write, then in theory yograp could be on forty grand a year, but write nobody is. It's aimost impossible. deci RJS: How does a program happen I'll ju then? How do you begin converting arand arcade machine?
goor
Nigel: Err - basically, you look at thsom arcade game - decide whether it can RJS be done or not on the micro - then pua tez it to pieces, analyse it. If it's got a big Nig map, map it out, work out how much knac memory you're going to need for It's h graphics, how much memory for spritudivid how much memory for the program. Athe r just start writing it.
the f
RJS: That makes it sound very simple
(Laughter) is Ghosts And Goblins goir Ka to be a particularly hard one to conver Ma Nigel: Well - l'm only two weeks int in st it. No major problems so far. her, RJS: What sort of mind does it take her, become a machine code programmer OKa I'm sure most of the readers won't har RJIS any idea... Nigel: Warped (Laughter) You've go horr
bein
have a logical mind. have a logical mind.
RJS: Yes. Kar
Nigel: (Pause) It's difficult to describe $\begin{gathered}\text { RJS } \\ \text { befo }\end{gathered}$
You don't have to have much
Js
imagination. You've got to have... you befo just got to be basically a logical perso Krog RJS: Are you based around here? Kar Nigel: No - 1 live in Manchester, but prog
when we wrote Commando they brou

Evt as we eat, Rachael Smith is totally Walsall pact to program Ghosts And Goblins...
us down here because they wanted to keep an eye on us.
RJS: Right. (Pause) How do you do your writing? Do you work on Spectrums ๙..?

Migel: No. I use a Tatung Einstein as a development machine.
RJS: Why the Einstein?
Nigel: It's... it's cheap, it's... er, it's got anice keyboard and it's got discs.

Teamwork
Despite my hours of journalistic training (both of them) I was beginning torun short of questions, so hoping to divert Nigel from the fact, I asked about the still absent Karen.
RNS: One thing l've got to ask is, if juire based in Manchester, how does the work as part of a team go? Is Karen based near you?
Nigel: No, Karen works down here. The graphics... what usually happens is I write out a specification, and once l've decided how big a sprite's going to be, II just send her the size of the sprite and she'll go ahead and do it. If it's any good, Illl take it, and if it's not somebody's got to do it again.
RJS: How about other programmers in a team?
Nigel: That's a knack. It's definitely a knack. Some people just can't take it. rs how to split the work up, how to tes, divide the game, sort of roughly down and the middle, so when you put together the parts it works.
le.
ing
int? Karen Trueman
Hy well of questions now dry, we went in search of Karen and at last located her, hiding in the programmers' room. Okay, Karen Trueman, this is your life..
RJS: Okay, we've got to go through this horrible interview bit again. Do you hate being interviewed, Karen.
Karen: I've never been interviewed before.
RJS: Fine. I've never done an interview belore. How long have you been programming?
Karen: (Pause) About three months. RJS: And what did you do before programming?

Karen: (Long pause) I was at school. I took art. (Silence. I get the idea Karen is shy.)
RJS: Okay - a nice easy question.
What's your favourite colour.
Karen: Bright yellow.
RJS: And what's your favourite game?
Karen: Chuckie Egg.
RJS: It all ties together, doesn't it. Tell me how you do the graphics.
Karen: Well, I use this graphics tool called Arthur. Elite wrote this in-house graphics tool about...
Nigel: Forty five years ago.
Karen: (Laughter) And luse that. RJS: Had you done any computer graphics before?
Karen: No. But I did a few sprites on Commando. Rory started it and I finished it. (Very long silence)
RJS: And how do you intend to make your fortune.
Karen: Marry a millionaire.
The business lunch.
Okay, I had a feeling that this wasn't going as it should. The Ed's last words to me had been, 'Keep it wacky'. ('Keep it cheap' as I remember, Ed). So I suggested that we go out to the pub to get a bit informal... only in Siberia the pubs shut at 2.30. Only one thing for it - into a taxi and hang the expense Ed's paying! (That's what you think! Ed)
RJS: Walsall, please.
Maureen: (the taxi driver): Right.
RJS: So how do you do the graphics, Karen?
Karen: Well, we usually get the arcade version in so we can have a look, then they'll just tell us the sizes they need. RJS: Do you start with the backgrounds then go on with the sprites...?
Karen: I usually start with the sprites. Get them over and done with first then get on with the screens.
RJS: Have you got a computer. Karen: My brother has and l'll get a Spectrum so I can work at home. Maureen: That used to be the airport. All: Really?
We arrive in Walsall, a town which just fails to remind me of New York, and trudge through the slush to the local Wimpy where we defrost our feet and

we
order. Karen
insists that I add that
she's a veggie and had to be forced into this carniverous cavern.
RJS: Two quarter pounders with chips one coke, a milk and an orange. Wimpy Girl: Right. That's four pounds forty six, please.
RJS: Thanks. Let's sit here. (We settle in and I get the camera.)
RJS: I'd imagine that as a team grows there's more potential for disagreement. The graphics people demanding more space for the graphics - or doesn't that happen?
Nigel: No, because there's always, like a superior, isn't there?
Karen: We're the underdogs.
RJS: Aww!
Nigel: Does anybody else get to listen to this tape recording?
RJS: No. I'm going to make it all up when I get back anyhow, so you can say what you want.
Wimpy Girl: Two cheeseburgers and chips.
RJS: Illl just go get those. Say something witty, someone.
Nigel: Do you want a chip? She's going to get some lovely slurping noises in this.
Karen: I don't envy her.
Nigel: Chomp, chomp, chomp.
Karen: Slurp, slurp
Nigel: Chomp, chomp
RJS: (Returning) So here we are, and I'm hoping you'll forget we're recording this.
Nigel: She just did. We were slagging you off!
And so I finally broke down the barriers. We stepped outside and in a totally informal manner Karen and Nigel grabbed handfuls of snow and hurled them at me. Finally, exhausted, they left me sprawled in the slush. Somehow I raised the strength to type this and now... PLEASE, LET ME COME HOME!

Next month: Macdonalds with Maureen.

# MICRODRIVIN 

# What's made by Sinclair, can be driven by people under 16, is not very high off the ground and prone to crashing? No, it's not a C5 - it's a microdrive! Andy Pennell takes it away... 

$\%$ Strange things have happened since I got a microdrive and Interface 1 at Christmas. When I first switch it on everything works fine but once it's been on for a while one drive seizes up totally or gives spurious 'out of memory' errors. Switching it on and off again makes no difference either. NR Wood, Basingstoke
$\approx$ That certainly is a bit weird. I haven't heard of anything like this before. It sounds as though it could be your power supply as it causes most time-related problems. Since you say you're also using an Alphacom printer and joystick interface I have a feeling that once it warms up it's all too much for your standard power supply. Try disconnecting the printer when playing games and the joystick when you need to print something as this should reduce the load, and hopefully cure the 'strange happenings'

How can I get my Brother HR5 to print what it shows on the screen, particularly from Masterfile? The print option in it uses the COPY command but my interface doesn't support it. SF Mallon, Hove
$\approx$ If you're happy with textonly screen dumps (and from Masterfile that should be okay) then you can use this
little program on any printer and interface. 120 FOR $Y=0$ TO 21 130 FOR $x=0$ TO 31 140 LET AS $=$ SCREENS $(Y, X)$ 150 IF AS $=$ "- THEN LET AS-" 160 LPRINT AS;
170 NEXT X
180 LPRINT
190 NEXT Y It assumes that LPRINT works (for the Interface 1 use OPEN \#3,"T"). You'll probably have to change the line numbers to be used with Masterfile. Graphics dumps are a little more complicated.
\%. I'm writing about the recurring problems of syntax errors in microdrive commands. Another reader wrote in with this problem and your reply was to ensure that the edge connectors were clean. Well, I can assure you that my connectors are immaculate but one method to get around the problem is to ease off the short ribbon cable between the interface and drive. If the problem recurs then the ribbon should be pushed back in again. This is a real nuisance and l've written to Sinclair asking for advice on making a more permanent solution.
Robin Buncombe, London
I've no further ideas on
how to cure this problem but l'd be very interested in Sinclair's reply. I've a feeling they're going to say 'send it back and Sinclair'll fix it for you' though.

- Here's a very useful tip from H Evans from Leicester. As a CAT doesn't tell you what the type of files are, you can add something to the name to indicate this. One way of doing this is to use an extension (like CP/M) for example TEST.BAS but this sacrifices four characters from the normally restrictive 10. A better way that only takes up one character is to use a token on the end of the name, for example DATA, CODE, SCREENS etc. though you'll have to decide which token you
like best for Basic programs. You could also use two tokens such as SCREENS LOADer as that'll make file types even more obvious.

Thanks for that and don't forget I always welcome tips from readers - all you've got to do is send them to me, Andrew Pennell at Microdrivin', YS, 14 Rathbone Place, London W1P 1DE. Well, that's it for this month but look out for next month's Microdrivin' as I'll be reviewing a microdrive sector editor.


## PRICE BREAKTHROUGH <br> SWITCHABLE JOYSTICK INTERFACE ONLY $\boldsymbol{£ 1 0 . 9 9}$ POST fREE

- ALL THREE SYSTEMS AT THE FLICK OF A SWITCH -'KEMPSTON'-'CURSOR:- INTERFACEII'
- ACCEPTS ANY 9 PIN JOYSTICK -INCLUDING RAPID FIRE MODELS • SPECIAL OFFERI! Buy with QuICKSHOT II complete for only $£ 17.99$ SEND
NOW


 POST FREE

ROBOTICS \& MODEL CONTROL
£29.99
Made sasy on your Spectrum

-I ropender nots for nimupy

- The
- 
- Thas is the unt that the "Lep"" pubication Mals and hapas por ame

Aobetr' was basel on * Conpete with al cablen $*$ fasy lo ise.

Now you can create Superb Graphics easily with


Digital Sound Sampling Technology. NOW Avalable


Games Ace features:

 filwoots
PLUS DEIVES TiE Souno mou roun
 only EI 7.99

II ONLY $\mathbf{7} 75.99$ or complete with Ouick Shot II only $\mathrm{EP2.99}$
Turbo Ace features:
Mit neari ststexsat tie rucx as A swnce Kisapstow - CURSOR - MTENACEII - ACCEPTS

 of light slices through the darkness. But only one man in the metropolis knows its true meaning - it's a call for help that he has answered many times before. Bruce Wayne races to the phone and hears a familiar voice. Commissioner Gordon: Batman? (For it is hel) Bad news. Robin's been kidnapped. Batmant impossiblel He's down in the Batcave.
Commissoner Gordont Then this ransom note's a ruse. But...

Has Robin been kidnapped? Or has the Boy Wonder wandered off? Can the Caped Crusader come to his rescue? Will the Penguin end up with egg on his face? Has the Joker cracked it? Is Catwoman felline felonious? All may (or may not) be revealed by Tommy 'Boy Wonder' Nash as he reviews Ocean's new megagame, Batman.

Wheececee! Batman comes slip slidin' away down the Batpole and he's off on his Robin rescue mission. Yes, that's how the straight-backed, squarechinned superhero of comic strip and silver screen makes his debut into software. Okay, so he's a mite chubbier than you may remember him from the pages of DC Comics but his cloak and mask make him instantly recognisable. But now he's on his own - sans sidekick. The other half of the Dynamic Duo has gone walkies, though the exact reason for this hadn't been concocted when I saw the game. At that time, the finishing touches were just being added to the plot though the game itself was a hundred per cent complete. No doubt some perfectly implausible explanation involving one of Batman's arch enemies will have been thought up by the time the game hits your Speccy.
Originally, Robin was meant to have a starring role in the game alongside his crepuscular companion and the programmer's even got round to designing a spritely figure for him. But then they hit a stumbling block. How do you make it easy for the player to control two superheroes simultaneously? It was at this point that Robin was conveniently kidnapped!

Batman's first task is to collect
the four items him in his powers. But the tidiest of he has to find out where he left the game that make up the
Bateave. He's after his Batboots that allow him to jump; his Batbag so he can pick things up; his Batthruster, to shoot him sideways and his Batbelt, which reduces the pull of gravity on him so he can 'fly' further. The game's cleverly designed so that you can't progress beyond a certain stage without these items. With them, the Caped Crusader is ready to go crime-fighting.

Robin didn't go without a struggle. The seven parts of the Batcraft, which he was servicing at the time of the snatch, are scattered all around the Batacombs. And before Batman can rush to his rescue, he must find all the bits so that they can be teleported to the launchpad, situated at the top of the very highest tower. The game ends when Batman's sitting in the reassembled craft ready to rescue Robin and bring the Gotham gangsters who got him to justice. (Note for Batfans; the reason for having a batcraft instead of the Batmobile is that a vehicle with wheels would've taken up too much memory!)

The Batacombs are a complex maze of at least 150 rooms spread
over nine floors. Well, it might be 150 but it could just as easily be 151 or even 153. The programmers weren't sure and I wasn't counting! The screens have a definite Knightlorish look about them but the much larger number of rooms means many more puzzles. Batman will test your arcade/timing skills to the limit but it'll also burn your brain out with its bewildering range of tricks and traps.

The Ultimate influence is unmistakable, of course. The game has a similar technique of forcing you through doors if you're not quite lined up. And you can pick up objects in a room and use them there but you can't transport them to other screens a la Fairlight. And the rooms reset to their original state each time you re-enter them. But the game's a definite development from the Knightlore days. Take, for example, the reincarnation pills that allow you to restart the game from the point at which you collected one last - great idea that. And then there's the ability to define a single key that lets you pick up and jump at the same time. Cuts out all the contortions with keys that you had to go through to achieve the Ultimate accolade. And Batman keeps up a constant speed no matter how many objects there are in a room - none of those short, slow steps that held Sabreman back on full
screens.
It's this attention to detail that marks Batman out as a true megagame. Hardly surprising then that it's taken ten months to write. You're even given three options for the sound effects. Nasty lets you hear every sound that resounds round the Batacombs; Useful only makes a noise when the caped one crashes into things; and Late At Night is silent.

The only thing that's missing is the crazy cast of criminals from the original cartoons. If ever there's a follow-up, perhaps the programmers will pick up a Penguin or take the gag out of the Joker's mouth...

How does Batman's mum call him in for a meal?
Dinner dinner dinner dinner, dinner dinner dinner dinner BATMAN


## EN SUITE BATROOMS



That's a re-incarnation pill up there on top of the pillar. Fortunately it doesn't have to be taken internally - getting one of those down your gob could prove difficult. Use the spring (\$ for spring) to boing yourself up. With a pill in your possession, and there are six in all, you don't have to restart the game from the beginning when you run out of flives - you can choose to start at the point where you collected the pill. (Programmers' noter adding re-incarnation pills to your programs is not harmful to the memory. Batman only uses four bytes to store the data for lives, objects collected, room and so on.)


Just when you thought it was safe to call it an Ulitimate clone... Double rooms like this are dotted all over the Batacombs but this is the first - and it's quite a shock if you're not expecting it. These rooms also add to the realism of the game - are all the rooms in your house the same shape? - but it's still possible to map the game.

## BAT MOBILES



Does he look the bat's whiskers, or what? He walks, he runs, he jumps, he stamps his foot now you can collect the complete set of Bat capers. This print-out shows you some of the programmers' finished ideas for the game's graphics. Besides Batman, you can see a selection of the dastardly devils out to do him in. Okay, all our old faves like the Joker and the Riddler have failed to show but the game's still chocka with cooky customers.

## LATER THAT SAME EVENING

This is a one-way walkway to destruction. Step on it and youtt be whisked away to your doom - its a conveyor belt. Just keep moving In an equal and opposite direction and you should be okay.

It's the Caped Crusader himself - bit of a fat batt Okry, so he's put on weight since we last saw him but he stili keeps active. That's why when you leave him alone too long, he taps his foot to tell you to put a move on.

Here's the Batthruster sneakily tucked away behind these bricks. The one colour rooms can make it a bit tricky to spot objects sometimes so the programmers have seen to it that they move sllightly as you enter a room.

Just when Batman's in a real batjam and it looks like he's breathed his last, something always crops up. The game's the same sometimes. There's a random 'dog's life' that may just save your bacon.

This is no stainway to heaven - you'li soon find that the steps have a tendency to disintegrate as you tread on them. Which ones? You'll find out soon enought

You can see here the objects that are stored in your batbag. But oven Batman can only carry things of a reasonable size like this spring. If you need to use a larger object to stand on, you'li just have to push it into position.


Batman? Pah, Catman - he starts out with nine lives. At least you can't accuse the game of being stingy. But then with 150 odd rooms to explore, you're gonna need them. Plus, there are a further 22 batpilis scattered around the rooms tharli each give you an extra life.

These boots were made for jumping and that's fust what theyll dol Course, trying them on for size can prove a little tricky, And getting out of the room again is no sasy matter. Use your carbon-reinforced cloak to hang on by the very last thread... and jump!

If you're going to keep out of the hairy monster's way, you'll need to find out which of the three bricks are safe. Watl, the first is okay, the second disintegrates and the third is a conveyor belt thar'tI dump you straight onto the deadly floor. So, take care.

When you've got your grips on an object it won't remain permanently in your possession unless you dropit and pickit up again. I's a little trick you can try out on the thruster. Forget and leave the room, and the thruster will retum to its original position.

- All over the Batacombs there are hidden rooms and the only way you're going to discover them is by walking into walls: Course, most of the time you'll just ond up with a sore heed.

If's not only picking up objects that can cause problems. Sometimes just getting from one side of a room to another can get Batman's knickers in a twist - even though he does wear them outside his trews.
$\qquad$
Here boy, walkies. This canny canine'll make a dog's dinner of you but you can put him to good use. Wait for Rover's return then drop the spring on his head. Now It's your tum. Jump on to the spring and bounce up into the next room where you'll find a bit of the Batcraf:

ight, to begin let me say that these are going to be some of the best adventure pages around, so keep reading 'em. And just so you know, I'll be dealing only with straightforward text and text'n'graphics adventures, with maybe some variations like The Fourth Protocolallowed to creep in. But, arcade adventures will be dealt with elsewhere in the mag. Okay the odd one might sneak in when I'm not looking, but if I come across that Wally Week in these pages I'll throw him out at once.

If you're writing in and want a personal answer to a problem, then enclose a stamped addressed envelope. If you don't then Itl assume you're happy for me to deal with your problem in these pages. Mind you, just because you enclose an sae it doesn't mean you won't be seeing your name here.

Address your letters to me at Your Sinclair. And remember, if you've got a query for a different department, you'll have to go wild and splash out 12 p on another stamp otherwise it's likely to get lost among the old axes and dead dwarves that lie around my desk.

Always try to ask a specific question, too. How not to do it is shown by Darren-Clark, of 8 Meadow Road, Mirehouse, Whitehaven, Cumbria CA28 8EJ. "How do you finish Spiderman?" Darren asks. Well, it depends how far you've got, Darren. Do you meap right from the start, from about half-way through, or just the last few problems? Anyway, for help on that, The Hulk, and just about any adventure youcare to name, contact James Elliott, 266 Carseview, Tullibody, Alloa FK10 2SU.

Another example of how not to do it is from M.N.Andrews, of 116 Rosebery Avenue, Yeovil, Somerset BA21 SLF, who says he or she is pulling out his or her hair trying to get past the Guardians of the Gates. Fine, but it'd make things just a touch easier if you told us the name of the adventure. We don't want people pointing at baldies in the street and saying "They must read Your Sinclair," do we?

Now on to this 'El Spremo' business. So many readers have completed so many adventures that I think instead I'll start a 'Big-Head of the Month' award, so just watch it. What I would like, thoughy is to hear from anyone who thinks they might be the first to finish an adventure. Write in if you reckon you have a claim to fame like that. You never know, we may even feature your ugly mug in these pages.

There's no doubt in my mind, though, that the 'El Supremo' title has to go to John Wilson of Rochdale, who's first in with completed solutions. And his right to the title is even supported by other readers who acknowledge his help. John himself hardly ever seems to need a clue of any kind. I hereby declare him the Rochdale Balrog. (Let's hope it's not catching. Ed). We'll find out how he does it in a future issue.

Now, a few tips to show that adventures are capable of POKEing a program as well as the next person. Jim Grimwood of London found you can break into Level 9's Dungeon Adventure if you get stuck in the tower. It's at this point that there's a bug in the routine that keeps track of the objects you're carrying. If you have too many you can press BREAK, POKE 26490 with the number of objects you were carrying, GOTO 100 and then get out of the exit door.

Adrian Shaw of Plymouth has been tinkering around in the Oracle's Cave, and found that you can press the down arrow key to get into the program, then change the value of $T$ in line 3002
to alter the number of days you have in which to complete your task. Increase it to 36000 to give you 50 days, for example, or down to below 3600 to start making the game tougher.

Most adventures are quite hard enough as it is, and Andrew Smith of Fakenham, Norfolk, is finding that he Karn't do Heroes Of Karm because he's having trouble finding Khadim and also according to him, because he can't open the pearl. I think you mean the clam, Andrew, in which maybe you hope to find a pearl. You can't get into that till quite late on in the adventure. And as you might've expected you'll need a tool of some kind to prise it open: RABW ORCA EKIL. As you see, Ill be printing the occasional solution backwards, in case some people are trying to figure out that particular problem for themselves. Though don't be like a reader (on another magazine, of course) who wrote to ask me if that meant the answer had to be typed into the adventure backwards if it didn't work the right way round.

Did you know that there was a text-only version of The Hobbit I didn't, till several readers wrote in to point out that if you choose ' N ' as the key to press to remove the loading screen and start the game proper, the graphics don't appear. It works - try it. I think the star of that adventure should-be nieknamed Bilbo Buggins, because of the numbers of thegs in the program. The latest to come my why is from Ian Ormesher of Bootlc, who says that in the original version 1.1 of the game if was impossible to kill the dragoh, That's because you couldn't go east from the town in the middle of the Long Lake. That's becausc you couldn't go east from the town in the middie of the Long Lake. This has been corrected in version 1.2, mind. It sounds like it was a slight fault in the routine where you must ask Elrond to read the map for you, and the route he tells you about is only actually filled in on the map at that point. If you don't have him read the map to you then the route won't exist. The way to spot the difference between the versions is that the names of the programmers have been added on the loading screen for 1.2 . Have any other readers found this problem? My version is the second one, so I can't check it out.
I'm sure wetll soon be encountering more and more bugs on Lord Of The Rings in the months to come. The most obyious one is in the first location, if you try to SEARCH DESK. See the response you get tothat! Any more from you little bug... erm, you little bug-hupters out there?

One of the problems in Melbourne House's Iatest is getting through the maze in the Mines of Moria. A reader from Christchurch in Dorset with the almost perfect adventurer's name of Richard Grandorge got himself lost at this point. I won't print the route through the mines backwards, as you might find yourself even more lost than you were to start with. So, if you don't want to know, don't read that it's UP, EAST, EAST, EAST, DOWN, DOWN, WEST, WEST, WEST, DOWN - you should then find yourself in a corridor.

Richard and others have also had trouble with the barrow-wight. It seems that violence only meets with violence. A peaceful approach won't get you anywhere, so: ELBIS IVNI EMOC EBDN AGNIR RAEW. Another common problem is asked by Tim Chamberlain of 17 Colthurst Way, Leicester LE5 2LF, and that's "Can you kill the Black Riders? ${ }^{\prime \prime}$ No, cowardice is the answer, but you've got to know which way to go to avoid them. If they arrive, the general rule is HTUO SROH TRON OGYL NO. And now if you'll excuse me, I'm going west till the next issue.

## LOST SOULS

If anyone's ever helped you on an adventurt Vinc remember that and see if you can now help any of tit She following with a quick letter solving their problen Wiga
J. Rose, 12 Rusholme Grove, Rusholme Manchester. In Sherlack, how to prove to Lestrad you that Mrs Brown killed herself, that Foulkes isings Norn cent and that the body is really Tricia Fender. If Pres Vall rive 17, how bo pars rats get meat Fender:. rency other than Grotniks. Queensferry, Fife KY11 115 . Din K Prota Gibraluar, how to get through dock customs and fini like civilisation after parachuting from plane In $\pi$ inspo avilisation afer parachuing from plane. In 7 the Goblins' Dungeon (you're barking up the wrop key there, Allan.)
J. Rickman, 25 Beech Wood Ave, Ner adve Milton, Hants BH2 25 NB. In Ship Of Doom, how who to get the key from under the glass cover in the lit totw room.
Lee Crump, 6 Colebrook Ave, Shiriey As Southampton, Hants SO1 5NR. In Sherlod adve how do you decode the notes so they're no longe futur faulty in Basil's house?
D.T. Ash, 144 The Drive, Bexley, Kent DA 3BX. In The Hobbir how to deal with the bulboe eyes, and in Legend what to say to the dragon (wel what do you say to a dragon'), and what to offer th robbers that surround you in the woods.

Paul Bree, 56 Pete Orkney, Sce, 56 Meadowbank, Kirkwall message, Scotland KW15 1QL has a simp feeling, Paul, but maybe a specific question woul help someone help you.
D.M. Markillie, 26 Marshall Roal Cambridge CB1 4TY. How to fly the plane as what is its destination in Atlas Asrignment. I doe know that adventure but it doesn't sound much fus searching for an atlas. Every school's got hundred of them.
Owen Dunn hasn't done Se-Kaa of Aus even because he can't go in the castle and his staff: mine useless. Sounds like Basil Fawlty again. Help Owe out at 78 Roche Way, Wellingborough.

Nicholas Redman, 2 Hawthorn Marple, Rosehill, Stockport, Cheshire SKi 6EP. In Finders Keepers how to get out of the ar above the puss-with-no-boots, and in Ship Of Dos how to get the key when you've broken the gia case. (Not that one again!)
Not a maiden but definitely in distress Spellbound is Andrew Heath, 52 Lower Dolcliff Rd, Mexborough, Nr Doncaster, S.Yorks S6 $9 P A$. How to get to the bottom two floors of ti game and how to enter the gas-filled rooms.

## KIND SOULS

I know there won't ever be a shortage of Le Souls, stuck in adventures and writing for clues, bu I hope III also be hearing from all you Kind Souh too, offering to share your success with others ani giving a helping hand by way of a map, a clue any unwanted old lamps you have lying around.
To start this hopefully never-ending-story (nom there's a subtle link) is David Inglis, 35 Kirkban Ave, Cambuslang, Glasgow G72 8NT. David finished and mapped The Neter Einding Stops excep for a bit near the end where, he says, he cas) remember how he got from the stairs to the doe We've all had nights ike that, David. If you want ag help on NES, then, send David an sae- and ifhecer remember how to get to the postbox be'll solve you problem.
Or write to Alan Fairclough, 23 Melider Gardens, Tranmere, Birkenhead, Mersey side L42 5NG, who completed NES in 12 hours and then went on to polish off Lond Of The Rive which people seem to be finding much easier thes The Hobbil, and rather a disappointment. "Nor patch on The Hobbic," Alan reckons.

Talking of which, there's hctp avaitable fore another reader on The Hobbil, Hampiuad, Vallyn 17, Velnor'I Lair and Pyjamanuma (how did Wilh

# Mike Gerrard joins the YS team to champion the cause of Spectrum adventurers everywhere. 

emp into my column - get out at once!) He's
Fiaceat O'Brien, 23 Manor Road, Steviagton, Wigan, Lancs WN6 8EE, is he a Tyin adventurer with no pecr?
Youll have to send the postman further north if pa want help on Eink The Viking. No, not quite to Nowant help on Enk The Vikang, No, not quite to Prestrick, Ayrshire KA9 IL.N. Euan's also wiling to help on Hampstead, Urban Upstant Werliock, Spiderman, The Hobbit, Valkynie 17, Fourth howal Part $I$, all Artic and Channel 8 (R.I.P.) adientures, and most Quill d adventures (sounds the you've got an early Quill that allows you to lis you've got an early (huil that allows
apoct an adventure's data - am I right?)
If you're wondering why I repeat tities like The H.Wis, which several people have written in about, sell it's hecause if someone's stuck in more than one stursture, he might be able to find one other reader sho can help on them all, rather than have to write istwoor three. If you do write, never forget to send a stwoor three. If you do write,
lamped addressed envelope.
Asfor those who've completed literally dozens of atientures, Im saving their moment of glory for a fiture issue, but meanwhile a few quickies:
The Hobtit, Sub-Sumk, Urban Upstart, Red Moom, Ewrald Isle, Forest At World's End and Twin Kinydom Valley: Kevin MeIntosh, 419 Great Fettern Rd, Aberdeen AB1 6 NJ .
Watern Rd, Aberdeen AB1 6NJ.
Pant of Death, Valkyne 17 and Fourth Protocol: Pter Bates, 21 Bedford Gardens, Tinshill, Levds LS16 6DH.
Svideman and Urban Upulart: James Winnard, it Bexley Drive, Normanby, Cleveland. And finally a plog for the Hints Archive for Lost Mimfurers (or HALA for short), run by Sonia
Griffiths-Glover (or Sonia for short), from 38 Bellfield Drive, Willerby, E. Yorkshire HU10 IIR HALA offers help on any adventure, and in murn only asks that you send in something for the arhive, to enable it to be built up. If you send Sonia the weal sae she'll send you details; and she may nea put a kiss at the foot of your letter, as she did on nike - but she'd have got the plug anyway!

## ADVENTURERS <br> INTERNATIONAL

If you're feeling kind and want to save a Danish ahenturer's bacon, you can do your bit for ermational relations and contact Nikolai S. Christensen of Kildevej 15, 8600 Silkeborg. Deamark, who's sent two postcards depicting amps from Greenland for some reason. Red Aerings I expect. Anyway, Nikotai's having trouble mbting the tax collector in Robin Of Sherroood, and moting to the town in Valkynie 17 (learned how to ili, zot your skis and your iki poles, Nikolai?)
From the same neck of the northern woods is
Steves Snedker, Hovedvesen 124, 2600 Glostrup, Deamark, who wants more tips and mips (jost what we're planning to give you), and also nomdi to get into Schloss Drakenfeld in Valkyne 17. nodatoget into Schloss Drakenteld in Valkyne the
That sure you've "bin' everywhere outside the Shie sure you've bin everywhere outside the
Sohlow, and if you need a password it's a 10 -letter vind that's in my previous sentence.
Yes more from the land of the Danes, with Martin Brinks, G1. Hellebackvej 68a, 3000 Elinore, Denmark. Martin's caught up in the adour codes of Smotoball, and anyone who's gone dour codes of Smotoball, and anyone who's gone
drogh that will havesympathy for him. I'msure. If jowght that wil have sympathy for him, I m sure. If
jolive enough, write and explain how to use the aps nember's code - it's a lengthy explanation thit there lin't really room for in this short section. Finally, for a slight change, a letter from Sweden, nid Kristoffer Lindberg, Rödkallensvigg 11, \$5141 Lulea, Sweden, Kristoffer found that The Nor binding Slory didn't quite live up to its name as arpolished it off in three days, but needs help from ithoe currently playing Sherlock, Soritrun'? Sulereor Hampitead, though he doesn't say where tritiock. What a Swedish adventurer makes of the (2W) hegentlemen's dubs and so on in /fampitead! intinow, but I'd be quite happy to hear, and from ist other adventurers international.


Our adventure section has increased considerably this month, and from now on it'll be in the very capable hands of adventure addict, Mike Gerrard. Mike is already well-known for his adventure columns in other computer magazines, and he has also written several adventure books and articles for the Guardian.


There's quite an incentive to buy the Spectrum version of Incentive's Graphics Adventure Creator when it's released on May 1st. According to Ian Andreto the sof teaure house is actively looking for adventures that 've been written using the program (which has already had rave revietes in its Amstrad version.) "The adventures soill have to be good, though," "Ian says. "At the moment rac re receiving tweo or three a day weritten using the Amstrad GAC, and tee 've only found one that's different enough to be worth publishing under our nete Medallion Adventures label. We definitely tant to see Spectrum adventures, though"

The Spectrum version weill have all the features of the Amstrad version, plus a feve extra ones. The price has yet to be set - also the case for Incentive's next Spectrim release in May/ Fune, Axc, a strategy graphics adventure twith battle sequences, complete twith book by Frank Oliver and graphics from Incentive's regular art-man, Pete Carter.

Iasked Global Software, whose 4-adventure compilation is this month's main review, if it had any other Spectrum releases lined up. Mike Daniels said, "We've got a
couple of adventures almost ready, written on the Amstrad using Incentive's GAC, and we're just waiting for the Spectrum version of that in order to convert them. One's called The Beer Hunter, which is obviously a boozy adventure in which you have to manage to get back into a party you've been thrown out of, and the other's Old Scores. This is a modern-day adventure, based in and around the South Bank area in London. It has over 200 locations and three major puzzles to solve in a real-time of about two hours.
We've got back-stage tours of places like the Royal Festival Hall arranged to tie in with it."

Talking of art-men, one of my own heroes is Terry Greer, who produces the stunning pictures in Interceptor's adventures. Though the software house recently cut the price of all their adventures to $£ 1.99$, fellow fans will no doubt be pleased to hear that Terry's currently working on their next release with his regular partner, David Banner. "lt's an adventure revolving around an earthquake, " was all Terry would tell me, though.

0nthe 128 front it seems to be very much a case of "Wait and see." Though Ocean has extended The Never-EndingStory (packaged weith every 128 sold other adventure publishers are in the main saying that they'd like to see how the 128 sells before knuckling down and producing anything for it. Oh well, it gives us chance to catch up on a few more of those tiny 48 K games.

Some of you Sevords and Sorcery fans out there might like to know that PSS has produced a second level to the original game, along with various other goodies like cassette labels for saving your favourite characters and The Complete Guide To Monsters, - 1 think everyone could suggest some entries for that! On its own the new packagecosts £ 4.95 mail order only, or you can buy the original level one release as well for a package price of $£ 14.95$

Figunes just published by The Adventurer's Club Lid show that they now have a membership of over 2,000, and about $40 \%$ of these ane Spectrum otvers. Half the members are in the 18-35 age group, though this may have something to do with the E10.95 membership foe. They do give value for money, howetver, tuith a rgular heavy dossier thumping through your letter. box and access to a phonc-in helpline five days a week. The news that Pete Austin's just agned to be their Prsident is a feather in their cap, so if you. fancy rading his monthly column in the club dossier, give 'cm a nng on 01-794 1261.

# YSAduentrares 

## FOURMOST ADVENTURES

Compilations are definitely the in-thing at the moment. Here's the first especially for adventurers, although it contains four lesser-known adventures rather than a group of mega-hits. Still, anything that carries Tony Bridge's seal of approval has to be worth looking at, and the varied selection here should provide at least two or three for anyone to enjoy.

## OUT OF THE SHADOWS



My own un-favourite is this attempt at producing a D\&D style game.
The opening screen invites you to restore a saved game, create a new dungeon, create a new hero, or create both. And your hero can be either a human, elf or dwarf, though there are no characteristics to set up other than those you're issued with. You then have a choice of six quests; or of a ran dom quest; or of no quest at all if you just want to have a mooch about. The quests all have grand names like Silmaril, The Island, or Crown and Serpents - and as that sounded like an interesting pub to visit I set off in search of it. It has to be said, though, that all the quests look remarkably similar.
One feature of the display screen is an attempt to simulate real vision. So, your little matchstick man can only see what he'd see in real life; any part of the landscape that's blocked by walls or whatever doesn't appear on the screen till you move to a more suitable position - hence the shadows, out of which various beasties come to attack you. One of the first essential things to do is locate the home of the
Merchant, somewhere near your starting point. Here you can buy and sell items, including the food that you'll need to keep on trekking.
There are plenty of spills and spells, as you attempt to slay a
few monsters and boost your experience. If you fancy moving a matchstick man round a matchstick landscape and getting attacked by matchstick rats then this could be just the game for you.

## THE MURAL



The Mural is certainly a contrast - unless there are now dungeons and dragons in Neasden High Street. This is where you allegedly begin the game, according to the scenario. Having been accosted by two men wearing suspender belts, you're given the task of painting over an obscene mural. Now you have to admit that as adventures go, this is just that bit different!
You awake in a cave with nothing more for company than The Quills gothic character set, but with exits in all directions. Trust me to pick the one which is immediately blocked off by a penguin which drops down and sits there eating a sandwich. Or was it a sandwich eating a Penguin? Whatever it was, I had nothing to try to get past it with, so I entered the cupboard,
warily examined the smelly fur coat and tin of dead maggots, before going north and walking into a lamp post where I was given a message that I'd met the lion and the wardrobe, but no witch yet!
Back at the cave, another exit leads to the obscene mural itself, so in the interests of research, I took a close look. It "shows several nubile elvenmaids in some extremely erotic postures while a gorilla in a tutu dances in the background. Shame it's text-only. It sounds just like the YSChristmas party! Interesting as the mural is, the room's a bit plain otherwise, so it's back to the cave and out the other side and off to a small house, where you find a carved cuckoo, a copy of the New Ore Times (ouch!) and a C5 order form quietly mouldering away. Heading off in yet another direction through a field of ripening corn, past the buzzing insects and the hovering vultures, I managed to squeeze myself into a pillar box but couldn't squeeze myself out again. The adventure makes as much sense from in there as it does from anywhere else, so I stayed put and tried to read the small white envelope and puzzle out why I hadn't been able to get the bucket with a hole in it out of the well. Baffled yet? Me too - but I enjoyed it all tremendously just the same.


Relcased previously as Project $X$ - Micro Man, this is the tale of Professor Neil Richards (that means you), who's been given a dose of Gamma Radiation that's reduced him to the size of a box of matches. Quite why the shrinking has to occur while he's sitting inside his car I don't know, but it does lead to the first fiendish problem - how to
get out. As it seems to me highly unlikely that most people would get it, F'll give the answer here, but backwards, of course: TIGN INRU TFOD AETS NIEL DNAH DNIW,

With that out of the way I was soon wandering towards the main road, where a dead hedgehog warned me to be careful. It's bad enough being small without being squashed. Keeping to the fields seemed a better bet, and the first simple maze came in the form of a haystack - no prizes for guessing what you can find hidden there. L.ater on a broken lolly stick proved its usefulness. though you've no sooner dug your way out of somewhere than you're confronted by a giant mole. Up onto a lawn and you're outside a house, though inside the garden shed there's a swarm of killer wasps that saw me off. Fortunately the RAMSAVE feature helps battle recommence pretty easily.

Microman's a lot of fun, and clever use of The Illustrator means that decent graphics pop up fairly regularly.

## GALAXIAS



This final adyenture on the Foummost tape is the one that'll probably interest lots of people as it's an carly effort from someone who went on to do better things. That someone is Fergus McNeil, the better things are Bored Of The Rings, Robin Of Sherlock and various quests for various joysticks. Not that Galaxias is in any way bad - it is certainly my favourite in this collection, with lots of style and indicating just how much variety you can coax out of Gilsoft's utilities.
For a futuristic adventure we're presented with a futuristic character set, though I'd have willingly sacrificed it for

# PIPED STSTEMS 

M/DRIVE DOCTOR 2.1 48 K Spectrum / Spectrum +

Extends BASIC to provide extra disk-like commands. New release includes:- Full rename facility. Sector restorer. Cloning of ANY cartridge (two drives). Cartridge status display. Full catalogue. Mergeing of ANY program. File finder. Lists faulty sectors. Special commands for advanced users and plenty more. Compatible with all Sinclair Interface 1 ROM types. Included is a sector editor program for on screen alteration of ALL data. YOUR TOTAL SATISFACTION IS GUARANTEED

WHAT THEY SAID ABOUT VERSION 1.0:-

Simon Goodwin (CRASH) ". . . . useful to anyone who uses microdrives seriously."
J. P. S. Glos " ". . . . would not be without my M/DRIVE DOCTOR."

AVAILABLE MAIL ORDER ONLY. SUPPLIED ON CARTRIDGE COMPLETE WITH A 2500 WORD USER MANUAL FOR $£ 7.50$ inc P \& P. (Price $£ 8.50$ inclusive if outside U.K.)

QL \& AMSTRAD versions due soon. Enquire for details.
SEND CHEQUES / P.O. TO:-
'PIPEO SYSTEMS'
151 MILLBRIDGE,
DOLLIS VALLEY WAY,
BARNET,
HERTS. EN5 2UH.

## The Adventurers Club Ltd.

$\overline{64 \mathrm{c} \text { Menelik Rood, London NW2 3RH. Telephone: 01-794 } 1261}$


## WE OFFER:

* Monthly 20-pages Member's Dossier with reviews, tips, solutions, new releases, etc
$\star$ The Master Adventurer Trophy Competition
$\star$ Unlimited help through our phone-in helpline
$\star$ Discounted software
$\star$ Contact Column, Free Swap/Sell facilities
$\star$ AND MANY OTHER SERVICES
£10.95 Join now to get a \&1 FCL Credit Voucher redeemable against any service of our Club
(OVERSEAS RATES ON REQUEST)
*YOUR MONEY BACK IF NOT SATISFIED!!!*
(Less 50p charge. Details with your first Dossier)
Please complete coupon or give us a ring for our
FREE leaflet or any other information


## Name:

Address:
1 apply for membership of the Adventurers Club - 1 enclose a cheque/postal order for $£ 10.95$

YS/5/86
The Adventurers Club Ltd. run by Professionals for ALL the Adventurers!
(We ar mot cosaseted in tay wey to de Leternationa/ Adrenture Clab)

one that I could read. Alongside it goes a futuristic adventure language, too, so that you get responses like 'Confirmed' instead of 'OK', and 'Input not understood.' Your job is to cruise the galaxies and find the lost crystal, but first it helps if you look round the locations near the Spaceport where you begin. Just south of the Metalon Bar you'll find the

Alcohol Reclamation Centre, (the loo!) while further on there's the miniest of mazes one location!

There are special instructions for when you reach the bridge of the meta-galactic skycruiser, and these enable you to visit whichever planets are within your reach. Initially there are four of these: Graflon, Terminan, Akrol and Septule.

## THE EXTRICATOR

I suppose you might call this another QUIP adventure - one written using The Quill, The Illustrator and The Patch. And come to think of it, that's not altogether a bad description for a game that displays a neat line in dry humour. In one location there's a piece of string which you can't GET, so naturally you EXAMINE STRING; "You know perfectly well what a piece of string looks like." Oh well, it was worth a try. Elsewhere you rummage through a pile of rubbish to unearth a letter. We intrepid adventurers are always finding letters, and what's the first thing we do? Right, READ LETTER. "It's not that sont of letter!" What' Examining the object proves that in fact it's a letter 'L. that's dropped off a sign somewhere - though what the 'I' you do with it I haven't yet worked out.
Your task in The Exiricator as an carth agent for a top secur ity company is to rescue a Professor Roberts from the detention area of the 'Star Fleet Command' headquarters on the Planet Arg, You begin, though, on "an alien plain with purple grass swaying in the breezc." You're wearing a tin hat and staring at a rather tatty scarecrow. Sitting staring at things doesn't normally get you very far in adventures, though this is one where you'll have to look closely at the occasional illustrations, as well as paying attention to the text, if you're to make any progress.

Uncovering a familiar old fissure, I made my way past some not very clean water and into one sector of the complex. On a desk I found a computer, which on closer inspection turned out to be "a ZX Spectrum wearing a Saga keyboard." I had a tape of data with me, and got a code from that which later provided me with a laser gun, and eventually I made it to the red sector.
I doubt if experienced adventurers would take too long to work their way through this, but I think you'd still like some of the problems and smile at their solutions. Beginners though, could find it taxes their ingenuity a good deal. The atmosphere's reasonably convincing, with an attempt to produce more than just the bare location descriptions. And the pricing's about right to provide value for money, especially as the B-side of the cassette contains an impressive tune called Frantic.


Graphics are used sparingly but effectively, and the ability to travel between the different planets means there's a lot of variety in the adventure - just as there's plenty of variety in this package. And at $f^{2}$ an

adventure I can't see anyone complaining. Okay nothing stunning, but a nicely thoughtout collection of good solid stuff that might otherwise have escaped your attention.

## FAX BOX

Title: Fourmont Adventures Publisher: Global Software, PO Box 67, London SW11 IB5 Price: 57.95

## SURVIVAL



Central Solutions seems to have released several tons of budget software recently, including a few hundredweight of Spectrum adventures. All the ones I've seen so far have been written using The Quill and The Illustrator, but my choice of what to review was dictated by finding one that would load. Never has my volume knob been twiddled so much to so little effect.

Still, the aptly named Survival finally went in there, though after all that trouble I really wished it hadn't. Perhaps after introducing The Patch, Gilsoft ought to provide a spelling checker for programmers who write 'thaught' for 'thought' and 'screach' for 'screech'. The idea behind this one is that you're MI5 agent Gary Gullible and you must recover some top secret documents believed to be hidden on the island of Master Mud. It's here that you're parachuted at the start of the game.

You begin beside a perimeter fence carrying nothing but a cheese pasty, a crowbar, a stopped watch and a lamp without a plug. Strange things to be carrying when you've just been parachuted into this top priority mission. Bond wouldn't have stood for it! The first painful experience is your encounter with a guard, and this meeting is followed by a Swords and Sorcerytype sequence of messages like "He hit me" and "I missed him" which are printed on the screen in a long drawn-out manner. You have no control over this and as the messages and outcome are the same every time your enthusiasm for the adventure soon starts to disappear. My first thought after that was SAVE, which I'd advise you to do, except for the slight problem that the program doesn't recognise the LOAD command. Despite the fact that this is documented, it produces the response "I can't." I tried the usual RESTORE, RESUME LOAD GAME, LOAD PROG in case the documentation was wrong, but all to no avail. This is doubly annoying when the adventure is jam-packed with sudden deaths that hit you with no warning. Take, for instance, the corridor junction where, upon going NORTH, you're immediately killed by guards who smell your cheese pasty. As each of these sudden deaths means having to go back to the start, you can imagine the fun I've had reviewing this one. Survival really was an apt titie after all!

fax box Titie: Survival Publisher: Central Solutions Price $\$ 1.99$




## More thrust Scotty 'cos we're off into space on a mission to preview Martech's latest game, The Planets. Teresa Maughan boldly goes where no woman has gone before...

captain's Log. Star Date 4.3.99. Disaster has hit the planet Earth. Tornados, Earthquakes, volcanoes and hurricanes rage violently, threatening the survival of all life forms. An alien force has made its presence known. Signals arrive from deepest space and a capsule enters the Earth's atmosphere. But what does it all mean? Mission: To save the world from total annihilation.
Sounds pretty hairy, eh? It's
actually the scenario for Martech's new arcade/strategy game, The Planets. Written by lan Mc'Ardle, Malcolm Smith and John Wilson, it's an icondriven game that looks a shade similar to The Fourth Protocol - which isn't too surprising since John was involved in the development of that game too. That's where the similarity ends. though. The Planets is a huge puzzle that contains many different game elements as well as being extremely informative and accurate on our solar
system. The program actually comes on two cassettes as it just wasn't possible to cram all the info onto one tape. On the first cassette you'll find The Planets game and The Alien Game and on the other is the data for each planet in the solar system.

You begin by orbiting the Earth on board a mothership. You've just received signals from outer space that have been encoded in your spaceship's computer and it's these that go to make up The

## WATCH THIS SPACE



Tobe or not to be that is the question, And heres the bin O' harlilenable you to oramine a capoute on a planet s surface Neat eh? To select an icon move the big hand using the spuce bur untifs over the icon you want.

Run rings round Saturn. Here you lisee the pane: voure currently orbiting. Nice creant in At teas! youre not running rings around Uranus.

It youre a bit of a book worm and would like a bit of extraniflo about ife (or death) on your tave planet then seect this icon. And atl least you dont have to theert al in mit Pitrict Morres pace.




## There li be no blind dates

here. The day date and pear wire displayed in tull


How many light years away? Well youre travelting in as supersonic spaceship at about a million times the speed of sound.

Alien Game. At the same time a capsule enters the Earth's atmosphere. It is found to contain a map of the Solar System that shows the position of eight similar capsules on the other eight planets of the galaxy. That's all the info you have. And even that's more than you'll glean from the 'instructions' that come with the game - there won't be any.
So how do you set about saving the Earth from total destruction? First you've got to play The Alien Game - here you'll uncover the clues that'll help you open the capsules. But don't expect it to be immediately obvious when you do find a clue. Remember aliens aren't too keen on us humans so they 'll do their damndest to make things difficult.
Now you've got some idea of how to open the capsules you'd better track down where they're located. So prepare for blast off - destination: the solar system. Decide which planet you want to visit first, then select the Space Travel option. Your spaceship's computer'll then be given all the information it needs about the planet you've chosen.
Then lift-off into the vast vacuum of space - only to find
it's choc-full of asteroids and meteor storms. But having successfully blasted your way past these you're then ready to land on the planet. Be careful though, you'll need to take all sorts of factors into account such as the planet's gravity, atmosphere and surface conditions. And that's where all the up-to-the-minute technical info on each of the planets comes in handy. If you thought docking procedure in Elite was difficult, try having a go at this! At least the gravity's the same on every Coriolis space station.
If you land correctly you should see a locked capsule bearing an alien inscription. If you've cracked the code that lets you open the capsule, you'll receive part of the solution to the Earth's problems. But you'll need to open all nine capsules before you make sense of the solution. And even then your troubles aren't over - you'll just learn what you've got to do next. It was never like this on the telly. Beam me up Scotty. Kirk out.
FAX BOX
GameThePlanetsPublisherMartech
Price c9 95

Heather Couper, presenter of Channel 4's The Planets, talks about her involvement with Martech's new game of the same name.

When did swur interest in
Astromomis first start?
Oh. when I wat very small - about 7 or 8 . 1 lonked out of my hedroom window and saw a green shooting star in the sky and it really turned me on
What do now actualls do as an astranomer"
Im a full-time astronomy
broadeaster and writer. live written If hook and presented three television series - the most reeent one theine the Plancts, of course How did sou get imoleced in the Ilaners game:
 when my producer told me that Martech wanted me to get involved in the production of is new game. The Planest, I was very exefted by the proposial beciuse the same is very different fom the series and very hi-fech.
How aceurate is The Plonets game: Very accuratc: You can find out foads of detail aboout each planet like eravisy and distance from the Eenth. And vou can use this imformation when playing the game
Are gon imsolsed in amy other compmeter games?
Weil. I did feet involved with Sarfinder for the BBC but I shouldn't really siy that, should I? Can swn tell us at bit more about the latest info on tramus:

Pcople are wery surprised by the latest finding on Uranus. There are is morom and we crpected them to he barren because theyre so far from the Sum. The surfaces of theee moons arc full of swirls and this means the cores have at some point heen warm ant refive The hig guevtion mow is. how? Uramus is iser two billion miles from the sun so it couldn't have been the heat from that. This up-to-date info has even been imelowleat in the same
13., people recognise you now amive been on 1V such at lou? Yes, Atwolutely. Eypecially girls of about 14 or 15 - 1 can't think why D." you have s, home computer: Yes a BBE. Ooops
Does it ammes sou when people call vou in Astroloper?
Yes it does. 1 get very angry because the two subjects are totally different Do sou beliesc in Astrologs? No way!
Ilave von beew dubleed the Iemale Patrich Mionre?
Yes, and no. A lot of people do sis I im at femalc Patrick Moorc but its obviously rubbish cos Pm half his sive. Apart from that were also totathy different. Patrick's is sensational amateur Astronomer whereas I was maned as a Astrophysicist and can therefore impart the hard facts about the physiex of the eollar sytiem

## THE ALIEN GAME



Therc's a stageering 43 lovels in this puzale/strategy Alien Came, Each orid section reprosents a level tward time you suecasctully complate a level yoult main apiece of intormation that hep you open a capath Tomoke it cyen more tricky Martech hasn't Incificed any instructions - you'lijust have to work it out for yourseli, won't you!

## JOURNEY THROUGH SPACE



Did the Earth move for you too? The graphics are amazing and in the final vertion thore may even be animuted horses and tho ilies. Youlro curfonth on Earth but il you select the Long Range chant you can move the curser to the planet of your choice. Looks Eke we've chosen Moptune as the first port of call.


Once you've reached your destination planet select the fanding option and your ship'li start its descent. You'l see anfd aspear and you must sedrch until roufladthe squarocontaining a charactor representing a capsule. Take care when landing - you must be at a speed of tess than $20 \mathrm{~m} / \mathrm{s}$ and you must alsp take into aecount the plandts almosphere and switace eondtions.


We've arrived sole and sound on Neptune. If you look carelully you'll see the capsule on the left of the sercen -chooss the big at to exnginaitis stecting the Sampler option will unabley ou to got the geh on the planet - you may need this when trying to open the capsule.

# O'LEVELS 

not just revision but also tuition for the Spectrum 48K

| Mathematics <br> s progans TOTNL 150K | Fractione. squase roots, docinals, logarithmes, avess, sets. accurcacy, bases, interest, volumes, noces, standerd fome equations, bat ctarts. averrops, pobatily, alpebrict lums <br>  mety, difenertation, intagration, factors, argiei. |
| :---: | :---: |
| Physics <br> 7 progans TOTAL 140K |  |
| Biology <br> 6 programs TOTAL 120 K | Plant and arimal cels, genetics, mhertance, meproduction in man, asexaul and wexar negroduction, howeding plants, phols synthesis, ofmonis, transpiation, manaport, bactiecia hood nervous syatem. ecovystem, food gycles, hing, serthwom amphibians, birth. manvili, response. |
| Computer Studies <br> 7 programs TOTAL 140 K | Oats coliection, coding, storage, procenting, prevertason, vab dation dpe systema, pivcy seculty, hardnare, 10 devices. assemblers, inteppotors, compliens eirori in prograiming, sich |
| Chemistry <br> Sprogans TOTAL 150 K | Manger stales, action of heas and siectioty, rection with air, water, acios akains. naiogons, arypen, sujpher, nitropen, phos phonss, carbon, mysrogen, akal metaly skaine sath motes. manston metais, organic chomusty, mome, ormias, mose extraction, poljmers, fertizers |
| French <br> E programs TOTAL 160 K |  <br>  <br>  conyuctiona, propovtions, 150 ma , measuremerta. |
| Electronics <br> E programs TOTAL 150K | Energy and is sourcth. power distrotion emi. po, chare current power, ime Veves, resiators, series and parase. <br>  <br>  arreifiens. leedback. |
| Technical Drawing <br> 10 programs TOTAL 100 K | A sut of animated mbosats alowing isonnotic propections, the constuction of cyinders cones und other propectione |

## ALSO AVAILABLE

 proviout ime. Sutabio 100 O' wiver itiderte.

## Principles of

 Computing


EACH SUBJECT ONLY £5.00 INC P\&P

## PASCAL \& C

| 1 program Each 306 |  |
| :---: | :---: | programs is a worsen eator Anction Trace trolifet as plovidec Logo soon, Forith soon

each language only $£ 5.00 \mathrm{inc}$. $\mathrm{p} / \mathrm{p}$

## GCE TUTORING

quality educational software
HILLSIDE, KIAETEAD, NOAWICH, NOAFOLK NA1E 1EE Tel: (0508) 58158
$\square$
Please send me:

```
<2-2,
My computer is a:
I enclose a chequerPO for C .
Made payable to GCE Tutoring
My name and address is:
```


## HIRE SPECTRUM SOFTWARE

* OVER 500 different tittes available for hire including ARCADE, ADVENTURE, BUSIMESS, 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 63 p (plus P\&P and VAT) for 2 weeks hire.
* FREE printed Catalogue
* FREE newsletter with hints, tips, reviews, etc.
* TAPES for sale at DISCOUMT prices, (eg MANIC MIMER £2.00)
* FAST, FAST SERYICE. All tapes sent by ist class postage.
* HALFPRICE OFFER - LIFE membership OHIY £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.
MSL 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. JOII 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 MSL

## 

```
42 Harefield Avenue, Cheam, Surrey SM2 7NE.
I enciose £3.00 for LIFE MEMBERSHIP. Please rush my membership kit to me. If, within 28 days, Im not delighted with your service you'll refund my membership fee.
Name
Address
```


## 

## INCREDIBLE!

TRAMSFER ANY PROGRAM TO MICRODRIVE CARTRIDGE THE FULL POTENTIAL OF YOUR MICRODRIVE CAN BE REALISED WITH THE MIRAGE MICRODRIVER

NOW WITH EVEN MORE EXCITING FEATURES AND STILL onlv $£ 39.95$ inc Pap
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 opertion.
* Extremely easy to use.
* Freere 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." lolo 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 on to microdrive cartidges for apeed and ease of access. Programs saved using the Mirape Microdriver are unveadable unless the Microdriver is present. Now available from your local computer store or in case of difficulty order divectiy from us:


## MIRAGE <br> Microcomputers Limited

## 24 Bank Street Braintree <br> Essex CM7 7UL <br> Tel: (0376) 48321

# COMPETITION <br> YS Makes it Biggles! 

## Chocks away chaps 'cos we're off with Biggles and his chums to win a model Sopwith Camel, five Tiger Moths and 25 copies of Biggles, Mirrorsoft's ace new game.



Biggles was in the breakfast room of his Mount Street flat. In between mouthfuls of toast and tea he slowly digested the contents of a newspaper in front of him. Bleeurgh! Algy and Ginger, his two closest chums, came bounding in panting slightly and looking very red in the face. "Morning Biggles, old chap," they chortled in unison. "A fine time to roll down to brekkers, I must say," grunted Biggles. "Cripes, we have blotted our copy books," sniggered Ginger.
"Looks like we're in a bit of a jam," said Biggles. "Rather have marmalade
myself," wheezed Ginger. "Oh buck up Ginger this is serious stuff," jerked Biggles. "What ho! Out with it Biglet; there's something in the wind," grimaced Algy. "Only last night's curry," sniggered Ginger. Biggles pursed his lips and looked Algy and Ginger squarely in the face. "Have you two seen the front page of The Daily Male?" inquired Biggles, passing them the rag. "Cripes, it's a picture of us," guffawed Ginger, "Remember that particular scrape, eh chaps?"...

Have a look at the cartoon - what do you think they're up to now? If you can think of a witty picture caption you're
in with a chance to win a fabulous prize in our whizzo Biggles compo. And crumbs have we got some spiffing prizes - Mirrorsoft is offering a fantasticSopwith Camel model aircraft to the winner and five second prizes of a Matchbox Tiger Moth. And that's not all - the 25 runners-up will each get a copy of Biggles, the computer game that's based on the film. Top hole, eh?

All you've got to do is fill in the caption in less than 12 words, add your name and address and send the whole caboodle, or a photocopy, to Biggles Compo, YS, 14 Rathbone Place, London W1P 1DE.

[^2]$\qquad$

[^3] Address

## Rules

Chaps who work for Sportscene Specialist Press and The Mirror Group are not allowed to enter. Bouncing Czechs included. Your luck will run out if you try to enter after May 31st. Unless, of course, you're one of the old school. The Ed'll ask you to come outside if you try and argue with him 'cos he's a real bounder, cad and rotter.


Alright, you asked for it ... now you're gonna get it - regular coverage of everything QL. Max Phillips dusts down his machine ...

0pen wide and say aaah. Ummm, I've had this QL for a while haven't I? No matter, YS has got a lot of catching up to do on the surprising world of the QL. We're starting with the reviews here but we'll be doing hints'n'tips, letters and listings as soon as poss. But first, as they say, here is the news...

- Is there a language the QL can't run? QL/APL is now available for $£ 99.95$ from MicroAPL on 01-622 0395. If you know APL, you should know that this'll go on an unexpanded QL and comes in either keyword or squiggle versions. MicroAPL is well chuffed with it, "It's better than some of our $£ 2000$ Supermicro versions". Wowl And if you've never heard of it, it's a concise and powerful maths-based language. Past experience says they will be delighted to tell you more but be warned ... if you've never seen a complete statistics package written in one line of program, you won't believe a word of it! - Digital Precision's Supercharge SuperBasic compiler continues its run away success and is now in use at several well-known QL software houses, turning out commercial products. There's been less success for a nasty Belgian type turning out fake copies. The blister-packed fakes don't actually work. And the program detects that the Lenslok code has been removed so that any programs which you do manage to compile with it frequently stop with a "Pirated Supercharge" message!
- Talking of Lenslok, Supercharge's producers point out that Firebird's Elitefor the Speccy has given the system an unfair reputation - apparently the reason it's so impossible is that the wrong scrambling routine crept into the original release! I always wondered why it was easier to guess than use the lens...
- Beginners looking for a break could do well to contact Breakthrough Software at 17 Shaftsbury Way, Royston, Herts SG8 9DE. Among usual things like a $£ 6.50$ print-spooler and a free screen dump with all purchases, Breakthrough has an on-line SuperBasic manual for a mere $£ 8.50$ (this is the stuff). When you come across a problem, hit F1 and the On-Line Manual pops-up with complete help on SuperBasic, without wrecking the current display. You can even create your own help screens with Quill. Come to think of it, why should this be limited to beginners?
- On the games side, Leisure Genius's fiendish Scrabble for the Spectrum has made it across to the QL. It costs $£ 14.95$ and brings with it new extras like a clock and a much enhanced dictionary. Give 'em a ring on 01-935 4662 if you reckon it won't make mincemeat out of you. Genius also has the rights to Monopoly and Cluedo but is holding fire to see how Scrabble goes. Don't wait too long guys ... Digital Precision is talking about a familiar-sounding game with the QL playing a very intelligent opponentl And still no word on Microdeal's great new adventure with arcade bits.
- And finally, the bit at the end that reminds you we can't do without your help. We need your ideas, hints, problems, news and new products ... even if you just write and tell us what you do with your QL, what add-ons you have and what you'd like to see in the mag. You could even send in some program listings ... the Ed's gonna have to get used to this! - Write to: QL News, YS, 14 Rathbone Place, London W1P 1DE.


## KEYDEFINE . . Key

## Secrets!

Pscientific produces KeyDefine, a general purpose key definer with some helpful extras. You can either keep the program in memory (if you've room) and redefine keys as you go along or you can create small stand-alone key programs which you EXEC at the start of a session. You can store up to 2048 characters on up to 41 keys. Just press Alt and another key and that key's characters are typed out for you. So for example, you can reprogram Quills keyboard to suit your taste or have complete routines run at the touch of a key in SuperBasic. Pressing Alt and Enter will recall the last line entered - a godsend for SuperBasic! The only hassle comes if the program you're running wants the Alt key for itself (such as Hisoft's screen editor). Perhaps a new release could let you define a key of your choice as the call-up key!

You also get Dir-Help, a multi-tasking job which will open a real window, let you do directories of either microdrive, list all the jobs in the machine, view your own help file or spool-print to a printer or microdrive. Using the print-spooler lets you instantly get back to work while DireHelp does the printing for you. Finally, there's one of those useful fast cartridge copy programs on the tape. At its price it packs in a lot of stuff and makes using the QL a lot quicker and more enjoyable.

| FAX BOX |  |
| :---: | :---: |
| Titie | KeyDefine |
| Publigher | Psientific Software |
| Price. | ...........95 |

CL MACRO ASSEMBLER
The official Sinclair assembler is produced by GST, the people who nearly bought you QDOS. It's a big, capable, unfriendly thing, crudely adapted to run on the QL and consists of a full-spec 68000 macro-assembler, the you-knowwho grotty screen editor and a linker. These are run separately, although you can run the assembler and linker directly from SuperBasic if you have Sinclair's QL Toolkit. Still, it's possible to talance both the editor and assembler in memory on a 128 K system if your source code is quite small.
But the lack of luxuries is no problem when you consider how good the assembler itself is. As well as a comprehensive set of directives and superb expression evaluation, it can generate either absolute code to be run directly with EXEC or relocatable code that can be glued to previously assembled modules (or even compiled high-level programs) using the linker. The macro facility is very complete and the package includes a library of useful macros, such as IF, FOR, CASE and so on. Using these and your own macros can make machine code almost as painless as SuperBasic. The only disappointment is that conditional assembly is only provided inside macros . what happened to an IF . . . ENDIF directive?

## PARAGON... of virtue!

Eigen Software's first QL release is the stunning Paragon. Once loaded, you can call up 10 different functions at any time which work in genuine windows. You can reposition them and they don't mess up the screen when you finish with them. Any similarity to Borland Sidekick on the IBM PC is purely intentional!
Paragon needs 22 K to get going so you can't use it with big programs like the Psion packages on an unexpanded QL but it works fine for assemblers, Superbasic and the like. Our pre-
release version has a fair number of bugs but the final version should be out by now. And Eigen cuts corners with the skimpy manual - it comes on a Quill file not on paper! Even so, it's an impressive program. Get one to impress your friends ... plus you'll probably find it dead useful!


## WINDOWS/ICONS/

## FONTS . . . the real thing!

When you write a program like Paragon, you're sure to end up with a lot of useful little routines. Like genuine window code, icon and font designers and driving software. Eigen has bundled them all up and interfaced them to SuperBasic to let you use them in your own programs. Window/lcons/Fonts gives you eleven new Basic keywords plus two simple editors to design your own fonts and icons and yet another freebie screen dump. Hardly fab'n'gear but great fun.

|  | Windows/lcons/Fonts |
| :---: | :---: |
| Publisher | Eigen Software |
| Price. | ¢9.95 |

## R WINDOWS . . . great

## minds

Much the same thinking has been going on at Pscientific software whose Q-Calc calculator looks a bit out-of-date compared to Paragon although it's half the price and can be used with the Psion programs in 128K. But the code behind it now pops up in $R$-Windows, a package that gives you real windows with eight new SuperBasic keywords. Like all Psientific programs, it's got a proper printed booklet and you can buy the source code for another $£ 9.95$ - can't be bad!

| FAX BOX | R-Windows |
| :--- | ---: |
| Titie | Psientific Software |
| Publisher | ع9.95 |

## Brute force!

The assembler is also fast . . . about 25\% quicker than Hisoft's Devpac. The manual is a ring-bound guide that's comprehensive if a little blunt and lacking in examples and explanations. This may not be suitable for beginners or indeed many programmers but is ideal for professional work or mammoth projects - in which case a better editor, 512 K Ram and disk drives are recommended.


[^4]
## DEVPAC QL. . . Better than Ever

Devpac's got a reputation as the top Speccy development system though, like most of the people I know, I actually use something else. The QL. version is in a different league - and that's got nothing to do with the fact it's programmed by YS's own Andy Pennell!
The editor and assembler are combined so that you can assemble your code simply by hitting alt-A. It's a pleasant screen editor controlled using Alt keys and even has a help screen. . the only drawback being the odd bug and the failure (like the GST editor) to highlight a marked block of text - pull your socks up Pennell! The assembler is pretty comprehensive . . . full arithmetic, conditional assembly, a proper macro facility plus all the usual directives. Output is an EXECable binary file. there's no linker so long programs have to be done by complete assembly with INCLUDE files. But the only thing that actually upsets me is that it automatically assumes PC-relative in relative instructions and sometimes you have to explicitly tell it not to. I'm sure it's trying to be helpful but I'm a Humpty-Dumpty programmer and instructions mean exactly what I say they mean!
Devpac's debugger is Hisoft's superb MONQL, with its single-step, breakpoints, front-panel display, disassembler and so on. It even looks-
upQDOS function names and error messages for you so that you can see instantly what your program is doing. Six new SuperBasic commands are added, allowing you to list current jobs and break into them.
Hisoft has an excellent upgrade policy so the few teeny bugs shouldn't worry you and the package is even available on EPROM. An excellent choice if you're just starting out or have an unexpanded machine . . . and one you won't outgrow in a hurry!


[^5]
## JADORE LESBINDERS DE MS



Sacre bleu! Rut alors! Maurice Chevalier! Les bindeurs de Your Sinclair are ready! Key 'ave been individually 'and painted by ze Art Editeur 'imself with re genuine gold lettering on ze spine. Zey are magnifique, superb et trees chic. Zey are also trees cheap, seulement $£ 4.95$ for ze pleasure of keeping ze copies of YS neat et tidy sur votre shelves. Ooh la la! is sis not brilliant? 'Az a frog legs? At me price, 'ow can you say 'non'?


## QL GAMES



Are you really an ace? Sure? Prove ito . . . No abstract aliens, but airplanes, balloons, birds and other strange or absurd things flying in the sky
The aim of the game is to become the General. Very funnel 20 levels, machine code, compatible joystick.

## GWENDOLINE

is the name of your fiancee, captive in a dungeon of the haunted castle. You, the hero, try to discover her; find the keys, eat ham. apples . . (you are human, no?) and runt Beware of the bottles of winel And what happens when you reach GWENDOLINE? See yourself. 38 screens. Very nice graphics, machine code compatible joystick.

SAVE £5.00 - Gwendoline with Baron Rouge £30 only (Price incl. p\&p and English instructions)
Available by Mail Order. How to order - send your address and (1) An Eurocheque to LABOCHROME or (2) Transfer money to Account No. 000-0146480-10 to LABOCHROME, LIEGE, BELGIUM or (3) An order to the address below; we will send the package with post cash on delivery ( 8 days delay).
LABOCHROME, 173 Rue de Fragnee, B- 4000 Liege (Belgium) Welcome trade enquiries

> SINCLAIR REPAIRS BY THE SPECIALIST

Walkers will repair your computer at a realistic price.
You send a cheque not to Exceed $£ 30.00$; your computer will be repaired and
returned the same day or send for a free quotation.
Most repairs will be in the range $£ 15.00-£ 30.00$ subject to machine.
For information
Telephone - 021-643-5474
or simply send your computer together with the coupon below

Thomas Walker \& Son Ltd, 58 Oxford Street, Birmingham B5 5NX PLEASE TICK
$\square C H E Q U E E N C L O S E D$-FREEQUOTE $\square A C C E S S C A R D$ NAME
ADDRESS

ACCESS NO: $\square \square \square \square \square \square \square \square \square \square \square \square \square \square \square \square$
TELEPHONE NO:

## 1 In

## -MORESCREEN SHOTSON PACE 29

## ARCO F YESOD

Thor Computer Software/88.95
Max Doooiiing! He got the motion, he got the action, man, the boy can play. Arc's just the thing for all those who've got a cold in the nodes. It's the Rt. Hon. Charlemagne Fotheringham-Grunes back in his somersaulting splendour, bouncing through Thor's beautifully detailed flicker-free graphics, collecting crystats and generally dealing with one of those teleporting allen monoliths that frequent films like 2010.
Things haven't changed much sincenodes of Yesod - it's still the split pixel, platform-leaping, nastycavolding bizarre that makes you think that there's lots of lifg lett in the platiorm game. If you've got Nodes, the only reason to buy this is if you like it so much that you want to carry on in a slightly different variation. If you missed out on the original, you're missing out on one heck of a game.
Personally, I'm completely hopeless at both games. I can't make head nor tail of the wacky inlay card (who do these guys think they are - Ultimate?) and I keep falling into the same inescapable room with awful regularity. But winning has nothing to do with it ... I just love the way Charlie moves and am quite happy to sit there jumping up and down till my lives run out. Fab'n'gear ... get into this Arc next time it starts raining!



Bug Byte/E2
Rick To be read in Husky tones. It's a dog's life working for Your Sinclair. The Ed just keeps giving me all these dog rough games and telling me to get my teeth stuck into as many puns as possible on 'dog' and 'byte' - but uniess you're a rabid mazer the only word I can think of that has anything to do with dogs and this game is unprintable.

You know how pooches are meant to like digging holes, well Dogsbody goes a hole lot deeper. He's a special agent for the Animal Liberation Front whose task it is to rescue 192 pups from the dastardly Dr. Dogmush. Fitty meanies, the robot guards, are on his tail. Being an ideologically right-on Rover, he can only use flower power. Dig above a plant and it'll grow to cut off the meanies access. Or burrow beneath rocks that'll marmalize them. The baddies get re-incarnated, but the little doggie only has three lives - far better to be a cat!

It won't take you a million years to poodle round this maze game. The meanies move in most unmysterious ways across the 25 screens (though it's fun when they all go yellow and run away) so it won't take long to work out the best way to tunnel out the pups. A mongrel of a game derived from a mass of others, the main obstacle is actually not to corner yourself between the flourishing fauna.

This game should be given to your nearest Pal or Chum.


## VECTRON



## Firebird//7.95

Luke The more attentive of you may be experiencing a touch of dèja vu as you read this.. that's because Vectron was first launched by insight and was checked out in the first issue of YS.

For those who've forgotten the tale, your ship is trapped in the subspatial dimensions of a computer and, using your UD Cannon and shields, you have to search out the exit to a maze. Only then the trouble really begins!

Up on-screen, you have it 'Destroy all enemy craft'. Not exactly the most comprehensive instructions l've ever seen, but the phrase does seem to cover all the angles. Indeed, once you're playing the game directing the cross-hairs of your UD Cannon around the 3D maze at 90 mph - it's difficult to remember even to fire at the enemy as you try
desperately to manouevre round a corner without ending up as a nasty stain on the wall The screen has the usual array of control panels but things go so fast that it's best to keep your eyes glued to the action. More useful is the maze map that can be superimposed over the view out of your craft - at least then you've some idea of what's coming up around the corner!
Overall, a pretty good game and one guaranteed to keep your attention. The graphics are good and fast, and the 3D effects are pretty realistic. My only criticism is that the game might be a little too difficult for casual arcade players - but who's going to admit to being one of them?


# Hiwail <br> Mastertronic/\&1.99 

Rick The fireman hero featured in Mastertronic's latest, is not Hissing but Shuffling Sid. And you'd be shuffling too if, like Sid, you'd been shrunk in a shrinking plant fire. Being only half the man he used to be (bit like the Ed really) and only on half pay (like me), it's your job to find the stretching rack that'll return Sid to normal.
A silly scenario, true, but it's one arcade adventure that's offensive to nobody unless you're a dwarf! Although a cheapo, it's got nowt taken out when it comes to the basics of a satisfying game. Sure, it'd be better to know how much energy the nasties knock from you on contact, and, okay, his leaping about is a most peculiar movement - but this is Shuffling Sid after all.


Otherwise the graphics are cute, Sid cuddly and the thinking behind the game fairly thorough. The objects you need to collect to open doors are not always the most obvious - maybe the very fat mouse is of more use than the axe! Most access to the different rooms is up and down fireman's poles (yup, it's a multi-screened maze), but with the right objects on you, short cuts can be bounced through ceilings.
It's not as easy as it always looks, this fulsome family fun, and if you pass this over 'cos you think it's a cheapie, then that'll be your loss, - this Sid's not for hissing or missing.


## Mastertronic/£1.99

Rick Here's a rocket for your pocket from Mastertronic, a sort of space age Band Aid. Earth has finally run out of food and instead of using trad means like genocide to solve the problem, we're sending out space pilots to filch the food from alien transporters. Trouble is they've all been squelched and it's up to you to fly the firmament and feed the world. The more grub you get (and aliens you zap, of course) the further up the astral plane of promotion you'll move, from rookie to the ultimate accolade of hero!

Your first task is to set your approach speed and seek out a target from one of the three types of alien ship. Then plot your course across the star map, keeping a close check on your fore and aft viewers and astral compass. Readings are given for system status (shields, ammo, fuel) and player manifest (warp drive, robo bike, equipment). Warp drive'll get you out of a star
system (and trouble) but is heavy on the galactic gasoline. Get this all sussed (phew! not easyl) and you board your target. Jet pack propelled (inertia effect'n'all) you can now search for stores supplies and flashing food aboard the ship - but beware, she's heavily protected inside too. A mini-maze ensues, and I think you'll be mega-amazed at the features squeezed into this package.
With eleven ranks to be achieved and fifteen star systems to be explored this game's worth the money for sheer longevity. But it's far more than a cosmic maze or alien shoot'em up. To call it a cut down version of Elite is a complement to both. But Space Hunter isn't just a cheap imitation - it's a valid game in its own right. A wonder at £1.99.



# QL QUBODSS 

Sinclair/ $/ 9.95$
Max Panic stations ... literally 'cos this is a version of the old Panic arcade game that's not for the squeamish. You play the driller killer in this plats'n'ladders thriler ... digging holes in the platforms, luring the monsters into them and then ... bam, bam, bam, bam, bam - drillin'em right through the head. Sicko!

Yes, forget the fact that the keyboard controls are sticky and that getting on and off the ladders is really fiddly - wait until you slice up your first hapless Nebulon. All the time, you've got to keep knocking back the hamburgers and oxygen just to stay alive - just like working for YS in fact. But dont lose your nerve and take mercy on a trapped meanie- leave'em in the holes long enough and they turn info festier nastier beings altogether. Dealing with Gastroids, Bipods and the dreaded Quboids is much harder because you need to drop them through several platforms at one go to be rid of them.

The graphics are okay, the sound a little timid but the game is all go and there's plenty of levels to bore your way through even if more than four types of monster would've been a great help. Hardly the most original of games but a real screamer once you get the bit firmly stuck between their teeth.



Bug Byte/£2.95
Gwyn Here's a topical little game in the light of recent Sellafield mishaps. It all concerns the last remaining power station, in the year 2086, which is running wild. It's up to you to create a robot to venture into the complex and deactivate each of the fifty-one zones.

It should come as little surprise to find that behind this plot lies another platforms game, but without the ladders. Your five droids can either sink down a level or move faster with a twitch of the joystick. There's the usual selection of rampaging robots shooting at you and a maze of exits linking the sections - and as some are part of one way systems it all takes a bit of mapping.
Nothing revolutionary then, but timing of the robots and the sliding doors is perfect so that each screen will take some time to master. Everything a budget game should be.



PSS/E7. 95
Rachael This is the sort of game that gets a lot of flak from people who see it as nothing more than exploitative bad taste. In fact, Falklands 82 is a serious wargame and its intentions are undoubtedly honourable, which only raises the question of why a simulation of contemporary history is considered tasteless when a simulation of the mud and blood of the Somme isn't.

You play the British, against an Argentinian micro, in a strategy game that concentrates on land activity. But the task force is still an important factor as it supplies both reinforcements and the aircratt carriers, Hermes and Invincible. You start the game

by allocating fifteen ships between the task force's protective screen and land gunning. Then it's to a map of the island and a decision which of four landing spots you'll choose as your beach head it's wise to bring in the SAS or SBS to provide intelligence as they can reconnoitre a five sector radius without committing you to a major landing.

After that it's a question of occupying, or being the last to gccupy, the ten tiny towns of those windswept rocks. And though you can have a crack at landing at Port Stanley, the concentration of Argentinian troops is likely to make il your final objective. Unless you use the Recce option carefully, the
first you'll know of the Argentinians is when you bump into them, though at turn twenty any remaining pockets of resistance will be revealed. The shape of the island presents problems of bottlenecks forming, and you'll need to plan carefully for terrain, particularly if you're to have the long range gunning of the artillery. Fog and rough conditions can rob you of air and sea support, but it they're fit for you they'll also be fit for the Argentinians. In that case you hope your Harriers can see them off.

And that's it in a nutshell. With its single key entries, using initials for the options, it plays smoothly, though what seems like a large amount of

Basic means annoyingly slow responses at times. The instructions claim that the British are white and the Argentinians black when in fact the Brits are blue and the Argies red and yellow - and to confuse things further British units under command flash red and yellow too. Though it's done away with grid references it still plays rather 'blockily'. In its favour, though, it has five tevels, the easiest of which is a good learning mode and the simplicity and relatively small scale of the game could make it ideal for newcomers.



# F.A. CUP FOOTBALL 

## Virgin/E7.95

Rick When the Ed heard Virgin's F.A. Cup Football was the first Football Association endorsed soccer game and that Tony Williams, editor of the F.A. League Club Directory was writing it, he knew experts were needed to review it. Tough, you got me instead. Off he sent me to find 'added realism'. The Royal Box at Wembley, I dreamed. Oh no, he poured iced water down me wellies, gave me half a can of flat Skol and made me watch this game over the shoulder of a six foot seven Arsenal fan
through a Rediffusion window. The glamour just never stops. In many respects this text based simulation with a touch of strategy is the most accurate of football games on the market. It attempts to recreate the splendours of a complete F.A. Cup campaign. With an up to eight player facility it's a full family game. Each player can choose ten teams to manage, picked from the 92 league teams plus 32 non-leaguers, or you can program in a personal favourite.
Af each round a draw is made but there are no rattling balls in a black bag, just a

scrolling screen. If you want to leap (as all but the most manic Runcorn fans will) to the third round where top division clubs enter, then you can. Before each game in the first three rounds you can choose your basic tactic - defensive, balanced or attacking. In round four you can modify this at half time.

From round five you'll be asked an increasing number of managerial questions. Some are silly and rude (do you let your Nigerian winger see his witch doctorl!) to the crucial and practical (how do you remotivate your penalty taker?). You also have the option to look at news flashes that might affect the morale of your team. At this stage you also get extra chances to change your strategy depending on the state of play.
The glory of the F.A. Cup though is unpredictability. And this simulation tries so hard to be accurate it ends up with the anonymous appeal of watching the pools panel sit. The F.A. Cup, thank God, is not programmed to the dictats of Don Howe. True there are little
ripples of shock - Runcorn beat Wimbledon, Liverpool and Arsenal get involved in an unlikely eight goal shoot out but nothing that's gonna make Saint And Greavsie take up tiddlywinks. This game's statistical background - who's done best in the last ten years - is severely weighted toward the big four - Everton, Spurs, Liverpool and (spit) Manchester Utd. I'd have relished a little more managerial control to make me feel thoroughly involved as the minutes ticked by - the only action ever seen on the screen.
For sheer variety the Rothman's World Cup is a better bet, but this walks all over Bryan Robson's Football Manager (which is something I'd like to do). I refuse to knock this game. As someone who flew half way round the world to watch the Cup Final last year f've taken great joy in managing Everton to three successive Cup victories. Eat yer heart out Big Ron.


## Bug Byte/E2.95

Rick Who remembers Mickey Mouse as the Sorcerer's Apprentice in Fantasia? Other than the Ed, go on, put your hands up? Well, it seems nothing's changed much. Wizards are still feisty so and sos and apprentices lazy lads likely to be laid off (or laid out) at a moment's notice. Of course, the world of Disney innocence is now long gone. Bug Byte's sorcerer is charmingly named Sodov and his three apprentices are all on YOPs courses.
But despite this humourous nod to the present, this game's as old as, if not the hills, then at least the earliest sword and sorcery arcades. The wizard defends the castle ramparts whilst his protegés toil and trouble in the courtyard. Dragons attempt to swamp the castle but you can zap them with a shouted spell ( mmm , now I wonder what that could be, - is there a clue in the Wizard's name?). The spell turns the dinos into dosh, but at great expense to your energy - which can only be replenished by shouting another spell at the star over the tower.
Miss the dragons though and they'll make yum-yums of your YOPs - and if you don't pick up the cash pretty slick, then an ostrich will. So there is a (marginal if not magical) touch of strategy - you'll have to make a decision as to when you whizz out of the castle - or do you stay and protect your apprentices.
Sounds familiar? - you bet. But while Bug Byte keeps the emphasis on the cheap and cheerful rather than pretentious and pricey then I won't hear a word against them.

# BACK ISSUES 

The fab foursome of Your Sinclair back issues are up for grabs!


Our bumper first issue includes:
Games: Commando • Saboteur • Rasputin e Winter Sports. Features: Droid Wars • Eight Page Program Power Pull Out © David Crane Interview.

Issue two contains:
Games: The Young Ones • Bladerunner - Three Weeks In Paradise - Beach Head II.

Features: Maclone • Joysticks - Ten Best Best • Matthew Smith Interview.

Our mega third issue contains:
Gamest - V • Movie © Zoids
Featurest © Switcha • Art Studio
Issue four includes:
Games: Max Headroom e Skyfox e Lord Of The Rings
Features: 128 Review • Art Studio • Dimmer Switch

Old Your Spectrums never die - they get snapped up sharpish by new readers. Guick - use the coupon below to bag your own back issues at $\mathbb{£ 1 . 1 0}$ a throw. Or visit our shop, open Monday to Friday 9.30 am to 5.30 pm at 14 Rathbone Place, London W1P 1DE.

国issue 1
Chess packages, Speech
synthesis, Toni Baker's machine code breakout

## E issue 5

The Quill, Software For Printer Interface, Zip Compiler pt. 3

## E Issue 12

Ghostbusters, Music packages Ghoulies

- Issue 13

JSW, Hunchback 2, Kong Strikes Back

EIssue 14
Alien 8, It's A Cracker, Patching Up the Drives

## Elssue 15

Starion, Painting by Numbers,
Hot Heads

- Issue 17

A View To A Kill, Black Magic Boxes, Dun Darach, The
Generation Game

## [issue 18

Dambusters, Ghostwriter, JSW 2

- POKEd apart


## Elssue 19

Exploding Fist, Frankie,
Movin'n'Groovin'

## - Issue 20

The Rats, Fairlight, Shrink
Wrapped

- insue 21

Ramoo, Impossible Mission,
The Spectrum 128 and
Compiler Comparison.


[^6]My Spectrum loses its colour capacity on warming up. How do I change the faulty part on my Spectrum as repairs are very expensive here. Oh, and while I'm here my
Spectrum+ has lost its extra function keys, how do I fix this?

## M Neuman, Israel

Inside the Spectrum you should find two white discs - adjusting the bottom one when the Spectrum is hot should bring the colour back to its cheeks. As for the Spectrum+, there is a little bar under the keyboard top secured by screws where the extra membrane overlay is connected to the main one. Tightening this or adjusting the membrane underneath should bring the extra functions.

## 8 Although l've never had any problems with my

 Seikosha GP-50S printer itself, it causes 'mucho problemo' when Itry to connect other hardware devices. This mainly happens when I load and save a program. Do I hit it with a rubber mallet or is there a more rational solution?
## Mark Danham, Hull

ด:Ummm, I think it would be a good idea if you didn't hit it. The printer more than likely isn't well-seated on the back of the Spectrum which is causing it to appear at the same time as the ULA, crashing the computer. You'll only make it worse if you attach more equipment at the back. Try to stop it wobbling or get one with a tighter edge connector.

## I'm having mega-

 problems setting the 'bit image mode' on my serial Epson P40 printer. I've tried various listings and unfortunately falled miserably.Paul Stackhouse, Burnley, Lancashire
Well, you've come to the right place. Try setting up and sending the ESC codes via the $B$ channel if you're using the Interface 1 .

## 8Where can I get a

 backplane, as seen in Your Spectrum issue 18 in the Bits and Pieces article? The manufacturer, UMICRO says it no longer does them. BJ Flatt, Worcester Park, Surrey
## Q Well, EPROM Services do a mother board for the

 Spectrum but it's unbuffered. If I were you l'd give them a try.8I wonder if you could help me Steve. I bought a Fidelity CTM1400 TV to use with an Adapt Electronics composite video interface so that I would get a better picture. It is an improvement but I still get dot crawl, especially when using BEEP. Is there anything I can do to get rid of it?
KE Hankin, Aldridge, West Midlands

Seems to me that you've already done your best. The only way to eliminate it is to use a black and white picture I'm afraid. Have a bash at adjusting the top white variable capacitor as yours is an issue 2-this may reduce the problem slightly.

## Ineed some advice on

 how to construct a microdrive - does it contain a ROM?James Holmwood
Yes it does have a ROM and circuitry to bring it in without disrupting a program. This is usually done by using a Non-Maskable-Interrupt which doesn't work on the regular Sinclair ROM. It then runs its own program and transfers all the memory contents to tape so that it can then be reassembled in the Spectrum to be loaded back into memory from microdrive.

Restarting can then be carried out by simply jumping back to the original ROM to restart the program where you left off.

Do I need to buy Tasprint in order to print out text from Tasword Two? l've got a Timex 2040 printer and cannot afford to buy both. Anthony Empson, Southway, Plymouth

Breathe a sigh of relief Anthony - no you don't. Tasword includes a Sinclair printer copy option and you can use this with the Timex.

You're my last hope! I've
taken my Timex 2040 printer back once but it still doesn't work. I'm desperate. I can't get screen dumps to work properly - they come out all elongated with gaps in. I have only one more thing to say - help! Nigel Bareham, Winchester

Sorry old chap! I've investigated the problem by looking inside the printer but it seems that the spacing is governed mechanically. There's no solution to the problem as you can't reprogram it or reverse the printer paper.


Are your peripherals proving a pest? Send your hardware hard luck story to Steve Adams.

8Please, please, please help. I really want to get onto Bulletin Boards but I'm not sure what I need apart from a VTX 5000 modem. David Scott, Thetford, Norfolk

©Well, you'll need some software as well as the VTX since most boards operate on ASCII not Prestel software which is all the VTX contains. You can either get something like Specnet for the VTX or you can pay a little more for a new modem called the Voyager that has autodial/answer and comes with both ASCH and Prestel software on ROM. It costs about $£ 100$. As for costs, most Bulletin Boards only cost you the price of the phonecall and that obviously varies depending upon time and distance. My Sinclair - only board is on 01-249-3238, 24 hours a day at 1200/75 and 300 baud.


Does anyone know of a program to control a digital LN03 laser printer for vertical printing etc.
Colin Nesbitt, Dumbarton, Scotiand
®: Unfortunately you don't say if this is controlled through an Interface 1 RS232 interface or some other. The vertical printing is a function of the control codes (codes below 32) on the printer itself and varies from printer to printer so my advice would be to look in the manual. To send control codes on Interface 1 the B channel must be used, otherwise the Spectrum will convert or ignore these codes.

8Help! Since I bought a Wafadrive for my issue 2 Spectrum I've had nothing but trouble from my peripherals.
Dr John Reynolds, Sheffield

The Wafadrive uses addresses from 0 to 16 so I suggest you try putting in the peripherals before the Wafadrive and check that the address lines A0-A4 are all at binary 1 before you bring in your own devices.

## Q I'm trying to convert my Spectrum to a portable

 machine but l'm having a big problem. When I connect it to 9-D1200 Ni-cad batteries it blows the power transistor R4 (ZTX650). What can Ido? John Ellingford, Pulham St Mary, NorfolkOh dear! There are two possible things you can do. Either bring your voltage down to 9.25 voits and fit a 2,000 microfarad capacitor across the Spectrum's power input to slow down the surge you're getting. Or, you could put in a small value resistor in series with the +9 supply but before the capacitor. This would bring the surge down even more.

9My Timex printer produces oval circles crazy! l've been back to the shop but they say it's up to specification. What do you think?
Steve Summerscales, Batley
This happens to the best of printers because the distance between each line of dots is greater than the distance between each dot on the line. This is known as 'aspect distortion' in the trade and arises because the characters are five dots by seven high,not eight by eight as on the Spectrum. Sorry, but you're stuck with it.

## E CentreSoft presents

```
With over four years experience of providing practical sotware 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 soltware 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. H you don't have a database, you certainty shouldt

## Mallist



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' lacility 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, unitquantily, cost price, selling price, minimum stock level, units in stock, order quantity and supplier details. Detailed reports include totais of stock at cost and sale price, cost of bringing stock up to tevel 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-ot-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 andas 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 sel 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 doficits 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 it 5

Consists of invaluable routines to allow the creaton of any type of financial ledger system. Its usefuliness les in its ability to produce account balances instantly for debtors and creditors together with an audit tral 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.


At last, supert grapns, 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 ploting.

Mail Order to:
 Cheques/POs enclosed or please debit my Access/American Express No. $\qquad$

Name:
Address: $\square$
Signature:


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

## JUST YOU AND A CAR NAMIDD "KIYY". <br> abvs99




## 21 GUILDHALL STREET THETFORD, NORFOLK TEL. (0842) 61645

## SERVICE DEPARTMENT UNIT 4, LEYLAND CLOSE, FISON IND. EST. THETFORD, NORFOLK TEL. (0842) 65897

## SPECIALIST COMPUTER REPAIR SERVICE

We have become leaders for a fast, efficient repair service to SPECTRUM COMPUTERS, undertaking repairs worldwide, all over the U.K., Europe, Arabian States, and as far as Australia. All repaired Spectrum computers (and others), leave our workshop fully tested on the same day we receive them. A three-month warranty is given on all work carried out by us, giving you every confidence that your valued micro is in safe hands.
Spectrum repairs $\quad £ 15.00+£ .2 .25$ VAT + PEP
Microdrive repairs $\quad £ 15.00+£ .2 .25$ VAT + PEP
Interface 1 repairs
ZXPrinter repairs
Commodore repairs $\varepsilon 15.00+\$ .2 .25$ VAT + PEP
$\mathbf{\Sigma} 15.00+\Sigma .2 .25$ VAT + PEP
$\$: 29.00+\Sigma .4 .35$ VAT + PEP
(Quotes can be given on other micro and peripheral repairs)
Post and package: (1.K. $£ 2.00$, airmail $£ 5.50$. Australian airmail $£ 13.50$. Next day delivery (Securicor) £4.60.
We also carry out:
Spectrum and keyboard upgrades $£ 30.00+$ PEP 48 K Upgrade Kits $\$ 22.00+P E P$
Composite Video Conversion $£ 11.50+\mathrm{PEP}$
Commodore Power Supplies
ON/OFF Switch Fully Repairable
$£ 29.00$ inclusive of $P \varepsilon P$
B.B.C. Data Recorders £.14.95 + PEP
Commodore Compatable
$\$ 14.95+$ PEP
Tape Recorders for Spectrum
$\mathbf{\Sigma} 12.00$ + PEP
Commodore Compatable Data Recorder with built in Backup Facility
£. 24.95 + PEP
Payment may be made by cheque, postal order, Barclaycard, Access or American Express.

## SPECTRUM IN MANCHESTER <br> NOWIN STOCK ONE OF THE BIGGEST RANGES OF SOFTWARE IN AND AROUND IOO'S OF TITLES!! S..PLUS..PLUS..PLUS..PLU

JOYSTICKS, INTERFACES, LIGHT PENS, SPEECH SYNTHESISERS,
MICRODRIVES, ETC. ETC. ETC...
LUS..PLUS..PLUS..PLUS..PLUS..PLUS..PLUS..PLU
A WIDE RANGE OF SOFTWARE FROM WORD PROCESSORS TO GAMES ALL GAMES AT BUDGET PRICES: AT LEAST 5Q,0FFI
NOW IS THE TIME TO CALL IN AT


BUDGET
SOFTWARE
CENTRE
51 FENNEL STREET MANCHESTER M4 3 DV
OR TEL: 061-834 2808



When the Spectrum starts to load, it's time for most of us to nod off. Until now this prime cut of code from Danish programmer, Esben Krag Hansen, speeds up the whole process.


Have you ever felt you were about to peg out from old age waiting for your Speccy to load? Well, this ingenious piece of machine code goes a long way to solving the problem. With it, you can double the speed of saving, loading, verifying and merging. And it does it by using improved versions of the ROM cassette handling routines in which the timing values can be changed, so giving you full control of the data transfer speed. So, you can put away those pension books for a few years yet!

## FRIENDLY... AND FAST

The program is very user-friendly there's no need for all that PEEKing and POKEing here. Type it in following the instructions, then save it to avoid any mishaps - no-one's going to relish retyping all those data statements! Now start it with RUN and you'll be asked immediately for a start address. And the good news here is that the turboloader is relocatable. You can enter any start address suitable for storing the 1845 bytes of code and the loader program will relocate the turboloader to run in that area. So, you'll have no problems using the turboloader in conjunction with your other machine code utilities.
When the loader program's finished, you should save the machine code as instructed on the screen. Now you're ready to roll...

## SPEED SAVING

Using the program is simplicity itself. All you have to do is insert a RANDOMIZE USR statement before the turboloader commands. It's this that activates the turboloader's command interpreter. The turboloader will now remain activated until it reaches the end of the line or a command it doesn't recognise.

As an example, let's have a look at how you'd save a Screen\$ using the turboloader:

RANDOMIZE USR $x$ : SAVE "test pic" SCREENS
where x is the start address of the turboloader. And, of course, the program supports all the usual cassette commands - SAVE, LOAD, VERIFY and MERGE.
But stop, you're saying - at least, you are if you've just tried executing the statement above. It's no faster at all. Ahal (Famous Scandinavian pop group? $E d$ ). That's because l've yet to tell you how to change the transfer speed - the baud rate. Initially, the speed is exactly the same with or without the turboloader - 1500 baud (bits per second). But you can easily change this using one of the four new commands that the program adds to ZX Basic.
The problem is that while SAVE, LOAD, VERIFY and MERGE already exist in Basic, where do we find keywords for the four new commands? I've got round this by adopting four of the Speccy's existing keywords, RUN, LIST, INPUT and PRINT. They all still work as normal except when you're using them as commands to the turboloader. Then their new roles come into play.

NOTE FOR TRAINSPOTTERS
NOTE FOMht you'd caught me out Ha, though? Doesn't he know, you're to didn't your Doe use of RANDO RND saying, that the use makes the RND call machine code mater That every call function unusable? RND value to the actually resets the the time? same number all the time? Well, yes I do! And to get that the Weli, side eflec,
turboloader on return loads turboload with the value of the systize
register with register with the Then the RANDDOWD variable SEED. Then only load SEED And
USR command will USR commane it already contains. with the valfect on the RND func bingo, no ehe whole problem is
at all so, the at ait So, the using a single machine eliminate
code instruction,
LD, only four bytes long.

| FAST FOUR-WARD <br> The four 'new' keywords work in the following way: |  |
| :---: | :---: |
| LIST | RUN |
| This command reads a header from | This now changes the baud-rate. It must be followed by a number ranging from 1500 to 3500 inclusive, in steps of 200 ( $1500,1700,1900$ and so on). The maximum baud-rate you can use all depends on your tape recorder. Butmost of you should be able to run at a minimum of 3100 baud - more than double the normal speed. |
| tape and lists it on the screen. For |  |
| exampie, List will display the start |  |
| code block. And that should keep the |  |
| hackers happy! |  |
| If you want to see how the first two commands work, try: |  |
| RANDOMMIZE USR XI: RUN 3100: SAVE |  |
|  | INPUT |
| PRINT |  |
| This command lets you choose just | This is used in exactly the same way as PRINT. It deals with the message |
| how much info you want on screen. It should be followed by either a 0,1 or |  |
|  | a key in the SAVE command. The |
| 0 O Neither the baud-rate nor the | values are used as follows:0 : The message isn't printed and you |
| names of the data blocks during |  |
| LOAD/VERIFY are printed onto the | don't have to press a key. |
| 1: Only the names of the data blocks | key press. |
| are printed. | 2. As usual. |
| ${ }^{2}$ 2: Everything is printed. | The turboloader is initially set to PRINT 2 and INPUT 2. |

## THE OFFICIAL



Tony Williams, celebrated author of "League Club Directory" and "F.A. Non-League Club Directory" has provided authentic up-to-date home and away form for a total of 124 League and Non-League teams.

You must decide which tactics your teams use throughout the various matches and you must make managerial decisions which may well effect the morale of your team and subsequently the score! You may represent a local team, and if you are lucky enough to receive the benefit of a "giant-killer" your team may even experience a dream cuprun!
Above all, The Official F.A. Cup Football game comes up with realistic results that's why the Football Association have given it their full approval!
Available for Spectrum 48K, Commodore 64/128 and Amstrad CPC 464/664/6128

Name
Address

Spectrum 48K Commodore 64/128 $\square$ Amstrad CPC 464/664/6128 $\square$ Tick appropriate Box All versions of F.A. Cup Football cost $£ 7.95$. Please make cheques and postal orders
to Virgin Games Limited and post to the address on this advertisement. Please do not post money.



NOW YOU HOLD THE KEY TOTHE WORID OF THE CAPED CRUSADER COMING THIS EASTER from...
SPECTRUM 48K


AMSTRAD


# FAST FORWARD 

TURBOLOADER
Phew，look at all those data statements！ But don＇t despair it＇s not nearly as bad as it looks．The number in front of every hex－string is a checksum．So the loader program automatically checks every single byte you＇ve typed in．And unless you＇ve made a real pig＇s ear of it，your typing errors will be detected and the appropriate error message printed on the screen．Finally，save it and start speedin＇

```
O REM SFECTRUM TLIRBOLGADER
20 REM
30 REM（e） 19 ABS Esben Kran Han sen
40 REM
50 DEF FN \(h(a s)=\) CODE as \(-4 B-17\) ANB ary＂Q＂）
100 INFUT＂gtart address：＂ E etar
110 CLEAR start－11 LET start \(=F E\) EK \(23730+256 *\) PEEK \(23731+1\)
```

Lines 10－110 Ask the user where to put the machine code and set RAMTOP right．

## 120 PRINT AT 10,114 ＂WAIT 4 MIN．

130 PRINT AT B，6；＂CREATING MAACH INE CODE＂
140 LET adr＝starts RESTORE

Lines 120－140 Sit back and relax message．

150 FOR $1=1$ TO 15
160 LET $p=1$ ：LET summos READ ch ot sum，dt
170 PRINT AT 12,14 ：1845－adr + sta 180 GO SUB 日00
190 IE fesi THEN GO TO 250
200 LET hivait GO SUB 日00
210 IF fesl THEN G0 To doo
220 PONE adr，FN h（h＊）$=16+$ FN h（a）
b）
230 LET 2 ummexim＋PEEN Adr：：LET ？ drwadr＋1
$240 \quad 60 \quad 10 \quad 170$
250 IF sumc＞checksum THEN GO T － 600
260 NEXT

Lines $150-260$ Read the machine code into memory， checking it line by line．

400 PRINT AT 12,0, ，AT B， 4 ：＂RELO CAT INE
A10 RESTORE YONO
420 FGR $\mathrm{i}=1$ TO 4
430 LET sum＝o
440 READ checkwum
450 READ poke
460 IF pokew－1 THEN 60 TO 520 470 READ
480 LET sum＝sum＋poket
490 FOKE start＋poket1，INT（ista $r t * v) / 256$
500 POKE start＋poke，start＋v－256 －PEEK（start＋poke＋1）
510 GO TO 450
S20 IF sum ；checksum THEN CLS ：FRINT＂ERROR IN LINE＂ $1990+1$＊ 10：STOP
530 NEXT

Lines 400－530 Adjust the code so that it works wherever it＇s been loaded．

540 CLS
550 PRINT＂RAMTOP max．i＂ 1 start -1 ．．．＂EAVE $\mathrm{H} / \mathrm{C}_{2}$＂＊－＂SAVE＂＂name＂＂CO DE＂Istarti＂，1845＂－．＂CALL MACHIN

E CODE：＂＊＂RANDOMIZE USR＂istart 560 STOP

Lines 540－560 All done ．－print info on how to load，save and run the code．

600 CLS ：PRINT＂ERRDR IN LINE ＂ $11 * 10+9902$ BTOP

Line 600 Ooops，an error in the code lines．

日uv LEI fNJITO
810 IF pXLEN ds THEN LET fesl $=$ 810 IF p
1：RETURN
820 LET af＝ds（p）：LET pep＋1 830 IF as＞＂＂＂THEN RETURN 840 GO TO 810

Lines 800－840 Return the next hex character of machine code data．

1000 DATA 17954 ，＂DFFEOD2日47FE 3 A2 B02CFOBFD340D2ASDSCESE72160EAE3F EFS2日SDFSESCDDDEAEIFIFEEEZ日SFFEF TCA17ECFEFOCA6BEC0600FEFB286104F EEF2日SC04FED62B5704FEDS2日52225D5 CFD350DE1CDE4EAED4B765CC93A2BF1F E02COC36EOD3A2DF IFEO2COCDGEOD1 IS OFOAFCDOAOCED4B27F1CD1B1A3EODD7C 9CDFOEAFEOSD266EC
1010 DATA $144 \mathrm{E2}$ ，＂322AF 1 18DeCDFO AFEOS3OF1322CF1C9E7CD日21CC3941E7 erpวof 1E70necicenzojspernot11003 A29F 1A728020E22F7DSDDE 1060 B3E201 21310 FCDD 3601 FFCDF 12B21F6FFOB090 330103A29F 1 A72003C3420678B12日0AO 10AOODDESE123EBEDEODFFEE420473A2 9FIFEOSCABAICE7CDB22日CBF9300C210 0003 A29F13D281603
1020 DATA 14236 ，＂7006CZAA1CCD302 52818237EDD770B237EDD770C23DD710 E3EO1CB7128013COD7700EBETFE2920D AE7EBCTSDEDFEAAZO1CSAZクF 1 FEOSCAB A1CE7DD360BOODD360E1B210040DD750 DDD740E184AFEAF $204 D 3$ A29F 1FEOSCAB A1CE7CD4B20200CJA29F 1ATCABA1CCDE 61C180FCDB21CDFFE2C2BOC3A29F1A7C ABA1CCDESIC1304ET 1030 DATA 14257 ．＂CDE21CCD991EDD7 1080D700CCD991EDD7 10DDD700E60690 D360003C35DEDFECA2807DD360E80C33 DEDTAZ9F 1 ATCZAA1CETCDE2：1CCZ34EDE 7CDB21CCD991ECSCD2B2D016400CD2B2 DEFOS3ACD941EFEOF3日34FE243030D60 FCB47202ACB27CB27213DF $106004 \mathrm{F09E}$ B212DF1060BCSIA134E23462302C1 1OF S3AOEFO3239FOC1ED
1040 DATA $1429 \mathrm{~B},-4327 \mathrm{~F}$ CSBDEACFO 9E7FEOD2日06FEJA2日02CFO日111100DD2 $116 F 1$ AF 37 CDEBEF 3 OF 23 A 16 F 1 FE 0430 E ECDB4EA3EO2CDO11611E6FOCDOAOC1 11 TF1060A1AFE203NO1AFD7 131 OF63EODD 73A16F 1 A72822FEOS2日SD3E051150F0C DOAOC3A24F1FSE61FC640D7F 1 CB77280 उЗE 24073EODD7184EED4B23F178E6C02 6tOCS3EO2115OFOCD＂
1050 DATA 14088 ，＂OAOCCIEDIBIABEO DD73E06115OFOCDOAOCEDAB2SF1C5CD2 AED $3 E 071150 F O C D O A O C C 12 A 21 F 1 A 7 E D 4$ 2444DCD2AED 1 OOF 3 EO 31 15OF OCDOAOCE D4E23F 1CD2AED3E04115OFOCDOAOCEDA B2：FICD2B2DCDE32D3EODD7C9CD991ED D7100DD700EDD3600002AS9SCEDSES35 C37EDS2DD750BDD740C2A4B5CEDS20D7 SOFDD7410EB3A29F1＂
1060 DATA 15521 ，＂ATCAFDEEESO1110 ODDOPCDPDEADDES $11: 1$ 100AF $37 C D E B E F D$ DE130EF ЗA2BF 1 A 728 OCCDB4EAJEF ECDO 116FD3652030E日ODD7EOODDBEEF 20020 EFGFE0430CD473A2BF ：A77日2EOB1：E6F
 C200379日04F131ABE2320010C3A2BF 1 A 728021 AD710EFCB79209日3A2BF 1 A7280 63EODD7CDBDEAE1DD
1070 DATA 15005, ＂TEOOFEOS2BOCTA？ 9F 13 ЗСA 1 EEFEO2CADEEEESDDGEFADD6 6FEDDSEOBDDS60C7CBS2日OEED5238272 GOBDD7EOOFEOSC2060BE $17 \mathrm{CBS} 2006 \mathrm{DD6}$ EODDD66OEESDDE 13 A29F 1 FEO2372001A
 57 CB 52006131313 EB 1 B0CDD6EFADD6bF BEB37ED52380911050019444DCDOS1FE

1DD7E00A72日3D7CB5
1060 DATA $14131, " 28132846284 E 2 B C$ 303030D23wrsccneet9DD2ASFSC2A595 C2BDD4EOBDD460CCSO30303DD7EFDFSC DS51623F177D12373237223E5DDE1373 EFF 1 日日FEB2AS9SC2BDD225FSCDD4EOBD D460CC5CDE519C1ESC5CD5516DD2A5F5 C23DD4EOFDD4b1009224BSCDD660E7CE 6CO200ADDGEOD22425CFD360AOOD1DDE $1373 E F F C 32 A E E D D E^{\prime}$
1090 DATA 15619 ，＂ORDD460CCSO3F73 6BOEBDIESESDDE $1373 E F F C D 2 A E E E 1 E D S$ P535CC3D20BES3A2CF 1 A72日243D200A EFDCDO116CDDE1S1日17CD6EODCDBDEA3 EO1115OFOCDOAOCCDDE $15 C D G E O D C D E D E$ ADDES1：11100AFCDA2EFDDE106327610F DDDSEOEDDS6OC3EFFDDE $1213 F 05+521$ 日 O1FCB7F2日03219日0C0日130D2BF33E044 $710 F E D 3 F E E F O F 06 A 4$
1100 DATA 13690，＂2D20F50525F258E FOG2F 1 OFEDJFESEOCO6 371 OFEDSFEO 10 DTBOB6F 1 G097AB3200DDD6EOO7CAD573 E023718176C1日F579CB7B1OFE 3004064 210FEDSFEOGSE2OEFOSAF SCCB152OEB1 BDD230631 3E7FDEFE1FDO7A3C20C7063 B1OFEC9140日：SF3YEOFDSFE2：TFOSESn BFE1FE620F6044FBFCOCD4BF03OFA211 50410FE2B7CES20F9＂
1110 DATA 14450，＂CDATFO30EBO69CC D47FO30E43EC6BOSOEO2420F 106 C9CD 4 RFOJODS7RFEDA $30 F 4 C D A R F O D O 79 E E O 64$ F260006B01日1F082007300FDD7500180 FCB11ADCO791F4F131807DD7EOMADCOD D231BOB06B22EO1CD47FODO3ECBEACB1 SO6B030F37CAD677AB320CB7CFEO1C9C D4BFODOJE： 6 CJE90500545552424F4CA F414420207F203139＂
1120 DATA 9574 ，＂ $383520454 \mathrm{B4} 42020$ 42415544 BA 2020535441525420544150 $4520414 E 4420505245535320414$ ES920 4845095354415254204C494EA5BA5354 $4152542041444452455353 B A 4 C 454 E 47$ $544 \mathrm{B204F} 46204441544120424 \mathrm{C} 4 \mathrm{~F} 434 \mathrm{E}$ BA4152524159204E414D45BAS0524F47 52414 D 204 C 454 E 47544 BBA4C454E4754 48204F4620564152＂ 1130 DATA $10595,-4941424 C 4553 \mathrm{BAO}$ DSO524F4752414DBAOD4ESS4D4245522 04152524159 AAOD434B4152414354455 2204152524159 PAOD4250544553panoo 0000000000000000000000000000000 D COS000002027EEF9TEF 9DEFABEFOBFO2 CFO34F04CFO3E423E31BOB2CB16373D3 A2DB7E9D0153239352EEDEFD4132E343 124C4C6n912707025－
114 U DAIA 5492 ，＂1FLACCDD $102 \mathrm{~S} 2 \mathrm{v} . \mathrm{t}$ 1ED1D3E2OF 21272417 D7D9E60D1C221F 12DEEOEBOCIB1EIBOEE4EGEFOA131916 OqEBEDF 409 OF 151205 F 1F3F 807

Lines $1000-1140$ Heaps of hex ．．．this is the machine code．

2000 DATA $33659,20,0,30,93,41,43$ $9,46,520,77,84,65,1739,94,1739,1$ $03,1520,111,1735,121,144,126,518$ $, 129,1739,134,144,141,1740,153,1$ $737,168,1737,203,1737,231,1737,2$ $50,1737,299,765,306,1737,339,173$ $7,352,1737,372,1737,412,765,-1$ 2010 DATA $49152,425,733,426,1737$ ，437，724，481，1757，489，1741，505，1 $451,508,1497,513,1735,516,93,536$ $, 1718,541,1371,546,1718,553,84,5$ $61,1670,567,1719,585,1718,597,15$ $20,603,1732,626,1731,637,1520,65$ $2,1520,659,1733,663,714,668,1520$ ．675，1729，－
2020 DATA $53122,683,714,690,1520$ $, 697,1731,700,714,705,1520,712,1$ $729,766,1737,770,1181,779,93,789$ ，1371，795，1734，日02，84，e31，1739，\＆ $38,1670,869,1739,883,1739,892,93$ ，903，1737，907，977，912，1150，960，1 $737,971,1371,1148,970,1171,970,1$ $183,1740,-1$
2030 DATA $56328,1205,93,1210,152$ $0,1222,93,1231,1250,1286,1272,13$ $94,1515,1409,1511,1416,1511,1431$ ，1515，1441，1515，1488，1511，1512，1 $515,1741,1304,1743,1335,1745,134$ $1,1747,1355,1749,1451,1751,1484$ ， $1753,1492,1755,1516,-1$

Lines 2000－2030 Relocation data to let the machine code be loaded in any position in memory．

# EXPRESS SPECTRUM, BBC COMMODORE REPAIRS! FRE WORTH £24WITH <br> When we say NO HIDDEN COSTS we mean it! 

 EVERY COMPUTERFIRST/to provide 'while-u-wait' service.
FIRST with international repairs. to provide Insured/ Recorded Delivery on return journey.

## FIRET with LOW CHARGES

 (e.g. £9 for keyboard faults). with discounts for Schools, Hospitals and H.M. Forces.

## FIresT

 to charge prices that are FAIR to you!, we do NOT charge HIGH FIXED prices!

WHY PAY HIGH FIXED PRICES? N.B.OUR PRICES INCLUDE VAT, P\&P and INSURED Delivery!

PHONE or SEND PHONEORSEND computer (without power supply or leads) for FREE NO-OBLIGATION estimate! If you don't like our estimate we will return your computer AND refund the postage incurred.

REMEMBER WE HAVEA REPUTATION TO LIVE UPTOI If you must insist on paying a HIGH FIXED price of $£ 19.95+\mathrm{VAT}=£ 22.95$ we will donate the difference between that price and our charge. to the charity of your choice!

Printworks Lane, Levenshulme, Manchester M19 3JP.

FIRST 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'. AUGUST ' 85.
FIRST for LOW PRICES 'My Spectrum dlew recently. I took it to MANCOMP, who fixed it in 8 mins and for less than $£ 10$. They are local, 'clued-up' and blindingly efficientr' COMPUTER COLUMN, '4 HEATONS DIGEST', (Vol. 1, No. 11)
FIRST for ADVICE AND HELP 'I have come across a firm that will be more than willing to advise you as to how to remedy your problem. 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 'POPUIAR COMPUTING WEEKLY' JAN. '85.
FIRST for SPEED 'One firm, at least, can usually effect any necessary repair 'over-thecounter' in 45 minutes. Based in Manchester, MANCOMP can offer what is arguably the fastest turnaround in the business, the personal callers.
"CRASH' Magazine, June 1985.
FIRST for HONESTY. We let you watch your computer being repaired. Our engineers don't disappear into another room।

## ATTENTION ALL

 MANCOMP CUSTOMERS: All repair companies have a legal obligation NOT to sell sinclair spares to the public. otherwise our supplies get cut off and thenwe would go out of besiness we would go out of business
 YOARANONTFIND ANY
YOUDENCATCHES' YIIDDEN CATCHESEREI

## MANCOMP GUARANTEE

©
It the same fault occurs within 90 days of our repair, we will repair it FREE of charge AND refund \% the postage.
© 880888088880888088088880880


Tel: 061-224 1888
or 061-2249888

## THE BEST KEYBOARD for YOUR SPECTRUM TheSAGA1 EMPEROR <br>  <br> £39-95 inclusive!

We repair hundreds of computers every week, so we can pass on our 'bulk-buying' discount to you Z80A CPU - £1.50 4116 RAM - £0.50 SPECTRUM UPGRADE FITTED - E 18 6-48k
Opus disk drives E 200 inc . VAT 5 free diskettes worth $£ 30$ with every Opus disk drive

## FREE POST SPECTRUM REPAIRS

## GUARANTEED SIX MONTHS

We have been maintaining all types of computer systems from mainframes to micros for over 15 years and offer you:

- Full overhaul and update with each repair.
- Six months warranty on whole computer - not only on repair.
- FREEPOST - we pay the postage both ways (UK).
- Returned to you by 1st class post. Fully insured.
- All inclusive prices for any fault $£ 20$.


## MP ELECTRONICS FREEPOST, DEREHAM NORFOLK NR19 2BRY Tel: 036287327

## INTERFACE 007

The Back-Up unit sold worldwide on recommendation alone WITH BUILT-IN KEMPSTON

TRANSFERS ANY TAPE TOTAPE, DISC, COMPATIBLE JOYPORT.
 CHODRIVE or WAFA. 100\% SUCCESS Saves out ONLY program Date Bytes with option to Transfer WITHOUT a Screens, thereby leaving more oom on cartridge.
POKEs or extra MESSAGES added with ease. UNIOUE ACTION: After Transferring, your game/program will automatically restart. CONVERTS ANY TAPE TOLOAD AT HYPER SPEED. Tranafer routines built into Interface, but a FREE extra tape required for DISC. Dise users send for fret leaflet.
GUARANTEED TO BE THE MOST VERSATILE BACK-UP UNIT AVAILABLE (even original INT OO7 can be updated by a C2 Tape)
(Wafadrive users should order as INT OOTWD)
Postage: U.K., BFPO or lreland C 1 . Europe +C 2 . Elsewhere + ©4

## ZX-GUARANTEED (Dent. YS)

29 Chadderton Drive. Unsworth. Bury Lancs. BL. 9 8NL
Tel: 061.7665712 (do not phone when Startrek is on)

## SPECTRUM REPAIRS

We expertly repair Spectrums for $£ 17$ inclusive of parts and labour and return postage.

Spectrums upgraded 48 K for $£ 34$. Keyboard faults only $£ 12$.

## R.A. ELECTRONICS <br> 133 London Road

South Lowestoft, Suffolk
Tel: (0502) 66289

## THE BEST BACK-UP INTERFACE 100\% SUCCESS!

£35.95 SPEC-MATE
£35.95
Automatic one touch transfer to
*MICRODRIVE *WAFERDRIVE *BETA-DISC

* TAPE *TAPE DOUBLE-SPEED $\star$ OPUS (see below)
"THE TRANSFER PROCEDURE IS SIMPLICITY ITSELF"CRASH MAGAZINE

1. EXPANSION PORT INCLUDED (you can keep SPEC-MATE attached if you want but you do not have to).
2. NO ADDITIONAL SOFTWARE REQUIRED. FAST, DIRECT AUTO-TRANSFER.
3. "FREEZE" PROGRAM AT ANY POINT (can be used as save-game opt.).
4. FINISHED IN SPECTRUM STYLE BLACK CASE. 5. ADD POKES WITH EASE.
5. CONVERT ANY PROGRAM INTO A TWO MINUTE RELIABLE FAST LOADER.
6. ANY PROGRAM CAN BE MADE CHALLENGE SPRINT COMPATIBLE.
7. GET 2 PROGRAMS ON ONE CARTRIDGE
N.B. TRANSFER TO OPUS IS IN TWO SIMPLE STAGES (extra software required charged at $£ 2$. Please contact us for details) Orders to:

## A.T. \& Y. COMPUTING LTD

35 VILLA ROAD, LONDON SW9 7NY
Information: Tel: 01-733 6175 or send s.a.e. Fully inc. price: $£ 35.95$ (Opus $£ 37.95$ ) Overseas:

Europe $+£ 2$ Others $+£ 4$ )

## HINTS - POKES - MAPS

Monthly handbooks for SPECTRUM owners. Hundreds of game playing tips in each edition, plus competitions and special software offers.
Spectrum Arcade
Handbook $\qquad$ 11.00

Spectrum Games
Review Handbook $\qquad$ $\mathbf{C} 0.75$
Adventurers Handbook..... $\mathbf{E 1 . 0 0}$ Send cheque or P.O. to:

H\&D SERVICES (YS)
1338 Ashton Old Road Higher Openshaw
MANCHESTER M11 1JG
TEL: 061-370 5666

## CHEZRON SOFTWARE

(Dept. 204), 805 louchborough road BIRSTALL, LEICESTER LEA 4MJ PRO-MAT fox sasier control of your pritis. EPSON, BROTHER, HR5, WM80 via INTER FACE 1, KEMPSTON of TASMAN. State printer and interface when ordering _ $\mathbf{2 3 . 5 0}$ PROGS-FILE for progam recorth, sasy une, can resed m'divet. Herd top1/face 1 or Kempiton GOLDEN $\qquad$ adventure. 12.50 GOLDEN COBRA a real time
SKETCH draw, paint the 12.50 CATLOADER ane key, self-maintaining loader memu to damaticily simpilfy microdive une. Plas SAVE ITI AUTODRAW AND TIME COUNT all on one wepe. $\qquad$
'No Quibble' refund if dissatisfied.
SAE brings program details.
CHEZRON SOFTWARE

## POOLS PREDICTION

Outputs best druws, homes and rway.
features analytical draw finder.
Prints tean form comparisen yraphs.
Analyses and graphs resuits wery week.
Takes full scesunt of nid week games and Propotigntrlegation option. Can be uned from vesion to suaseal
Easy to use, even for beginners.
Gesy to use, evin for of predintions il mpinal full bick sp service
53 wime 1334 dividendsi receliend by author far.
"Thie is the hest and mast scientilic of any arogram / have seen"- Mr R.A.P. Ievcretar. Drpington Computer clabl
"Owce agait thank yoe for oee of the bes: investiments f have made" - Mr D.1.B Freltham).
7 moidelite to compratulate pew on ruir trcedont service - it is a ravr thing these doys ML.SP.SMrwtorl

7 found rour arogran viry puaferrianal and uner friendy - Ian wey satirfied with it - Mt 8.0 . Spalingl.

RACING PREDICTION
Aa sasy to une predictow, by the same mithoc, for the flot Racing season.
No inewledoe of recine requind
lipput information from any daily newspaper Holds data on draw advantage and yrount conditions for 37 Britinh courtus.
Self-teaching propam is never out-ol.date. Curlomers reporf wins of ip lo 33 I.
Auk for:
Batish Pools
AUSTRALIKN POOLS
ПATHACNO
$9 \$ 11.95$
HATAKCNO E 81195
Allow 7 days for delverr. Cheques, POs payable to ROMBEST, or quete
AccessfurpcardMastercard number
Overseas catiomers please add Cl for $\mathrm{p} \mathrm{B}_{\mathrm{p}}$.
ROMBEST, Dept. YS
2 Welland Croft, Bicester Oxen 0X6 8GD
Avalable for 48 Spectrim. British Pools alse wivilate for Commodors 54 .



youn simclais does mot combowe sorimane piancy

## M The essential Microdrive utility.

Have you precious files on a cartridge which will still CAT but no longer load? M-Doc to the rescuel

- Find, load, repair and rewrite bad sectors, and hence load damaged files - Full status reports pinpoint faults quickly - Monitor-type sector editing e Full printer support © "Filter data" option for Tasword Two files e Separate program makes corrupted BASIC programs editable Only £6.95
All Spectrums except 16 k . Available from good computer shops and Micronet 800 . Also via fast mail order (UK postfree, Europe add £1. overseas add $£ 2$ airmail) with 14 -day "full refund if not entirely satisfied" guarantee (statutory rights not affected). Trade enquiries welcome: phone R\&R Distribution on 0977795544.

SEVEN STARS
Seven Stars Publishing, Dept S,
34 Squirrel Rise, Marlow.
Bucks SL7 3PN. Tel: 062843445

## SERIOUSLY

"You need a monitor which gives a pritned trace of your machine code program to a line printer.

## MAKE EASTMON YOUR CHOICE

EASTMON disassembles and single-steps in RAM, ROM and Interface 1 ROM and makes a hard copy for finding those elusive bugs. Full display of registers and selected memory with option to print to ZX type or fullsized printer.
Breakpoints in RAM or ROM
CALLs skipped, executed to singlestepped at your choice.
Fast hex and character entry . . . Block moves and Fills . . . Hex-dec-hex conversion.
Clearly written manual and easy commands . . . no gobbledygook.

## EASTMON MONITOR

For SPECTRUM 48K and SPECTRUM +: $\mathbf{£ 6 . 9 9}$ inclusive Cheques and postal orders to:
MYINHURST ELECTRONICS LTD
86 Eastem Way, Ponteland, Newcastlo upon Tynè NE20 9RE

PREMIER LEAGUE and EUROPEAN TROPHY
FOOTBALL MANAGEMENT STRATEGY GAMES FROM
E \& J SOFTWARE premier league
our popular league game - Featubes INClude, Training, Team Selection, Substitutes, Half-Time Soores, Full Squad Details, Named Goal Scorers, Team Styles Save Game, Financial Problems, PLUS MANY, MANY MORE. AND NOWI

## EUROPEAN TROPHY

A SUPERB EUROPEAN COMPETITION STYLE GAME WITH THESE GENUINE FEATURES Home \& Away Legs, Away Goals Count Double. Two Substitutes Allowed, Extra Time, Home 8 Away Legs, Away Goals Count Double. Two Subutute Alowed, Extra Time. MANY MOREI


```
                    *ak sFIctmum
```



```
*)
OON paves ave avalable by MEAL ORDEP ONLY at the UNBEATAREE VALUE of CS.25
SNCLLL TWW MWESENTATION PACK OFBOTN GANES AVALABLE AT ONEY CP.gS
    Mice includes postage A pocking ledd C1,00 ovteibe UK.
E & J SOFTWARE, 34 Lordshlp Roed, Cheshunt, Herts EN7 SOP
```


## SPECTRUM REPAIRS

$£ 14.95$ inclusive of labour, parts and $p \& p$.
Fast, reliable service by qualified engineers. Average repair 24 hrs . 3 months guarantee on all work.
For help or advice - ring: H.S. COMPUTER SERVICES

Unit 2, The Orchard Warton, Preston Lanes PR4 1BE
Tel: (0772) 632686

## SPECTRUM TAPE UTILITIES 007

007.spy Cancope withthe new jerky pulsating tone types and converts toload 007MD $\quad$ Trinsters tapes MD includes a FREE Misue includes a FREE Exue of Microdive Exchange explaining logner B/or awkwar 007wo progtranste WAFA S/h...................A hackers delight

Send stamp for full details All tapes $\mathrm{C5} .95$ (Europe +55 p. Elsewhere by airmail + (C1.65)

2X-GUARANTEED (Dept YS) 29 Chadderton Drive. Unsworth Bury, Lancs, BL9 8NL


## 48K/128K SPECTRUM UTILITIES

CODE SLICER 2 is a new cassette handling utility which will read ANY section of a tape into ANY store address. It will list the size of "headerless" files and will read Basic or Machine Code programs created at any of 7 different speeds. The instructions supplied explain how to use this product for Microdrive, Wafadrive and Disc transfers, general hacking etc. Many hints, tips and examples are included to enable you to gain the full potential of this amazing new utility. A tape header reader is also supplied which will stop "auto-run" Basic programs if required. Invisible programs can be made visible, large programs can be split into several sections, headers can be added to headerless files and much, much more.

$$
\text { Simple to use - just } \mathbf{£ 5 . 5 0}
$$

$$
\text { さै さै } \hat{\hbar}
$$

KWIKLOAD has now been amalgamated with our VARILOAD utility to allow 48 K \& 128K cassette software to be loaded between $2000-6000$ baud. This means a saving of $1.3-4$ times the normal loading time. No additional hardware is required and the converted software loads independently of the KWIKLOAD tape.
The professionally written instruction manual explains how to convert most commercial programs including Basic, Machine Code and many which are protected.

> 48K Gyroscope loads in 135 secs ( 4500 baud)
> 48K Exploding Fist loads in 105 secs ( 4500 baud)
> 128K Never Ending Story loads in 4 mins 10 secs $(3500)$ baud
"A bit like upgrading your C5 to a 3.5 litre car" ZX Computing "F'm very satisfied" - N. Mellet - France
"Thank you for the delivery of your exceilent Kwikload"
A. Cupif - Switzerland

Only £6.95 including a free tape header reader additionat 70 p postage

## SPECTRUM REPAIRS



TAPS (BETONE) LTD., 3 Cordwallis Street Cordwallis Trading Estate, Maidenhead, Berks SL6 7BH. Tel: 0628 781202/32640

Using the speed and accuracy of production ATE. We provide a reliable quality repair at costs with no hidden extras. Send or bring your damaged equipment with remittance. We will return it working and guaranteed.

16 K and 48 K repairs $£ 16.00$ 16 K to 48 K upgrades $£ 24.00$ QL repairs $£ 27.50$ Interface 1 repairs £19.00 Microdrive repairs $£ 16.50$
Various interfaces $£ 10.00$

odopt electronic;

## HOME ACCOUNTS

Put your house in order! Probably the best home use of your computerl Comprehensive coverage of bank accounts, credit cards, HP, etc. In-built accuracy check for all transactions. Project cashflow for any period ahead. Available for all Spectrum computers $\mathbf{£ 8 . 4 5}$ or free details from:

## ADVERTISEMENT INDEX - YOUR SINCLAIR

| Adapt Electronics | Classified | H\&D Services | Classified | Pipeq Systems | 65 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Adventurers Club | 65 | Hewson | IFC | Qualsoft | 35 |
| AT+Y Computing | Classified | HiSoft | 67 |  |  |
| Budget Software | 84 | HS Services | Classified | RA Electronics RAM | Classified $20+21$ |
| Buttercraft | 84 | Imagine | OBC | Romantic Robot |  |
| Cascade | 38 | Kempston Micros | 25 | Rombest | Classified |
| Cheetah | 6 | Konix | 11 | Saga Systems |  |
| Chezron | Classified | Labachrome | 74 | Seven Stars | Classfied |
| Datel | 58 | Lem | 38 | Taps | Classified |
| Devron | 31 |  |  | Tasman |  |
| DigiTape | 65 | Mancomp | 90 | TEC Publications | 65 |
| Discus Software | Classified | Micronet | 33 | Thetford Micros | 84 |
| E+J Software | Classified | Microsphere | 28 | The Hit Squad | 7 |
| Evesham Micros | 54 | Microworld Mirage Micros | Classified | Thoughts \& Crosses Trojan | 67 38 |
|  |  | MP Electronics | Classified | Unisoft | 10 |
| Forats | Classtied | Myinhurst | Classified | Video Vaut | 3 |
| Gargoyle | IBC | National Software Library | y 70 | Vrgin | 87 |
| GCE Tutoring Gremini Marketing | 70 81 | Ocean | 215182/88 | Wakers | 74 |
| Gremlin Graphics | 16 | Orpheus |  | ZX Guaranteed | Classified |

HARDWARE
Ewop: RAM joystick interface Mkil in good working order, hardly ever used. I would like any recent games, especially Saboteur or Spencer. 247 Coventry Road, Exhall Spencer, 247 Coventry Road, Exhall Coventry CV7 9 BG

- Swop hot dual Cumana disc drives for good metal detector, offers for $48 K$ Spectrum ct, 000 mint Tel. Harold 1 pm to 5 pm C1,000 mint. Tol. H
Sheffield 389202.


## Sheffieid 388202. - 48 K Spectrum+, Junior Pro joystick and

 over $\mathbf{L} 60$ worth of games. Sell for £100 excellent condinion. Tet,(0405) 813492 any time and ask for Dave. a 48 K Spectrum with many games (all Ilo5. Write to Alex Vaill, 38 Warwick Road. Bishop's Stortford, Herts CM23 5NW. Bishop s siortiordor disc interface for sale, accepts most BBC type drives. Complete with full most Bec type drives. Complete wio Speech instructions \&35. Also Curran MicroSpeech Ring Stuart on (0533) 875744 .Spectrumt, nearly 100 games, Interface and microdrives with cassette recorder. joystick and interface, lots of mags. For just £200 ono. Tel. Chariey on 01-736 4277. Will sell microdrive separately
Weilcosha OP-100A graphic printer and paper, plus DKTronics Centronics interface for Spectrum ع85 inc. postage. Tel. (0243) 692482, ank for Antony

- Arrgghit Wanted: any Centronics printer interface for Spectrum or any other hardware I will swop outragecus number of originals. Write to Mark Tynan, 18 Seagrange Avenue, Baldoyle, Dublin 13, Ireland.
- Currah MicroSpeoch as boxed and new. originals of Starquake, Dark Star,
Nightshade, Hunchback II, all for £30. Write to John Russell, 95 Woodside Avenue, Bouth Bentleet, Essex SS7 4NU
- Seikosha GP-250X printer, excellent condition, AS232 serial plus Centronics parallel. Cable suitable for Interface 1 RS232. Spare ribbon, ع375, Buyer collects. Tel. (0708) 227672.
- Rotronics Wafadrive unused under guarantee offers region $\mathrm{C90}$, or swop for microdrve and joystick interface plus pair of joysticks. Must be in excellent condition. Tel Alwyn on ( 0970 ) 828196 after 6 pm \$48K Spectrum with printer, joystick, stack, light ritle and C300 of software e.g. Supertest Hunchback II, Real You, Adrian Mole. Write to Michael Storey, 4 Attlee Estate, Tow Law, Co. Durham.
A Kempston joystick and game speed controller combined. mado by DK'Tronics £10. Very good condition, as new. Tel. Dronfield 411407
- Rotronics Wafadrive as new in box, unwanted present. Cost £129.95, will take ع60 inc. po
after 6 pm.
after 6 pm
For sale, ZX 81 with 16 K RAM pack and all eads and power pack. Also two tapes included - Space Invaders and Trader. Sell Yelor 8. Tel, York 51948 , ask for James. ex. $7 \mathrm{E} 25,15,13-21 \mathrm{Cl}$ each ? inc. poster $£ 5,3,4,6,8-12$ £ 4 each. A. Rowland, 4 Cleave
Wanted. Interface 1 and microdrive for Spy-Hunter, Zaxoon, Tapper, Buck Rogers, Moon-Cresta, Frank Bruno, Hobbit, Cyclone. Code Name Mat. Tel. Warren Point 74080 ask for Brian 4 pm- 6 pm . All original. with tape recorder, joystick interface. $£ 250$ of software and mage, all fogether worth about
c350. Will sellifor $\mathrm{C170}$. Tel. 01-9607161 aher 5 pm LTR-1 lettor quality printer. Prints ink on used C 75 . Ring ( 04865 ) 3836 ahter 6 pm . used c75. Ring ( 04865 ) 3836 aher 6 pm. cartridges for sale. ¿70 ono. Cartridges cartrioges for saie. E70 ono. Carruidges
contain utilitios and many games. Also selling Currah MicroSpeech for C14. Tel. O1-337 8932 and ask for Andy
Will swop Currah Microspeech and Tech Ted and A valon for either VTX 5000 or 0484) 687083 and ask for Jason after 4 during the week.
ITwo ZX Microdrives and interface 1 for sale. E100. TeL. Kevin on Hornchurch 51987 EFor sale: Your Spectrum issues 4-21 and Currah MicroSpeoch, other mags, software. books etc. Tet. (0820) 2338 and ask for Colin any evening betwoen 6 pm and 9 pm . - Dragon 32, tape deck, joystick, two books, magazines and software. Will swop for microdrive/Wafadrive or Alphacom printer and software, or sell for C80. TeL. 01-368 5787 after 4 pm .
EFor salel $M M$ vers OL . Brother EP-22 printer, AS232 lead, B/W 9' TV, Mk2 Software, 2 books, pre-formatted cartridges Case to hoid software items. c 300 . Tel. (0245) 356298, ask for Daren
- For sale - DK Tronics light pen with interface and instruction booket (stil boxed) £10 or will swop for Exploding Fist. Tel. 013603345.

Interface 1, Microdrive, VTX 5000, DK keyboard, Dk lightpen - any offers? Rodney Tregale, 95 Howard Avenue, Slough SL2 1..B. Also software list to swop

Will have Spectrum + black nyion dust cover Will swop for Spectrum dust cover. Tel. (0271) 861024 and ask for Trevor. Nightshade. All parts present but no for Elise, Nightshade. Ali parts preseni but no manu Edward Fowler, 4 Banks Crescent, Crieff, Perthshire PH7 3SA.
Currah MicroSpeech complete. E10. Wafadrive complete, C65, 11 Waters. C21. Wanted - 16 K or 48 K Spectrum, Robinson, 496 Dunstable Road, Luton, Beds. Robinson, 488 Dunstable Road, Luton, Beds. keyboard, iots of software, ioystick. Sell for keyboard, iots of software. oystick Sell cloo ono or swop for Ioshiba MSX. Any pm and ask for Gavin.
pm and ask for Gavin. plus nine various slze formatted waters plus nine various size formatted waters Nine rols of ZXPrinter paper - $\mathrm{\Sigma 1} .50$ a roll inc. psp. Tet. Doncaster 787694. inc. 48 K Spectrum for sale. Kempston interface, joystick and duat cover £200. Tel. Bath 331588 and ask for Aaron.
EFor salo. DX81 computer in great condition with real ieyboard, lots of games, utility bargain at 30 ono. Tel. ( 04465 ) 4322 after 6 pm.

- 48K Spectrum with professional keyboard. joystick and programmabie interface, books. magazines and lots of assorted software utilities, games, business etc. includes carrying briefcase. Price $£ 120$ ono. Tel (0603) 881012 after 6 pm .
- Sinclair B/W pocket TV, still boxed, vgc Will swop for good joystick and interface or sell for E 35 ono. A. Hill, 63 Harlow Moor Drive Harrogate, N. Yorks HG2 OLE
- Swop Prism VTX 5000 Modem for Datol Electronics Digital Sound Sampler. Modem boxed, complete and with full instructions. Write to Helon, 29 Greenacres, Kirkby-inAshfield, Notts NG17 7GE


On the lookout for hip hardware, snazzy
software or perky penpals? Your search
is over - put your message in YS and
get your name in the mag for free!
E Spectrum +.7 months old, e250 of software, joystick, interface, tape recorder worth $£ 400+$, sell for $£ 165$ for quick sale. Tel (0858) 34603 and ask for Tim after 6 pm . Spectrum 48K, Sapa koyboard, Interface 1, wo microdrives, Aphacom Printer, plus 1, two microdives, Aphacom Printer, plus
bits and pieces. £160. Tel. ( 0747 ) 840715 after 6 pm .
Spectrumt, Interface 1, Kempstor interface, cassette player, 50 games. C140 ono. Tel. $021-4498830$. Can deliver anywhere. Will consider swopping for radio controlled buggy. Please ask for Blaker after 6 pm.
Unwanted Christmas present - Prism VTX 5000 Modem, never used. RRP 160 , asking price £40 ono. TeL. 01-947 7911 and ask for lan after 4 pm

- For sale: 48K Spectrum with DKTronics keytoard, Quickshot II, interface, lightpen. tape recorder, over £ 140 of games, all in working order £170 ono. TeL. (06267) 4099. - RGB Interface I 15 , Currah MicroSpeech £12, RAM Turbo joystick interface £10, Cheetah SpecDrum E20, all in very good working order. Write to G. Hope, 72 Picke Close, Fordingbridge, Hants SP6 $1, \mathrm{JY}$. E 48 K Spectrum, over £ 1000 worth of games. 3 channei sound synthesiser, Kempston interface, Currah MicroSpeech. magazines, cassette carrying case. Sell for E220. Tel. (05402) 451 and ask for Willam. - Swop Currah MicroSpeech. Duingeon Builder and Gift From The Godstor any interface to back programs up on microdrive. Tel. (0475) 707518 between 6 and 7 pm and ask for Brian
- Prism VTX 5000 Modem, every issue of Telelink with binder, Melbourne House Micronet book, plus Spectrum software. First reasonable offer secures. Tet. John on (0742) 375418
- DKTronics lightpen, original box and instructions. Excellent condition. Will sell for c15. Tel. Hunstanion 34205 and ask for Mark after 6 pm .
- RAT remote control joystick plus interface Unwanted gift. Retall price £20, sell for E15 ono. Write to Raymond Clifford,
Gurteenataritt, Mitcheistown, Co. Cork, Eire. Spectrumt, as new. Joystick, interface. datacorder, software, bargain E100 ono. Tel (0782) 49944 after 4 pm.


## SOFTWARE

- Lots of games to swop. I guarantee a reply to all letters. Send your list for mine. G.T. Jenkins, 1 Greenwood Road,
Pontypool, Gwent NP4 8OA.
- Swop Tasword II, Finders Keepers, Jer Sel Wily and others for Abic Atac, Sherlocic Ghostbuaters, Terrormolinos etc. Write to James Fitzpatrick, 70 Prebend Gardens, Stamford Brook, London W6 OXU Eany now tities to mwop. Roty on a fast reply if your list is interesting. Write to Fredrik Bergstrom, Tranvagen 6, 43362 Partille, Sweden.
Will swop Brian Jacks and The Arc Of Yesod for Winter Games and Cosmic Wartoad or Nomad. Must be original games Phone 091-489 1931 and ask for Steven Robinson.
Latest Spectrum tities, Over 500 games to swop. Send your list for mine. Reply every time. Write to Daren Strevens, 8 Windmilf Road, Southwick, Brighton BN4 4RP Will swop any four of Swords And Sorcery. Hurg, Witches Cauldron, Dambusters, Towe Of Despair, Glass, Cylon Attackfor Quill and lilustrator. Call David on (0602) 653563 ather 6 pm .
Swop Skool Daze, Trashman, Jungle Fever for every Karate game or Tapper, Minder or Skips. Tel. Chester 45408 and ask for Robert - Swop complete Machine Code Tutorfor A Studio. Tel. (0827) 60148 after 5 pm and ask for Simon.
EHundreds of games to swop. Tities include Baseball, Chilier, Monty, Basketball, Daiey Fazantlaan 12,5731 XT Mierio. Holland Fazandaan E I have a lor of games to swop with anyone. anywhere in the worid. Send your hat ior mine French Francois Bemardi Aesidence de Grtwiers, Batiment 10,94190 Vitoneuve Graviers, Batiment 1Q,
Saint Georges, France. Whar Jetman, Flight Simulation, Bugaboo, Kong, Zroom, Spectrum Safarifor aimost Kong, Zzoom, Spectrum Sataritor aimost Buchanan Crescent, Sheffieid SS 8 NH . Buchanan Crescent, Sheffieid SS 8AH. Wriggler for Quill or Deus Ex Machina. Tel (0232) 615470 and ask for Rory.
- Lots of software to mwop. Send your list for
mine. Some of the newer games i have are Rambo, Commando. Starion, Gyron, Elite Aambo, Commando, Stanon, Gy
and Beach Head II. Dan Nielsen. Tornskadevaenget 4, 5210 Odense NV


## Denmark.

E Swop Shyfox, Ping Pong. Scuoby Doo for other tities. Write to Matthew Taylor, 131 Elmbridge Avenue, Surbiton, Surrey KT5 9HE.
E Will swop lmpossible Mission and Rald Over Moscow for Tapper, Shadowtire or Dam Bustera. Mark Norris, 50 Craigie Way, Ayr, Scotiand.

- Will swop Frankie and A. Mole for The - Artist. Aso Tasword Il and Winter Sports for Minder, and Bruce Lee for Hyper Sports. Tel. (0270) 812037 and ask for Lee. - Swop Everyones A Waily for Champions, - Spy Hunter, Herberts Dummy Run or Sam - Stoat Sale Breaker. Write to Paul Phillips, 142 Bloomfield Road, Bristol BS4 3RA.
- Swop Booty. Steve Davis Snooker, Beach Head, Decathion, Sabre Wult, jet Set Willy. Nicotine Nightmare, Nebula for The Artist. John Adams, 74 Clapham Road, Anfield. Liverpool L42TO.
Will swop Starion, Exploding Fist, Daley Thompson Decathion for Commando and
Ghostbusters. Write to Llarh Casey, 20 Burlington Road, Ballsbridge, Dublin, Ireland. Send your list for mine.
MAGAZINE HEALTH WARNING:
Think before you snip - most people use a photocopy instead.

EV

$=$
chestod wile lo zakion Place, Pitsmoor, Shetfield 5392 W for details.
Swop Brian Jack 3 Superstar Chalionge or ar Kung Fu. Chris Wood, 4 Winchelsea Street, Dover, Kent CT17 1 SST
Swop Nightahade and Swords And Sorcerytor Elite Must be in good condition

- Will swop Penetrator, Automania, Wheelie. Psytron, Aliade Alley, Fall Guy, Starstrike Blagger, Blive Thunder all for Whami Mutic Box or Megabasic. Tojram Dyal, 43 N
Road. Pecham
andon SEI
4 NP Road. Peckham, London SE15 4 NP Aegards To Miroad Sreetfor Blockiousters, Aegarde To Broad Streettor Blockousters,
Bindpe Ploy Bry Tel. Dave on (0438) 69447.
E Swop McGuigans Boxing, Shadowtire.
Doomdarks Revenge, Aaid Over Moscow to Soy Va Spy, Dun Darach, Tir Na Nos. Farlightor any other offers. Tel ©lom 4282658 after 5 pm .
- Latest Spectivim tites 10 swop. Over 600 tites - your lis for mine. Roly on a reply. Wite to Gary Opden, 2 Alder Grove, Hightields. Staftord ST179SW.
HSwop Wite Lightring, used iwice, for Currat Speech that is leas than a year old. Must be in good condition Jonathan Cole, 2 Aldeburgh Way, Springtield, Cheimstord. Essex CM1 5PD
E 350 games to swop. Fairlight, Exploding Fist, Commando and many more. Send your 94325 , ismaet.
EMany intes to swop including Sweevo צ World. Aoller Coaster etc. Send your list for mine. Michaei Simms, 28 Jenned Hoad, Amoid, Notlingham NO5 BFT
EWanted. Ghositbustiers for ZXX Spectirum
4BK. WII swop for Chess, Dimension Destructors and Chequered Fiat. TeL. 01-570 3676 betwoen 4 and 6 pm .
EOver 50 tapes to swop including Eureka. Frankie, Minder, Tir Na Nog. Dun Darach, Mini Otrice, Ouil, Skool Daze, Midnightand Doomdark. Especialy want adventures. Tol (0623) 550600 ather 5 pm .
- Swop Rally Drver, Broad Street, Raid Over Moscow, Dun Darach Cylon Attack for Zacron, Alver Raid, Sherlock, Vegas, Giass: Write to Colin Harman, 333 Redclift Walk, Chalkhil. Wembley, Middlesex
Iots of soffware lo swop including Hobbit, JSW, Skool Daze, Bugsy. Tel. Paut on Reading 597964
- Swop Zasron, Bruce Lee, Pole Position Send your list for mine. Write to Willam Lunney. 22 Trossacha Street, Maryhill,
Glasgow G20 7DR. Glasgow G207DR
- Swop Kentila and Doomsday Castle for Wirards Lairor Starstrike. Write to lan Gardner, 1 Spoeding Drive, Hartlepoo County Cleveland TS2490E
Swop White Lighining. Setabasic, Supercodell il plus various games and utilitios
for m/c, graphics urily programs, books or for m/c, graphics, utility programs, books
games. Your list for mine. Sond sap to $\alpha$. games. Your ist ior mine. Sond sae to d. Dorset BH5 ZEH.


## - Swop many top games including

Knightore, Underwuridio, Dambuiters, Knghoove, Underwuriod, Dimousterh, Munro, 24 Cliendee Road, Rentrew, Scotland PAHOAD.
Will swop Match Day, Daley's Decathion and Formule 1 Simulay. Dator Elite only. Tel (0342) 24005 atter school hours and askk for Stuart.

- Swop Pyiamorama, Soltaid. ABic Atac, Greart Space Race, Ork island, Stonkers and The Exterminatorfor Underwurlde, Spy Vi. Spy, Herbert' Dummy Run and Farright. Tel. Dronfleid 413898 and ask fer Andy.
EWanted. Spy Ve, Spyfor Beaci Jolly Sir Pack worth E14.95. Also will wop Las Vegas Ladytor Tapper, Spy Hunter or Siool Daze Tel (Ce74) 672134 and ask for Simon
e Sofmare to swop. Lots of new tifles Send your list for mine. Rely on areply. Write to Scott Miller, 6 Countess Gardens, Crieff, Perthshire PH77 30P
Wanted - The Ouilf and Imustrator. Win swop Wotet, FGTH, Alien 8, Soy Va. Spy and Shool Dare. Tel Lee on (0703) 43555 Will swop Scuba Dive. Forth, J.B. 3
Squash, Pogo, Maziacs, Volce Chess,
Surion, Tel $(0203) 384046$ and ask for
Starion. Tel. (0203) 384046 and askfor
Andrew.
\$ Software to owop. Commando, Fairlight,
Saboteur, Monty, JSWII, Roller Coaster.
Aobin and lots of others, Send detais of swops. Brian Holland, 1A Huime Hal Road. Cheadie Hulime. Stockport, Cheshire SK8 GJT.
EOver 340 Spectrum games to swop. Send your list for mine. Write to Ricky Strachan, 18 Marborough Road, Southal, Middesex UB2 SLW.
I Thave 40 sities to ofter including Faitight and Dark Star. Also have Ouickshot II joystick Kempstion interface and ZX Printor. I want a Softrom but ring anyway. Tel. 01-4e5 5302
BIwould like 10 swop Daley Thompsony Super Test, Cyclone, Sunval, Make-A-Chip
Ior Wham/ Music Bor Write Man Kincham for Wham/Music Box. Write to Ben Kirkham, 9 Saxon Road. Westgate, Kent CTB BRS - Will swop 40 games for ZXXPrinter. II

Tel (

## MESSAGES, CLUBS 8 duris

TR Beta disc user would like to contact others to swop ideas/progs. C. Young. Berks AG7 5Ex
Berks RG7 SEX.
Computar Club meets twice a month at the Co-op Hypermarket. Tel. (0843) 221845 any weekday except Monday for details. Ask for Mive Tew
Ispue 1 of Speccy Stuff. Loads of tips, reviews and hardware news. Send $30 p$ and a stamp to Speccy Stull, 1 Gracious Street. Whitlesey, Peterborough

- Arcade and adventure fans. Would you like a program that keeps a record of your scores and garnes. Then write to me with your requirements plus sae. Bryan Whitby, 16 Mansefleld Road, Kingsley, Warrington, Cheshire.
Want POKEs and tips absolulely free? Then write to me and send sae. Guaranteod reply and instant return. J. Riddell, 8 Manor Aoad, Salisbury, Witshire.
Straight swop. Wafadrive (with programs) Centronics and RS232 cables. Wanted, Intertace 1 with microdrives and cartridges
Tel. (0592) 890176 any evening between 9 pm and 11 pm.
a Could someone please tell me where I can buy System 15000 in the Manchester area. 've tried Smiths but they don'7 stock itt Please help. Adam Linnik, 15 Reid Close, Haughton
Green, Denton, Manchester,
Block Buaters ill is finished (Hurrah). How do you like your Atari, Nick? Mr Brooke, get a Speccy. Hi to Just, Marcus, Mathy and all at Hoit Park Middle School. Philip Eden, 98
Moseley Wood Gardens, I S16 7hU Moseley Wood Gardens, LS 167 HU ,
Hello to Moot, Omar, Curly, Graham, Sid. Willy, B. P, Bunti, Bule, David, D. G., Kaly, Hippy, Member, Ricky G., Jonny W. Ben, Mr Crowden Hoge, Greg from Jon. J. Meller. Crowden House,
Cranbrook, Kent.
in Any Speccy users with TR Beta-Plus E Any Speccy users with TR Beta-Plus interface want to exchange nints, pipe and other general info. on the DOS with me?
Please contact David MMilan, 48 Fairlight Avenue, London EAGPA.
EUrgent - Helpl Valikyie 17-Can't get into vilage. Any ideas? Tol, (0634) 683327 Sigmund - losi your address. Code for Sergio Trigo. Sergio Trigo
Complete set of YSmagazines. No A poster. Cash oflers please to K. Gardner, 32
Moorsfield, Moors Farm Est. Tyne and Wear DH4 SPF,
Printer, smal cassette and monitor or disk drve wanted. Swop ع 300 mobie hi-fi unit Swop button phone for light pen. Soltware swops wanted. Tel. (0205) 60252 .
EIf you own a 48 K Spectrum and enjoy dabbling in hardware and intertacing. get in fouch to swop ideas and circuit diagrams. Simon Butt, 21 Tram Road, Buckley. Clwyd. North Wales.
Eis thore a Speccy User Chution Bracknet? not, anyone interested in starting one? Answers please on the back of an old fiver Tel. Nic on Bracknell 52094
W Wanted - Mrage Microdriver. Must be as new. Will swop for over C150 worth of software including Rambo, Skool Daze. Impossible Mission, Deathstar, Interceptor Hunchback II, Chimera, Beach Head and more. Tel. Bolton 83955.
- Belgian Computer Club is looking for contacts with other clubs and users. Write to qAM Micro-Computer Club, c/o Colin O'Brien, 8 Rue De La Baronne, 6521 Atquennes, Belgium
a Wantod: Female companion to share Cobra Mk ill spacecratt (must be humanoid). im dangerousl? On my way to Ente. Lots of CR's, docking computers, military laser. extended cargo bay, know how to get into witchspace, hest my FCM system due to Thargoid invasion ship (encountered in witchspace). Maybe we can get together sometime, Iknow this great little planet. Commander Bytoc.
EA big "Howdy" to Jacquil, Alan, Sleve, Ed. Tox Rither, Yogi and Hank B West. All the bes from Vic. Gaby Hayes Uives!
Hiya Andrel Betcha nover thought you'd get your name in YS again. I think ''ve got it No, nothing serious. See you soon. Yours
Hercum, Prat of the North.

WANTED

- Saga 1 Emperor keyboard - will swop Abic Atac, Hunchback ill, Foomall Manager, Cookie. Flight Sim. All five for koyboard in good condition. Colm McGrath, 11 Dromlee Crepcent. Beaumont, Dublin 9, Ireland. Eigital Sound Sampler (Datel Electronics) wanted. Will give good price for one in Manchester area. TeL. 061-432 3441 after 6 pen and ask for Sieve.
E Microdrive and Interface 1. Will pay up to cel.Must be able io see hardware before purchase. Write to Shane Mitchell, 25 Westroyd Crescent, Windhii, Shipley. Yorkshire BD18 1HW
- Wanted: Sekosha GP50 printer in good condition. Choose 50 games from my list of 500 . Many now programs. Write to Omer Tekcan. Eendenstraat 25, Venlo, The Netherlands
Wanted: intertace 1 and microdrive. Wil Swop for C120 worth of software, including
Nightshade. Alphacom 32, will swop for C 370 Nightshade. Alphacom 32 , will swop for 23
worth of sofiware including Starion and worth of sottware including Starion and Catuidron. Al must be in good condito
Christie, 72 West Road, Fraserburgh. Aberdeenahire, Scotiand.
issues Mouse and interface wanted. Have issues 1-21 of Your Spectrum plus foads of software. Possible cash adjustment. Aiso any business sothware wanted. G. Hockney, 25
Salisbury Road, Seaford, East Sussex EN25 Salisb

208. 

WWanted-issues 3, 6, 7, 8, 3, 10 of YS. Win pay reasonable price. Also set Currah MicroSpeech and Cheetah RAT E12 each Both under 2 weeks old. Tel. ( 0757 ) 701387 and ask for Charhe
Wanted - Sinclair QL, will pay E100 or ! Will exchange my 48 K Spectrum with Kempston joystick, books, magazines,
games etc. Tel. $01-5180865$ and askfor Stuart.
E Wanted - ZX81 computer with or without 16 K RAM pack in working condition. Jason Wong. 384 Ripple Road, Barking. Essex. Wanted - Microdriver, Brother HRS or M009 or Epson LX80 or FX range with paper. Art Studio, Spy Vs. Spy, Sherlock, Macadam, Art Studio, Spy vs. Spy, Sheriock, Maca E250+ including White Lightning,
Hamprtead, Winter Games, Endurance Winter Sports, E 35 of books. Alex McKerrell 22 Miltar Street, New Elgin, Elgin, Moray. Scotiand.
Wanted - light pen and interface with sothware. Wir swop for games such as Fist, Spellbound, Juggemaut, Match Day etc. Tel (0252) 20394 and ask for David after 4 pm . - Original of Frank Brunoss Boving. Wia rwop Back Fo Shoot, Starion, Gyroscope, etc. Write to Patrick Wellington, 2 Beech Road, Austell. Cornwall.

- Wanted - Currah MicroSpoech. Will swop tor DK'Tronics light pen, Monty Is Innocent. Trashman, Bugaboo and Formula 1 Simulator. Tel. (0244) 42236 and ask for Breti.
Eswop any one of Choquered Flag, Cookiv. Pssst, Jet Pac, Hungry Harace for 2ip on tape and Picturesque Assembler for Picturesque Monitor. Write Io Colin Devitt, Jerusalem. Carlow, Co. Carlow, Elre.
e I need a microdrve and Interface 1, must work and preferably under guarantee. Wil give ع2e0 worth of sothware. Tel. (O749) 72423 afler 6 pm and ask for Matthew. Wanted - Glsolts millustrator. Swop for Tasword II. Write to Steve Lodey, 5 Feltix
Road, Fellixstowe, Suffolk. Also wanted. Road, Felixstowe, Suffolk. Also wanted,
Return To Eden, will swop for System 15000 or Hampstead.
Wanted - IIght pen or Art Studio. Will swop
my Currah MicroSpeech for elther. Tel. (0272) 697353.
- $2 \times$ Printer or Betabasic wanted for DKTronics light pen. Tel. Carl on (0792) 891578 after 5 pm
Al Wanted urgently! The Patch by Gilsott.
Also Laser Basic and Laser Complier by Ocean. Wal swop for recent software. Tel (0203) 313604 after 4.30 pm
- Wanted - ZX Printer or microdrive. Wil swop for games. I have most new tities (Elite. Commando, Saboteur, Roller Coaster and many more) Tel. 01-9987421 and ask for Edwin
- Swop Tau Cetr and Endurance for Eite
with Lenslok or swop for Arnhem or
Automata 10 Pack with Nudgeit on. Write to Beverley Smith, 20 Pinewood Ave, Flanshaw Park, Wakefield, Yorks
- Swop Microface 1 Centronics printer interface and driver sottware for 2 XX or Alphacom or Floyd 40 printer. Write to A Cooper, 267 Braehead Estate, Alexandria, Dumbartonshire G83 9NE.
Wics, Wanted: Jupiter Ace, Pets, Commodores.
Vicio
Vics, any Micro born before 1982. Must be
working. Will buy for best proposal. Carios
Peraira, Apertado 5057, 1702 Lisboa Codex,
Portugal
© Ouly. Will swop for sothware such as
FOTH, WS Baseball, Avalon etc. Tel. (0865)
778189 and ask for Keith
Hardware, games, microdrive cartridges
books, anything. Please write to M.C.
Whitten, 14 Rivey Way, Linton. Cambridge

Wanted: The Quili and manual. Will swop or any two from Daleys Decathion, Southern Belle, Games Maker and Match Day. Tel. Gerrards Cross 884434 after 5 pm and ask for Dominic

## PEN PALS

- 14 -year old mate looking for male of similar age to swop games. hints and tips in England and USA. Send sae. Patrick McLoughlin, 190 Mangitara Road, Beachhaven, Auckland 10 . New Zealand.
Needed! Preferably Canadian female penpal, $17+$ for wacky, isolated, pacilist, MJ fan or generai discussion of wornd lopici including Speccy software and roiven Orlando. Grumblwids 6Dourlas Crescent Vianderk, Uddingston, Glaspor, Soottand G71 5 JW View G715.W
Ponpals wanted from anywhere, any sex
$16+$ Especially if you know any POKEs or 16t Especialy it you know any POKEs or

hinte. Im also interested in photography and music. Paul Barton, 38 Minard Road, | music. Paul Barton, |
| :--- |
| Glasgow $\mathrm{G4}$ |

- Penpal 15-17 wanted, either male or temale. 1 m 16 and like sports, computers and music. Swop hints and games. Write to Christian di Plasic Cond Games. Write lo Christian di Blasi, Cond. La Playa, Via Bionely male, blue eyes, brown hair. $59^{\circ}$ seeks female penpal ( $15+$ ). Hobbles include Swimming and walking. Write to Robert Towner, 5 Wherretts Well Lane, Solihull, West Midands B91 2SD. If possible, please include photo.
Il am a 16 -year old Speccy owner and
would like a male or female penpal to swop hints etc. Write to Redmond OLeary, 14 Beech Park Drive, Fourock, Dublin 18,
Ireland. All ietters repled to
Male or fomale penpal wanted, 14-16 living autside UK. interested in arcade adventues: Swop games and lips. 1 am 14 and my avourile game is Fairlight. Mark Fainey, B4 Hendy Road, Mold, Clwyd, N. Wales ePonpal wanted. Im 18 and love music. sport, girls and computers. Girls under 19 please reply, I will answer all letters. Robent Hugoh, Jarnvagsgatan 22,595 00 Miolby. Sweden.
ahil 12 -yoar old boy seeks female of same ige to swop computer games, hints and tips. If possible, please enciose photo. David
James, 22 Percival Gardens. Chadnell James, 22 Percival Gardens, Chadwell Heath, Fomford, Essex RM6 SRJ
E Female penpal wanted, $16+$. llove arcade games, hacking, map drawing, loud music and bodybuilding. Send photo and letter to



# BAC K <br>  <br> S <br>  

 Iolo Davidson hits out at the same old software.Maybe I'm not the best person to judge, not being a convicted arcade addict, but isn't it all getting a bit sameish? It seems that whenever any slight innovation in gamesware appears (and I can't actually remember the last time it happened), it's instantly submerged in a flood of me-too's and sequels, and even sequels of me-too's.
Floods of rubbish are one thing. We don't expect all that
seems willing to try out a theme unless some other company has already had a success with it.
Maybe there just aren't any new ideas. The people I talk to always claim to be searching for people with ideas and not finding them. I don't think that's the trouble though. I think that really new ideas look wrong to established publishers. They think to themselves (without really noticing what they're thinking), "That can't be a very good idea. It isn't anything like

## Some of today's rubbish is actually very well programmed.

much from the producers of entertainment products like television and pop music, so why lean on the computer games people? What I object to are floods of high priced identical rubbish.
Some of today's rubbish is actually very well programmed People have done marvellous tricks with Spectrum software. Consider that the machine is now nearly four years old, with what are pretty restrictive limitations on graphics and sound, and then look at what the competition has to offer in the way of software. Most of their best stuff was available first on the Spectrum. Often it hasn't improved in translation.
But that isn't the point, terrific graphics against all odds don't make up for an appalling lack of new ideas. Of course, we've always had the Pac-Man clones and the like, imitations of the cut-down coin-op arcade games, but we used to get plenty of weird and wonderful one-offs as well.
Back in the days when the standard price of a Spectrum game was a fiver, lots of firms would risk bringing out something a bit zany and hope it'd sell.
Now that top flight games cost at least a tenner, no one
any of the successful games already on the market."

The trouble with this imitative cycle is that truly new ideas are chucked out as unlikely to succeed, while old ideas with a minor twist are accepted as marvellous innovations. This didn't bother me too much when the trend was for Jet Set Willy clones. I quite liked that particular genre. It was still good fun even after adding 3D graphics and moveable objects and changing the background to jungles or castles. But the time always comes when the cloning shifts to a new scenario, and if the new lot are not to your taste, then too bad.

Recently we've been going through a particularly bad patch. The charts have been dominated by a series of games based upon the ancient oriental arts of punching and kicking. Also the more domestic art of just punching. The fact that so many of these games have found a willing market is particularly disappointing to me. Not merely because they're all the same, but because the basic idea is nasty and uncivilised.
There's already been a certain amount of outcry about the zap-the-invader type of computer game, but I find
these less disturbing than games in which you try to kick another human being Blowing slimey aliens out of the air is not only very obviously a fantasy pastime, but it seems to be to be a reasonably moral act, especially when (as is usual) it's performed in defence of one's home planet. Kicking human beings, however, is immorat, illegal, and not a little dangerous.
Now, I don't want you to think that I am one of those people who's against the portrayal of violence in the media. What I abhor is the lack of realism.
People learn a great deal about the world through television and the movies, and I expect that might apply to computer games too. Specially as the graphics and presentation improve. Or at least, games can reinforce impressions taken from other media. We ought to be presented, therefore, with truthful pictures especially when we're given so little choice in the subject matter as we are with software.
Have you ever noticed how the A-Team spray thousands of bullets around the set without ever hitting anybody? Or how Mr. T seems able to knock people through walls without so
about, but that of the young. l've been both punched and shot (in the head, if you must know), and the way I look at reality is not likely to be confused on these points by a mere computer game. But young people with little experience of genuine violence might end up with the idea that it's exciting, rather than painful and debilitating. Ridiculous, I know, but that's how the subject is constantly presented to them. Since it's probably impossible to eliminate violence in the real world, I think it would be wrong to purge it from the TV screen or other media. But I have an idea that could encourage an intelligent attitude towards violent acts. It's a revolutionary new idea and just the kind of innovation that the arcade software business has been crying out for.
I propose that the next KungFu game clone is issued with a special pack of add-on hardware. When the little man on the screen kicks the 34th Dan, or whoever, in the groin, the player gets to see the victim's lungs spray out of his ears while simulated blood seeps from the back of the television set all over Mum's carpet. Then, if he misses

## 'I've been both punched and shot (in the head, if you must know)'

much as bloodying their noses? Dangerous and deadly assaults are portrayed as knockabout fun. This is an extremely misleading distortion of reality, and if we accept it. even subconsciously, it could damage the way we look at the real worid. In the same way, a game that allows us to beat the daylights out of a computerised opponent with no more penalty than an aching joystick wrist is bound to warp our ids.

Naturally, it's not my own subconscious that I'm worried
blocking the opponent's return blow, the joystick shoots out on its telescopic shaft and breaks his nose.

I call this technique '3D Violence' and I reckon it's the newest idea to hit the software scene this month (without being so different as to lose its way in the marketplace of course - musn't try to buck the established trends). The only problem is, it's bound to put up the cost of the game. But I think it'd be worth it, for the kids' sake, don't you?

[^7]



[^0]:    GEEP．0009， 35 NEXT G
    702 CLS GO SUE 51
    703 PRINT AT 1,10 ；INUERSE 1 ； GAME OUER－IF SCOREIHI THEN GO SUB 1400
    704 PRINT INK 4，BRIGMT 1；AT 5 3，＂SCORE：＂．INK 7；SCORE PRINT AT 10，3；INK 5，ERIGHT 0；＂SCREEN INK 7；ERIGHT 1；SCRE FOR G $=1$ TO 5 STEP \＆PRINT AT $4+6,15$ ． BRIGHT 1，＂ARANANADANDNत＂，AT 4 ＋
     PRINT AT 7，21；INK 6，＂＊＂，AT 8，2 1．＂界＂
    705 IF Fs＝＊＂TMEN LET Ns＝＂NOBOD
    706 IF FS 3 ．＂．THEN LET Ns＝F
    707 PRINT AT 15，3；INKK 7；BRIGH 1：＂MIGM＂）INKK 3：MI，INK 7：＂ ．SET BY：＂．INK 3 ，NS PRINT AT 1

[^1]:    5 REN LOCOMOTION POKES IS CLS：LET A＝s3asg：FOR F＝g TO 4 Ho FOR Neg TO READ A：POKE A，S：TO O T＝T＋S！LET A＝A＋1！NEXT N 30 READ E：IF TC〕I THEN PRINT＊ERROR IN LINE H10g＋Fsigt stop
    4g HEXT F
    SO PRINT AT $19, \$ 1$＊PLAY 69 RANDON1ZE USR 63698 109 DATA $221,33,233,92,1$ ？ 141， $11,55,62,255,1$ १ै7， 1 $33,48,246,34,85,1031$ 12 DATA 93,$195 ; 38,93,205$

[^2]:    What a jolly wheeze! Here's my wacko caption

[^3]:    Name.

[^4]:    ## FAX BoX

    Title
    Publisher
    Pubirsh
    Price... OL Macro Assembler Sinclair Research

[^5]:    FAX BOX
    Title DevpacQL
    Publisher Hevpacisof
    Pricce. HiSoft
    \&39.95 £39.95

[^6]:    ORDER YOUR BACK ISSUES NOWY

    Please send me the following back issues of Your Spectrum or Your Sinclair - UK £1.10, inc. p\&p, £1.50 Europe, £1.70 rest of cosmos.

    | Your Spectrum |  | Your <br> Sinclair |  |
    | :--- | :--- | :--- | :--- |
    | $\square$ Issue 1 | $\square$ Issue 14 | $\square$ Issue 18 | $\square$ Issue 1 |
    | $\square$ Issue 5 | $\square$ Issue 15 | $\square$ Issue 19 | $\square$ Issue 2 |
    | $\square$ Issue 12 | $\square$ Issue 16 | $\square$ Issue 20 | $\square$ Issue 3 |
    | $\square$ Issue 13 | $\square$ Issue 17 | $\square$ Issue 21 | $\square$ Issue 4 |

    I enclose a cheque/Postal Order for $£ . . . . . . . . . . .$. made payable to Sportscene Specialist Press Ltd.

    Name
    Address
    Postcode
    Date

    Please fill in this form and mail it immediately to: Your Sinclair, Back issues, PO Box 320,
    London N21 2NB. You can use a photocopy of this form if mutilation's not your bag. Otherwise snip along the dotted line for your YS snip.
    

[^7]:    Editor Kevin Cox; Art Editor Marlin Dixon; Deputy Editor Teresa Maughan; Production Editor Sara Biggs; Designer Caroline Clayton; Technical Consultant Poter Shaw; Editorial Consultant Andrew Pennoll; Software Consultant Gavin Monk; Contributors Steve Adams, Luke C., Steve Colwill, tolo Davidson, Mike Gerrard, Ian Hoare, Gwyn Hughes, Mex Phillips, Rick Pobson, Pachaol Smith, Phir South, Chris Wood; Advertisement Manager Mark Saimon; Advertisement Executive Nei Dyson; Production Manager Sona Hunt, Group Advertisement Manager Chris Taibot: Publishing Manager Roger Munford; Publishing Director Stephen England; Published by Sportscene Specialist Press Ltd, 14 Rathbone Piace. London W1P 1DE. Telephone (alt departments) 01-631 1433. Telex B954139 BunchG. Company registered in Engiand: Typesetters Carlinpoint London; Reproduction Graphic Ideas, London; Printed by Chase Web Offset, St Austell, Cornwall; Distribution Seymour Press, 334 Brixton Road. London SW5. Telephone 0i-733 4444 . All material in Your Sinclair © 1966 Feiden Productions, and may not be reproduced in whole or part without the written consent of the publishers. Your Sinclair is a monthly publication

