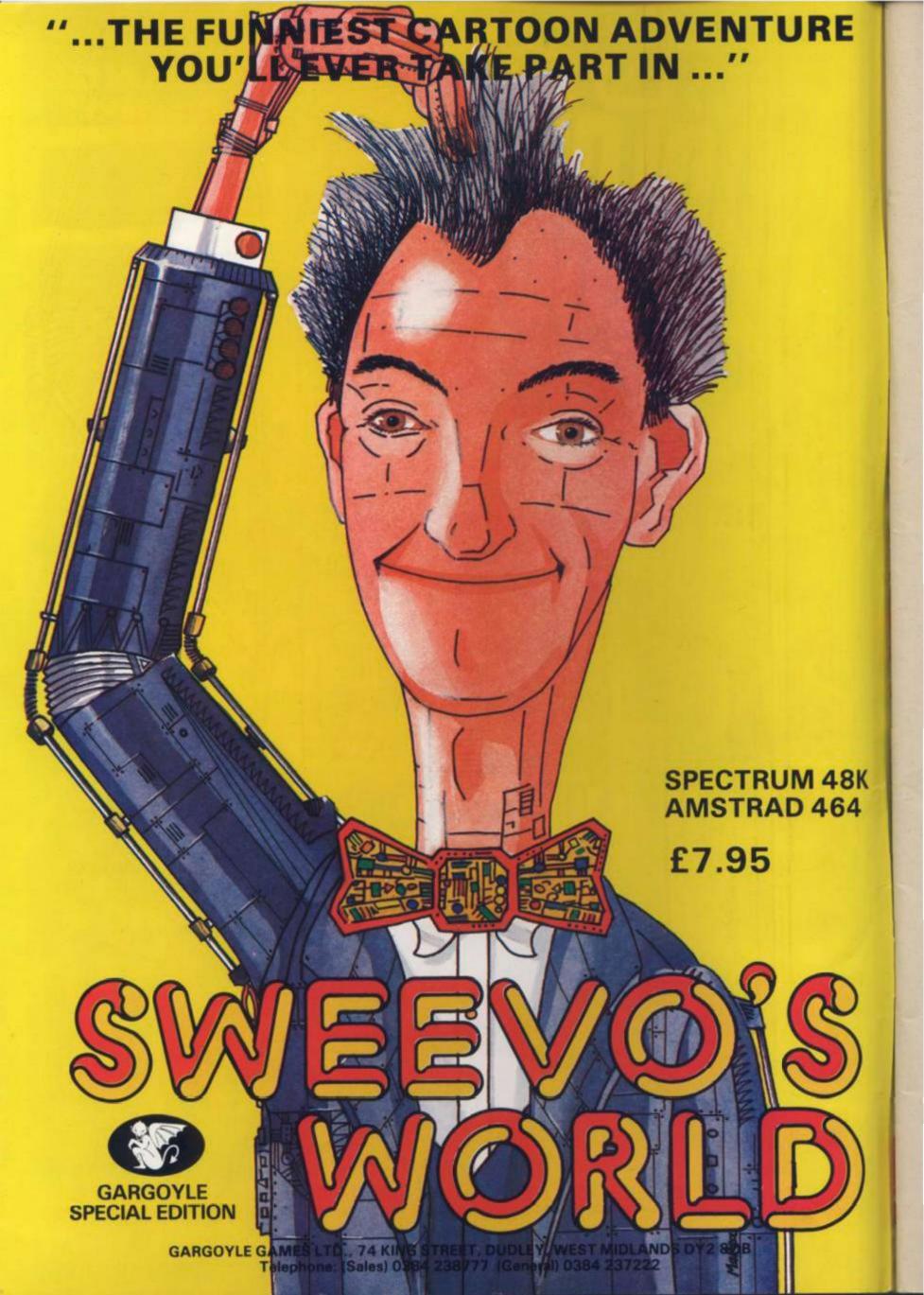


ART STUDIO - MICE AND MONITORS MUST BE WON! SWEEVO'S WORLD-THE POSTER MAP-WIN 50 COPIES OF BALLBLAZER





Skyfox Ariolasoft's fantastic fight simulator.

76

Lord Of The Rings Now we're Tolkien adventures.

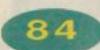
SOFTWARE

20

Screen Shots Eight fun-filled pages of games reviews. *Zorro*, *Spitfire 40*, *Twister*, *Enigma Force* and *Austerlitz* to name but a few.



Arcade Dream An April release that's set to stun the software world.



Art Studio
Hints'n'tips on
getting the best
out of the Art Studio.
Plus your chance to
win a colour monitor
or an AMX mouse.

POSTER MAP

42

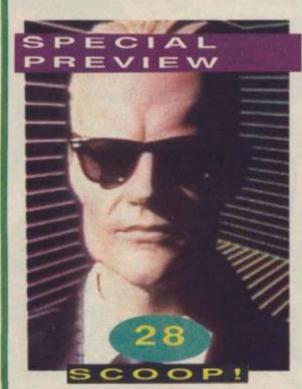
Sweevo's World — A map of the whole world!

HARDWARE

60

The Spectrum 128 It's here at last. See what it can do for you in our exclusive review.





Max Headroom M-m-meet the m-m-man behind the m-m-megagame!

PROGS



Program Power Pull-Out, Codebuster, Cherry Run and Black

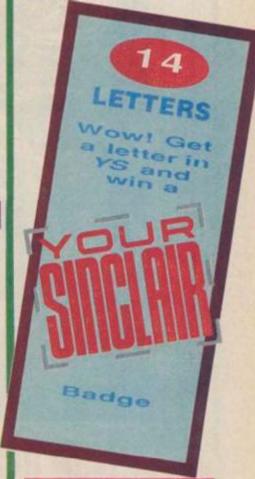
Hole Rescue to type in plus your chance to vote for the best readers' program.

73

Dimmer Switch Save your screen with this amazing bit of code.

GAMES	
Hack Free Zone	38
Hex Loader's back with your	
hextraordinary arcade hints'n'tips.	
COMPOS	
The Comet Compo	36
A once in 76 year chance	
Ballblazer Compo	71
Spot the ball and win Ballblazer.	
	_
CARTOON	
Program:Time Travel	
Fast forward into the future with Dave	
Rogan.	
REGULAR	
The State of the S	_
Frontlines	8
What's hip, what's in, what's new and	
what's free.	
QL News	13
New products queueing up for the QL	
Subscriptions Don't miss out — subscribe to YS.	13
Wis t feet	24
Hit List. In, out, in, out, shake it all about — it's	31
the Hit List hokey cokey!	•
Hacking Away	22
Hack to your hearts content and POK	E HIII
you're purple.	C III
Task Force	35
Follow the programmers' code	
Microdrivin'	37
Microdrivin' Keep on truckin' microdrivers.	
Hard Facts	85
Hands on hardware advice from Stevi	9
Adams.	
Back Issues	88
Input/Output. The YS free-for-all for all free ads.	
Backlash	96
The prophet of programming - lolo	

Davidson

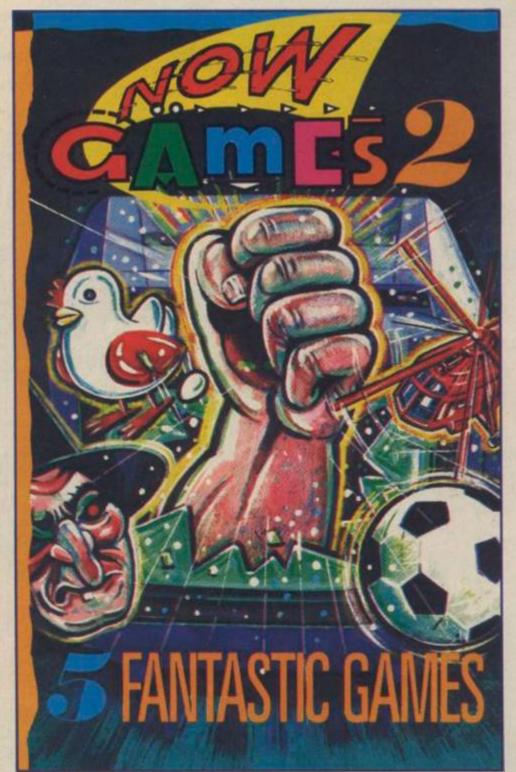


TALK TO US!

01-631 1433
EDITOR Kevin Cox
PUBLISHER Stephen England
SUBSCRIPTION Suzie Matthews
01-580 0504/631 1433
ADVERTISEMENT ENQUIRIES
Mark Salmon, Neil Dyson
Your Sinclair, Sportscene
Specialist Press Ltd., 14
Rathbone Place, London W1P
1DE.

Five Fantastic Games

Keep your eyes peeled for NOW GAMES 2. Five major software hits jostle for your attention on this packed-solid-with-fun cassette.



Now that's what I call value



STILL AVAILABLE – NOW GAMES

featuring

Lords of Midnight, Brian Bloodaxe, Strangeloop, Pyjamarama, Arabian Nights and Falcon Patrol II £**8**.95

Available from all good software retailers

Also available directly from: Virgin Games Mail Order, 2-4 Vernon Yard, Portobello Road, London W11 2DX

COMMODORE 64 and SPECTRUM 48K



1. AIRWOLF - Elite Systems Ltd

Stringfellow Hawke must use his helicopter to free five imprisoned scientists in this exciting arcade game which takes place in a subterranean terrorist base!



2. TIR NA NOG – Gargoyle Games

This remarkable interactive graphic adventure allows you to play the mythological Celtic, Cuchulainn, searching for the fragments of the Seal of Calum.



3. CAULDRON - Palace Software

Take up the witches' challenge and unravel the mysteries of this beautiful land in this striking arcade adventure.



4. CHUCKIE EGG 2 - A & F Software

Help Hen House Harry in the smooth running of the A & F Chocolate Egg Factory! He must find equipment and find out where to use it in this amusing arcade game.



5. WORLD CUP - Artic Computing

This great football simulation lets you re-enact the tough fight to the World Cup Final. Play a friend or the computer (a pretty tough opponent)!



QK. Quiz lince!-

- Where can you find over 100 FREE software programs a year?
- Who can you go to for **FREE** round the clock advice and help?
- How can you get instant news, views, gossip and "hands on" reviews 24 hours a day?
- Who gives you FREE national electronic mail?
- 5 Where can you "chat" with 70,000 other micro users?
- Who'll help you publish your own database for all to see?
- How can you take part in national multi-user strategy games?
- How can you book a seat on the 3.15 from Euston-at midnight?

for just 20p a day

ANSWER

008 2000000000

Make the most of your micro

> Micronet 800 8 Herbal Hill, London EC1R 5EJ Telephone: 01-278 3143

To:	Micronet	800,	8 H	erbal	Hill,	London	EC	l
-----	----------	------	-----	-------	-------	--------	----	---

Please send me a brochure on Micronet 800

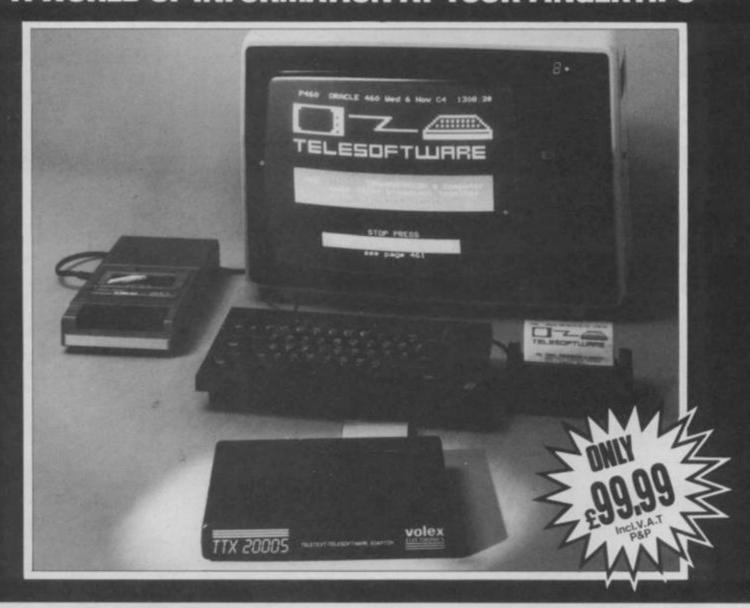
Name

Address

Telephone No

THE WOLEN TIN 2008

FREE COMPUTER PROGRAMS · INSTANT SPORTS RESULTS · CONSTANT T.V. UPDATE ·
ALL FREE FROM ANY T.V. VIA THE VOLEX TELETEXT – TELESOFTWARE ADAPTOR
A WORLD OF INFORMATION AT YOUR FINGERTIPS



TELETEXT

is extra information available day or night whilst television transmitters are on air and without any charge and can now be enjoyed without the need of having a special Teletext T.V. set. All you need is to plug in your VOLEX TTX2000S Adaptor to receive 4-Tel from Channel 4, CEEFAX or ORACLE services.

TELESOFTWARE

is the name for computer programs which are broadcast as Teletext. Thus they may be loaded "OFF-AIR" into your Spectrum instead of being loaded from, say, tape or microdrive. 4-Tel is Channel Four's Teletext magazine and they are now broadcasting FREE telesoftware. Because of the special nature of teletext these programs are frequently updated – so you will not see the same thing each time you run the program.

EASY TO SET UP AND USE

As simple procedure tunes the VOLEX Adaptor to your local teletext channels. All loading of Telesoftware is via an index page on 4-Tel which the Adaptor will automatically find and display for you. Absolutely no modification is necessary to T.V. or computer. A comprehensive manual being supplied.

STORING PAGES

With the Volex Adaptor it is possible to send received pages to your printer or to Microdrive for storage and later recovery.

THE VOLEX TTX2000S

IS THE ADAPTOR APPROVED BY CHANNEL FOUR T.V.

ECCLES	NEV	VRO	AD,	SAL	FOF	RD,	ME	2X1	H.TI	EL (061-7	36
l enclos OR cha												
533		П	T	П	T	Т	Т	П	Т	T	TT	T

TWOODE

ADDRESS.

ELECTRONICS

A DIVISION OF YOUR GROUP BLE

EXPRESS SPECTRUM, BBC & COMMODORE REPA

FREE! SOFTWARE WORTH £24 WITH EVERY COMPUTER SPECTRUM REPAIRS
BETWEEN E9 and E20 BETWEEN E14 and E45

COMMODORE REPAIRS BETWEEN

When we say **NO HIDDEN COSTS** we mean it!

WHY PAY HIGH FIXED PRICES? N.B. OUR PRICES INCLUDE

VAT, P&P and INSURED Delivery!

REMEMBER WE HAVE A REPUTATION TO LIVE UP TO! If you must insist on paying a HIGH FIXED price of £19.95 + VAT = £22.95, we will donate the difference between that price and our charge to the charity of your choice!

> STANDARDS and PRICES

others follow!

PHONE or SEND 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. WE set the

MANCOMP LTD.

(Dept. YS 4/86

Printworks Lane, Levenshulme, Manchester M19 3JP.

Tel: **061-224 1888**

ATTENTION ALL MANCOMP CUSTOMERS:

All repair companies have a legal obligati NOT to sell Sinclair spares to the public, otherwise our supplies get cut off and the we would go out of business.

COMPARE OUR
GUARANTEE TERMS
YOU DON'T FIND ANY
'HIDDEN CATCHES'
AFTER THE REPAIR!

MANCOMP GUARANTEE

If the same fault occurs within 90: days of our repair, we will repair it FREE of charge AND refund the postage.

FAST, REPUTABLE HELPFUL, LOW-PRICE SERVICE WHICH REMAINS THE

061-224 9888 THE BEST KEYBOARD

The SAGA 1 EMPEROR -----

for YOUR SPECTRUM

£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 - £18

Opus disk drives £200 inc. VAT 5 free diskettes worth £30 with every Opus disk drive

FIRST to provide 'while-u-wait' service. FIRST with international repairs. IRST to provide Insured/ Recorded Delivery on return journey. FIRST with LOW CHARGES (e.g. £9 for keyboard faults). FIRST with discounts for Schools, Hospitals and H.M. Forces. **FIRST** to charge prices that are FAIR to you!, we do NOT charge **HIGH FIXED** prices!

FIRST for PROFESSIONALISM 'Of all the

FIRST for LOW PRICES 'My Spectrum blew recently. I took it to MANCOMP, who fixed it

in 8 mins and for less than £10. They are local,

repair companies 'Sinclair User' spoke to, MANCOMP seemed the most professional

when it came to advice and a helpful

'clued-up' and blindingly efficientl'.
COMPUTER COLUMN, '4 HEATONS

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.

attitude'. AUGUST '85

DIGEST', (Vol. 1, No. 11)

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.

Phil Rogers 'POPULAR COMPUTING WEEKLY' JAN. '85.

CRASH' Magazine, June 1985.

FIRST for HONESTY. We let you watch your computer being repaired. Our engineers don't disappear into another room!

1st by Popular Choice!

Direct Mail Discount



TELETEXT-SOFTWARE ADAPTOR

hormally it is only possible to decode these signals if you have a special television but now your Spectrum can access pages of teletest rails the App Teletest Telesoftware adaptor in computation with any ordinary specific video Recorder.

to hitten thereon exist for receiving teletest and it is constitutionally eventable forthe producest hours, with over a continuously open of house, lineace, for, sport & features it's an exercise all interest regarder right at your timpertips.

Even more exciting in that Channel & Carrier a special pervice for Spectrum users Called Telegotimers. It can be downloaded through our adaptor to your Spectrum's samon's just as it it can a rise table for military of a selecting the appropriate page and procking a key.

 $F_{\rm mil}$ cases with through purt the esaptor plops directly into any Spectrum. A connecting less goes to the "VISCO CUT' socket of any rises received.

+£1 P&P

SELECTED HARDWARE

Title Inc. Arion Brader - Peaks Cveleised	PW1EE 6189.00
	4187.07
PRICES CALL ROS PONDEDOS POR LAS DE STANIS	2 49.74
Big infinest the faction on solin Cold or other envitors	1 5.54
THE CONTRACT OF THE PERSON STATES	4.93.17
A SOL MEMORY EXPANSION	£194.67
D. 254K MEMORY EXPANDION	£304.07
D. SIZV MEMORY EXPANSION	£ 17.95
St. Siles of reading addingons	
AZBEDNAL CHREGIJE METOMORM	6 15,95
INC 2181 NAM PACT	E 49.71
STHELATE 2" FLAT BEASEN FO	1 2,48
	4. 9.21
STORY ATT TO BATTERY FORK T C	£ 9.31
D. H1232 (EA2 SPECIFIER ADD-DAS	£ 44.52
Sent value modern, links sently to distract 800	2 44.95
	1000000
ALAKSACE CHESCULARY CONTROL CONTROLLER	1 17.95
Chetrala Att aprimers someth free	6 (7.42
Seal appear synthasiser, augitifies the	4 4.00
Clear of the net actains of the aut series and	6 29-52
ST. ANDRES ASTRONAS	33.56
SAGA 1 AT-BOARD	£ 37,93
THE RESERVE TRANSFER	W Serves
Transfer any images to the Spectrum	Taranta a
The state of the s	6.41-16
2x PRINTER PAPER 5 BOLLS INLIE SUIT ALPHACON PRINTERS!	g 7,00
TIMES DISC PAPER S MOLLS INCHES SELL PROPERTY.	£ 99.51
SINCLAIS EXPANSION PACK	
Tababt 6 S. Master trip, St. Act.	6.44.73
	8 1.04
CONTRACTOR CARCELLING - SIMPLE	6 9.57
MACHINETUR STORAGE BOX (TAKES, 20)	4 9.31
	1 3.50
IN INTERNACE I ASTRI CAN	4 . 4 . 4
PLEASE ADD 21.00 PAP TO ITEMS OVER \$13.00, STHERWIS	E POST FREE
PLEASE ADS \$1.00 PMF TO 17578 DVIN SCHOOL	_

Empty complete the order coupen or write your list on a seperate sheet and send it with your resiltance which should include 200 yout and packing per title to: AND DIRECT MALL SISCOLARY, UNIT 5, ASM SHOULD INDUSTRIAL PARK, SOMEON REDIS, W. BURSEN, POUZ TEL. 21 you prader you may order by talephone using your ACCESS, view or 21MERS CLUS CANS on 0243 823327, just ask for credit card sales.

SOFTWARE SUPERSAVER CJAMES SEYOND SINCLAIR SINCLAIR RABBIT RABBIT SINCLAIR SINCLAIR COL

CHEGA
CHEGA
CHEGA
CHEGA
DELPC
DVLPC
BINCLAIR
RABBIT
RABBIT ENAMER OF MORRORS
STORP
MURDER AT THE MANOR
RIFTS OF TIME/TRAVELLER
URBHART CASTLE/SOLDENROSE
MADRETS
FLIFFIT
LEARN TO FEAD 4
SPACE RAISERS
FLANETOIDS
INCA CURSE
SINIP OF DOOM
ESPICITIONS
ENAMED ASSAULT
BACKDAMMON
CHESS
REVERSI
SIDRYTHMS
SUIACKERS
CENTRO FODS
SOMBER BIRDS
CORRUPTION
SOOM
ZIR TAP OHEDA CORRUPTION
IMAGINE IDOM
IMAGINE IDOM
IMAGINE PERM
IMAGINE PERM
IMAGINE STONKERE
IMAGINE STONKERE
IMAGINE STONKERE
IMAGINE STONKERE
IMAGINE CASET RATS
SILVERSOFT EXTERMINATOR
SILVERSOFT MISSION IMPOSSIBLE
CASETAM COMMUNICATION
CHEETAM COMMUNICATION
CHEETAM COMMUNICATION
CHEETAM COMMUNICATION
COMMUNICATIO DO BAT ATTACK COMPUTEST HALL OF THINDS ROWHELS REVENDE SUNDECH HASTER THE ISLAND IT'S THE WOOLUF TIME BONS WINDED WARLONDS POOL POOL VARPIRE VILLAGE BPACE ISLAND CITY CATERPILLAR CATERPILLAR
BOZY BOA
3D PAINTER
SPECTRUM SAFARI
MAGIC HEARIES
OTHELLO
LEAPERDO
CARPET CAPERS
CHESS PLAYER
CAVERAN
GERHAN IS FUN
HURRY HURRY
BEDLAN DEALTER
REALM OF THE UNDEAD
THE ISLAND
SPACE COMMAND
GLUB GLUB
SEATH STAR
HURDER

PLIADER ESCAPE MCP VIRGIM
VIRGIM
VIRGIM
RUG SYTE
BINCLAIR
AND
CJAMES
ANTIC
CANTIC
ANTIC
CANTIC
CANTIC
CANTIC
COLLAIR
BEYOND
ADSEX
ADSEX
ADSEX
ADSEX
ADSEX

PANT PALA

BEAU JOLL

R BHEPPAR

RESCAPE RCP

PROBLEM

RESCAPE RCP

RESCAPE

Hardware

3.5 SECHARK CODE MARE MATT 3.

C. RENT OCEAN MR. WIMPY
ULTIMATE COOKIE
PROCON THORN EMI VOLCANIC PLANET
THORN EMI VOLCANIC PLANET
THORN EMI RIVER RESCUE
SINCLAIR CHESUERED FLAS
REVSON FANTASIA DIAMOND
HIRRORSOFT SUICK THINKING
OCEAN
MUDSY
A'N'P CHUCKIE ESS II
WISSION SHOCKER
VISION SHOCKER
SYSTEM 3 DEATHSTAR INTERC
MAISTER 3 DEATHSTAR INTERC
CARIO SYSTEM 1500
SUB SYTE
LONGMAN ZODIAC MASTER SHOOKER COMPUTION DEATHSTAR INTERCEPT EKI STAR 2000 SYSTEM 1500 TWIN KINDEDM VALLEY ZODIAC MASTER

RED ATTACK

PRACE STATION ZEBRA
CLUB RECORD CONTROLL
COLLECTORS PACK
PARATROOPERS
PHANTASIA
VU-CALC
VU-30
RESCUE
CYBERZONE
BAN SPADE
SUPER MUTT
RT TELLS THE TIME
LINKWORDISPANISM
LINKWORDISPANISM
LINKWORDISPANISM
LINKWORDISPANISM
LINKWORDISPANISM
TOTHPASTE/COLDITZ
MARJIA/ALIEN BANAM
SPACE PROFESSOR
1794
NIFTY LIFTY
ARCTURUS
SPIDER MAN AITTUUS
SPIDER MAN
FIRST HOVESTCHESS
COUNT ABOUT
LUNAR LETTERS
HOT 20T SPOTTER
SUM SCRUMCHER
MOZOT RUNHER
WILS WORDS
ASC LIFT-OFF
RIDDLE OF THE SPHINX
STAFFLE
WORD WIZARD
OO MICRO
ORADONSIPE
HOODISWEEPER
PERILS OF BEAR OCORDE

SACH THE PYRAMIDS CASTLE BLACKSTAR BARRELDROP SUPERSMAILS SKALL SKULL VALHALLA THE OREAT SPACE RA DEVIL RIDES IN HEADDANGERS HEAVEN HUNGRY HORACE (ROM) SPACE RAIDERS (ROM)

2.75 sech
QUICKBILVA FRED
MISC COMPUTER CARE KIT
AUTOMATA GROUCHD
HEVBON SPACE WAR 3D
ACL.
MIKROBEN PAT THE POSTMAN
PAOCON DYNAMIC GRAPHICS
BEAU JOLLY VALUE PACK 45K
R SHEPPAND UPBAN UPSTANT
PSB XAVIAR
KNIGHT ANIMATES STEEP ROW XAVIAR
ANIHATED STRIP POKE
KONOTINI WILP
TRIPODS
A VIEW TO A KILL
MULK
CODE MAME MATT II

COUNT ABOUT
WILD WORDS
SUM SCHUNCHER
VALUE PACK 14K
PSYTROM
EUREXA
ROCKY HORROR SHOW
BLAGGER SOES TO HOLLYWOOD
VAT MANAGER
ADDRESS MANAGER

S.PS SECH
FANTASY BACKPACKERS
HIRRORSOFT CASSER THE CAT
OCP CHESS THE TUPK
SELECT 1 12 DAMES
TERRITHAL BERCOK THE REDE
SCOPE 2
BEYOND CONSAT LYNX
DURREL CONSAT LYNX
NEW GEN. JOHAN BARRINGTONS SQUASH
BINCLAIR ENTREPRENEUM

6.95 each HARESOFT HARERAISER BUICKSILVA DAMES DESIGNER

BEAU JOLLY MESAHITS

CREATING ADVENTURE GAMES ON YOUR SPECTRUM
AS GAMES FOR THE SPECTRUM
PROGRAMMING YOUR IX SPECTRUM
INSTANT SPECTRUM PROGRAMMING
SELVING DESPER INTO YOUR IX SPECTRUM
49 EXPLOSIVE GAMES FOR YOUR IX SPECTRUM
EXPLOSIVE GAMES FOR YOUR IX SPECTRUM
EXPLOSIVE GAMES FOR YOUR IX SPECTRUM

SPECIAL DIFT PACKS all 4.77 sach

GAMES PACKI Jigsaw, Reflections, -Dimension Destructors, Spectrum Chees, -35 Suafracube, Road Racers.

ACTION PACK: Billy Song, Two-On--Nicro Mouse, Bestlemania, -Seciam Blaster, Grid Patrol.

UARHABTER PACK! Panter Atlack, Red Baron - Breadnoughts, Paras,



Software								
Software	_	_	_	=	_	_	=	_
Software	0	_	ï.	ā.		-	ü	_
	Э	o	F	u	w	a	г	e

All products are offered subject to evaluability and faulty tapes will be replaced free of charge by the same title if to returned within it days or receiving them. After this period we will replace foulty tapes with the same title at a bit replacement cost of DOp per cassette. All products are offered subject to availability and on 14 days approval. Please allow up to 28 days from receipt of your order.

		ect Mail Discount, Unit G, Ashgrove Indu	ustrial Park, Bognor Regis, V	est Sussex			
QTY	NO.	ITEM	ITEM PRICE €	TOTAL			
			P+P				
ease tick app		ste box:-	FINAL TOTAL				
Please charge my Access Barclaycard Account No.			Exp				
gnature	DS M	220		-			

YSJ4I86

GOOD BYTE

Presents the latest officially licenced arcade game from ...







... and the latest top software

Rambo			OUR	DESIGNATION OF THE PARTY OF THE	ACCOUNT N	
Astroclone 7.95 5.95 Nick Faldo's Golf 9.95 7.45 Commando 9.95 7.45 Sweevos World 7.95 5.95 Transformers 7.25 5.95 Runestone 7.95 5.95 Fighting Warrior 7.95 5.95 Winter Sports 9.95 7.45 Gyroscope 7.95 5.95 Winter Games 9.95 7.45 Gyroscope 7.95 5.95 Robin 'O' Wood 9.95 7.45 Starquake 7.95 5.95 Swords & Sorcery 9.95 7.45 Starquake 7.95 5.95 The Art Studio 14.95 11.20 Tomahawk 9.95 7.45 Shadow of Unicom 14.95 11.20 Toward of the Rings 14.95 11.20 Surf Champ 11.95 9.40 Rockfords Riot 9.95 7.45 Rasputin 7.95 5.95 Back to Skool 6.95 7.45 Rasputin 7.95 5.95 Back to Skool 6.95 5.20 Cluedo 9.95 7.45 Back to Skool 6.95 5.20 Cluedo 9.95 7.45 Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Wham! 9.95 7.45 Graham Gooch 9.95 7.45 Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Wham! 9.95 7.45 Graham Gooch 9.95 7.45 Graham Gooch 9.95 7.45 Graham Gooch 9.95 7.45 Graham Gooch 9.95 7.45 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Graham Gooch 9.95 7.45 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Graham Gooch 9.95 7.45 Gladator 8.95 6.70 Goonies 7.95 5.95 Figure 1.95 Figure		Contract of the Contract of th	Control of the Contro		De Contraction of	OUR
Astroclone 7.95 5.95 Nick Falldo's Golf 9.95 7.45 Commando 9.95 7.45 Sweevos World 7.95 5.95 Transformers 7.25 5.95 Runestone 7.25 5.95 Fighting Warrior 7.95 5.95 Winter Sports 9.95 7.45 Frank Bruno 7.95 5.95 Winter Games 9.95 7.45 Gyroscope 7.95 5.95 Robin 'O' Wood 9.95 7.45 Starquake 7.95 5.95 Swords & Sorcery 9.95 7.45 N.O.M.A.D. 7.95 5.95 The Art Studio 14.95 11.20 Tomahawk 9.95 7.45 Shadow of Unicorn 14.95 11.20 Tomathawk 9.95 7.45 Never Ending Story 9.95 7.45 Lord of the Rings 14.95 11.20 Surf Champ 11.95 9.40 Rockfords Riot 9.95 7.45 Rasputin 7.95 5.95 Back	Rambo		The state of board			And the Control of th
Commando 9.95 7.45 Sweevos World 7.95 5.95 Transformers 7.25 5.95 Runestone 7.25 5.95 Fighting Warrior 7.95 5.95 Winter Sports 9.95 7.45 Frank Bruno 7.95 5.95 Winter Games 9.95 7.45 Gyroscope 7.95 5.95 Robin 'O' Wood 9.95 7.45 Starquake 7.95 5.95 Swords & Sorcery 9.95 7.45 Starquake 7.95 5.95 The Art Studio 14.95 11.20 Tomahawk 9.95 7.45 Shadow of Unicorn 14.95 11.20 Tomahawk 9.95 7.45 Shadow of Unicorn 14.95 11.20 Tomahawk 9.95 7.45 Shadow of Unicorn 14.95 11.20 Tomahawk 9.95 7.45 Never Ending Story 9.95 7.45 Lord of the Rings 14.95 11.20 Sure Charles 9.95 7.45 Im	Astroclone	CONTRACTOR OF STREET	Charles by Speciment Control of the			
Transformers 7.25 5.95 Runestone 7.25 5.95 Fighting Warrior 7.95 5.95 Winter Sports 9.95 7.45 Frank Bruno 7.95 5.95 Winter Games 9.95 7.45 Gyroscope 7.95 5.95 Robin 'O' Wood 9.95 7.45 Starquake 7.95 5.95 Swords & Sorcery 9.95 7.45 N.O.M.A.D 7.95 5.95 The Art Studio 14.95 11.20 Tomahawk 9.95 7.45 Shadow of Unicorn 14.95 11.20 Their Finest Hour 9.95 7.45 Shadow of Unicorn 14.95 11.20 Their Finest Hour 9.95 7.45 Shadow of Unicorn 14.95 11.20 Their Finest Hour 9.95 7.45 Shadow of Unicorn 14.95 11.20 Their Finest Hour 9.95 7.45 Shadow of Unicorn 14.95 11.20 Their Finest Hour 9.95 7.45 Rauther Charles 19.95 <t< td=""><td>Commando</td><td></td><td></td><td></td><td></td><td></td></t<>	Commando					
Frank Bruno 7.95 5.95 Winter Games 9.95 7.45 Gyroscope 7.95 5.95 Robin 'O' Wood 9.95 7.45 Starquake 7.95 5.95 Swords & Sorcery 9.95 7.45 N.O.M.A.D 7.95 5.95 The Art Studio 14.95 11.20 Tomahawk 9.95 7.45 Shadow of Unicorn 14.95 11.20 Their Finest Hour 9.95 7.45 Never Ending Story 9.95 7.45 Lord of the Rings 14.95 11.20 Surf Champ 11.95 9.40 Rocktords Riot 9.95 7.45 Tau Ceti 9.95 7.45 Impossible Mission 9.95 7.45 Rasputin 7.95 5.95 Back to Skool 6.95 5.20 Cluedo 9.95 7.45 Bullseye 8.95 6.70 Hyper Sports 8.95 6.70 Daley Thompson S. Test 6.95 5.20 Yie Ar Kung Fu 7.95 5.95		7.25	Transfer Control State (Control Stat	Runestone		
Frank Bruno 7.95 5.95 Winter Games 9.95 7.45 Gyroscope 7.95 5.95 Robin 'O' Wood 9.95 7.45 Starquake 7.95 5.95 Swords & Sorcery 9.95 7.45 N.O.M.A.D 7.95 5.95 The Art Studio 14.95 11.20 Tomahawk 9.95 7.45 Shadow of Unicorn 14.95 11.20 Their Finest Hour 9.95 7.45 Never Ending Story 9.95 7.45 Lord of the Rings 14.95 11.20 Surf Champ 11.95 9.40 Rocktords Riot 9.95 7.45 Tau Ceti 9.95 7.45 Impossible Mission 9.95 7.45 Rasputin 7.95 5.95 Back to Skool 6.95 5.20 Cluedo 9.95 7.45 Bullseye 8.95 6.70 Hyper Sports 8.95 6.70 Daley Thompson S. Test 6.95 5.20 Yie Ar Kung Fu 7.95 5.95	Fighting Warrior	7.95	5.95	Winter Sports	9.95	
Starquake 7.95 5.95 Swords & Sorcery 9.95 7.45 N.O.M.A.D. 7.95 5.95 The Art Studio. 14.95 11.20 Tomahawk 9.95 7.45 Never Ending Story 9.95 7.45 Lord of the Rings 14.95 11.20 Surf Champ 11.95 9.40 Rockfords Riot 9.95 7.45 Rasputin 7.95 5.95 Back to Skool 9.95 7.45 Rasputin 7.95 5.95 Ballseye 8.95 6.70 Hyper Sports 8.95 6.70 Ballseye 8.95 6.70 Hyper Sports 8.95 6.70 Ballseye 7.95 5.95 Spitfire 40 9.95 7.45 Parizadrome 7.95 5.95 Spitfire 40 9.95 7.45 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Blockbusters 7.95	Frank Bruno	7.95		Winter Games	9.95	And the latest and th
Starquake 7.95 5.95 Swords & Sorcery 9.95 7.45 N.O.M.A.D. 7.95 5.95 The Art Studio. 14.95 11.20 Tomahawk 9.95 7.45 Never Ending Story 9.95 7.45 Lord of the Rings 14.95 11.20 Surf Champ 11.95 9.40 Rockfords Riot 9.95 7.45 Rasputin 7.95 5.95 Back to Skool 9.95 7.45 Rasputin 7.95 5.95 Ballseye 8.95 6.70 Hyper Sports 8.95 6.70 Ballseye 8.95 6.70 Hyper Sports 8.95 6.70 Ballseye 7.95 5.95 Spitfire 40 9.95 7.45 Parizadrome 7.95 5.95 Spitfire 40 9.95 7.45 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Blockbusters 7.95	Gyroscope	7.95	5.95	Robin 'O' Wood		
N.O.M.A.D. 7.95 5.95 The Art Studio. 14.95 11.20 Tomahawk. 9.95 7.45 Shadow of Unicorn 14.95 11.20 Their Finest Hour. 9.95 7.45 Never Ending Story. 9.95 7.45 Lord of the Rings. 14.95 11.20 Surf Champ. 11.95 9.40 Rockfords Riot. 9.95 7.45 Tau Ceti. 9.95 7.45 Impossible Mission. 9.95 7.45 Rasputiin. 7.95 5.95 Back to Skool. 6.95 5.20 Cluedo. 9.95 7.45 Bullseye. 8.95 6.70 Hyper Sports. 8.95 6.70 Daley Thompson S. Test. 6.95 5.20 Yie Ar Kung Fu. 7.95 5.95 Parizadrome. 7.95 5.95 Spitfire 40 9.95 7.45 Exploding Fist. 9.95 7.45 Critical Mass. 7.95 5.95 Now Games. 8.95 6.70 Wham! 9.95 7.45	Starquake	7.95	5.95	Swords & Sorcery	9.95	7.45
Tomahawk 9.95 7.45 Shadow of Unicorm 14.95 11.20 Their Finest Hour 9.95 7.45 Never Ending Story 9.95 7.45 Lord of the Rings 14.95 11.20 Surf Champ 11.95 9.40 Rockfords Riot 9.95 7.45 Tau Ceti 9.95 7.45 Impossible Mission 9.95 7.45 Rasputin 7.95 5.95 Back to Skool 6.95 5.20 Cluedo 9.95 7.45 Bullseye 8.95 6.70 Hyper Sports 8.95 6.70 Daley Thompson S. Test 6.95 5.20 Yie Ar Kung Fu 7.95 5.95 Parizadrome 7.95 5.95 Spitfire 40 9.95 7.45 Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run <td>N.O.M.A.D</td> <td>7.95</td> <td>5.95</td> <td></td> <td>14.95</td> <td>11.20</td>	N.O.M.A.D	7.95	5.95		14.95	11.20
Their Finest Hour 9.95 7.45 Never Ending Story 9.95 7.45 Lord of the Rings 14.95 11.20 Surf Champ 11.95 9.40 Rockfords Riot 9.95 7.45 Tau Ceti 9.95 7.45 Impossible Mission 9.95 7.45 Rasputin 7.95 5.95 Back to Skool 6.95 5.20 Cluedo 9.95 7.45 Bullseye 8.95 6.70 Hyper Sports 8.95 6.70 Daley Thompson S. Test 6.95 5.20 Yle Ar Kung Fu 7.95 5.95 Parizadrome 7.95 5.95 Spitfire 40 9.95 7.45 Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run 7.95 5.95 "V" 7.95 5.95 Strangeloop <td< td=""><td>Tomahawk</td><td>9.95</td><td>7.45</td><td>Shadow of Unicom</td><td>14.95</td><td>11.20</td></td<>	Tomahawk	9.95	7.45	Shadow of Unicom	14.95	11.20
Rockfords Riot 9.95 7.45 Tau Ceti 9.95 7.45 Impossible Mission 9.95 7.45 Rasputin 7.95 5.95 Back to Skool 6.95 5.20 Cluedo 9.95 7.45 Bullseye 8.95 6.70 Hyper Sports 8.95 6.70 Daley Thompson S. Test 6.95 5.20 Yie Ar Kung Fu 7.95 5.95 Parizadrome 7.95 5.95 Spitfire 40 9.95 7.45 Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run 7.95 5.95 Graham Gooch 9.95 7.45 Blockbusters 7.95 5.95 "V" 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Gladiator 8.95 <		9.95	7.45	Never Ending Story	9.95	7.45
Rockfords Riot			11.20	Surf Champ	11.95	9.40
Impossible Mission 9.95 7.45 Rasputin 7.95 5.95 Rasputin 7.95 7.45 Rasputin	Rockfords Riot	9.95	7.45	Tau Ceti	9.95	7.45
Back to Skool 6.95 5.20 Cluedo 9.95 7.45 Bullseye 8.95 6.70 Hyper Sports 8.95 6.70 Daley Thompson S. Test 6.95 5.20 Yie Ar Kung Fu 7.95 5.95 Parizadrome 7.95 5.95 Spitfire 40 9.95 7.45 Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run 7.95 5.95 Graham Gooch 9.95 7.45 Blockbusters 7.95 5.95 "V" 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zoids 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 <td></td> <td>9.95</td> <td>7.45</td> <td>Rasputin</td> <td>7.95</td> <td>5.95</td>		9.95	7.45	Rasputin	7.95	5.95
Bullseye 8.95 6.70 Hyper Sports 8.95 6.70 Daley Thompson S. Test 6.95 5.20 Yie Ar Kung Fu 7.95 5.95 Parizadrome 7.95 5.95 Spitfire 40 9.95 7.45 Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run 7.95 5.95 Graham Gooch 9.95 7.45 Blockbusters 7.95 5.95 "V" 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zoids 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45		6.95	5.20	Cluedo	9.95	7.45
Daley Thompson S. Test 6.95 5.20 Yie Ar Kung Fu 7.95 5.95 Parizadrome 7.95 5.95 Spitfire 40 9.95 7.45 Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run 7.95 5.95 Graham Gooch 9.95 7.45 Blockbusters 7.95 5.95 "V" 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zolds 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70		8.95	6.70	Hyper Sports	8.95	
Parizadrome 7.95 5.95 Spitfire 40 9.95 7.45 Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run 7.95 5.95 Graham Gooch 9.95 7.45 Blockbusters 7.95 5.95 "V" 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zoids 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70	Daley Thompson S. Test	6.95	5.20	Yie Ar Kung Fu	7.95	5.95
Exploding Fist 9.95 7.45 Critical Mass 7.95 5.95 Now Games 8.95 6.70 Mikie 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run 7.95 5.95 Graham Gooch 9.95 7.45 Blockbusters 7.95 5.95 "V" 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zoids 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70		7.95	5.95	Spitfire 40	9.95	7.45
Now Games 8.95 6.70 Mikle 7.95 5.95 Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run 7.95 5.95 Graham Gooch 9.95 7.45 Blockbusters 7.95 5.95 "V" 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zoids 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70		9,95	7.45	Critical Mass	7.95	5.95
Now Games II 8.95 6.70 Wham! 9.95 7.45 Gold Run 7.95 5.95 Graham Gooch 9.95 7.45 Blockbusters 7.95 5.95 "V" 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zolds 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70	Now Games	8.95	6.70	Mikie	7.95	5.95
Gold Run 7.95 5.95 Graham Gooch 9.95 7.45 Blockbusters 7.95 5.95 'V' 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zolds 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70	Now Games II	The second secon	6.70		9.95	7.45
Blockbusters 7.95 5.95 One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zoids 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70			5.95	Graham Gooch	9.95	7.45
One on One 9.95 7.45 Street Hawk 7.95 5.95 Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zolds 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70	Blockbusters		The Cartes County		7.95	5.95
Strangeloop 6.95 5.20 Knight Rider 7.95 5.95 Zoids 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70	One on One		7.45		7.95	5.95
Zoids 7.95 5.95 Max Headroom 9.95 7.45 Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70	Strangeloop			Knight Rider	7.95	5.95
Gladiator 8.95 6.70 Goonies 7.95 5.95 Fairlight 9.95 7.45 Skylox 8.95 6.70				Max Headroom	9.95	7.45
Fairlight						5.95
		The state of the s	Charles of Charles and Charles			
	Bored of the Rings	7.95	5.95	West Bank		5.95
Monty on the Run 8.95 6.70 Cyberun 9.95 7.45	Monty on the Run					
Supersleuth				30 Games		
They Sold a Million 9.95 7.45 Back to the Future 9.99 7.43	They Sold a Million			Back to the Future		
Special Offer: Bomb Jack5.95		A STATE OF THE PARTY OF THE PAR				

PLEASE NOTE IF YOUR ORDER EXCEEDS £40 YOU GET 10% FURTHER DISCOUNT

SEND CHEQUES/PO TO: GOODBYTE , UNIT 10-11, IMPERIAL STUDIOS, IMPERIAL ROAD, LONDON, SW6 TEL: 01-731 4607

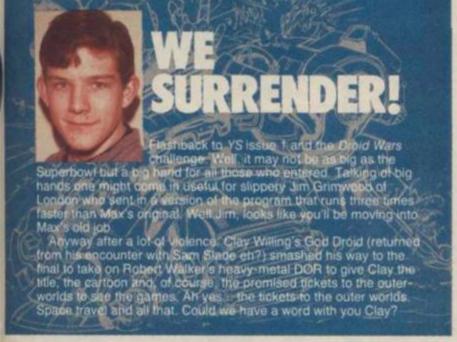
GAMES AVAILABLE FOR MOST MICROS

EXPORT ORDERS: ADD 75p per tape — TRADE ENQUIRIES WELCOME











Activision's at it again. More new games for the Spectrum. Rescue On Fractalus has been converted and should be out pur-eety soon. There's also The Eidolon from Lucas Film Games. You've discovered the eccentric scientist Dr Josef Vincent Agon and his fantastic machine — a machine that explores the id. You're placed in a whole series of underground caves filled with fireballs and monsters — Puffer Birds, Biter Birds, Greps and Bottlenecks. You've got to discover the secrets of the fireballs and figure out how they can be used to subdue the creatures.



And now for the 'Golden Turkey Award'! This goes to Global Software for its Golden Turkey Productions based on the world's worst movies book.

Attack Of The Killer Tomatoes takes place in a tomato processing plant and you play the part of Wimp Plasbott — spooky! The tomatoes start to mutate and turn into killer tomatoes - even spookier! It's your job to kill 'em off and turn 'em into Bloody Marys. Sounds pur-retty divvy to



ave you seen this month's poster map of Sweevo's World yet? Nip off and have a quick butchers then. Back? Ber-rilliant or what? Bet you thought it was done by a couple of reeceally famous artists who get to see lots of naked ladies and make a lot of Manet?

Wrong! It was in fact executed (technical term that) by two not nearly so famous YS readers who wouldn't dream of consorting with that sort of lady (We can all dream! Ed) and who aren't just interested in personal Gainsborough. Not nearly so famous until now that is. At this very moment thousands of other YS readers are rushing to pin their poster on the nearest available blank wall.

And the moral of this story is - if you can map new games and you can draw as well as Mischa and Stephen then you too could have your work treasured by thousands. And even if you're not too brill with the brush we may still turn your map into a poster and plaster your name all over it. Rush your cartographic masterpieces to The Map Room, YS, 14 Rathbone Place, London W1P 1DE. You've got nothing Toulouse.

You're not getting away that easily. Come back. Will you come back if I tell you that I've got simply heaps of juicy news for you this month. New games, gossip and a lorra-lorra-laffs Thought that'd make you change your mind. Let's start with something that

in this issues Spot-The-Balls-Up competition apart from the ball stupid Yeah. Activisions own thing about computers' Wright. We'd heard that getting Ands to take his trousers off would be no bother at all - he's done it enough times before. But no. Andy wouldn't spare us his blushes and more to the point had no intention of donning a pair of shorts not even for the YS team. Maybe he didn't want to put me to shame?

Talking of Activision it's got quite a few games up its sleeve for later releases this year. Koronis Rift, a boo) conversion should be out in May/June and its also converting On-Court

Tennis. Advantage to **Activision**

Meanwhile megahip CRL

has gone completely Spandau Ballet. It's taken a new label under its wing called Nu Wave that'll Where does that leave CRL l ask myself. First Nu game II be ID and it's all about ld who's completely helpless and needs you to discover where he comes from and his sordid past But you've gotta get him to trust you first and that'll take time and a lot of conversation. And you'd better not make any Freudian slips or I'll take you over. Mel Croucher of Automata had a hand in writing it so it's bound to be weird. See for yourself 'cos it's reviewed this issue

Sounds a bit ID-iotic to me Here's something heavy. Those boys at Odin have a few tricks up their sleeves. Icups, on the Thor label. should be out pretty soon and Kimera will follow it.

DGERUS

The YS Way Well, you've got to be a YS reader and you've got to have a letter printed in Your Sinclair. It's that easy. It doesn't even have to be in the Letters pages letters anywhere in the mag will qualify. For this measly outlay in effort you'll receive an exclusive super-duper, megaamazing, fantastico, splenditerous (That's enough adjectives! Ed) enamelled metal badge with the Your Sinclair logo emblazoned across it in tasteful red and silver. And all it costs is a 17p stamp and a portion of your wit and wisdom.

The Blue Peter Way For all you lazy, slothish, apathetic, comatosed, stagnant layabouts who can't be bothered to put pen to paper and write in to YS here's what you do. First you've got to clip out the paper version of the YS badge and stick it on a bit of cardboard. Then trim the outside and colour it in first with a red pen and then colour the letters with a silver one. Next get a safety pin (be careful) and attach it to the back of the badge with some double-sided sticky tape and there you have it — a Blue Peter version of the YS badge. What a Palaver!

Eeek! It's a mouse. They seem to be multiplying like rabbits. Kempston's Spectrum Mouse and Interface comes complete with a copy of OCP's Art Studio and costs £69.95.



Gather round girls. It's a letter from those refeened young ladies at St Bride's School. They've sent word that they want to share their secrets with us.
Jolly japes in the dorm, what? The only blow
is that the offer's also open to the boys, the
rotters. Bool

> St. Brides F Chronicle THE REAL PROPERTY AND RELIASE AND REAL PROPERTY AND REAL PROPERTY AND RELIASE AND REAL PROPERTY AND RE

(

Wε

fro bu

are ful bu

go

de

al

(AI

Everyone knows that St. Bride's brings to the written word the same kind of to the written word the same kind of flair and originality that Sweeney Todd brought to gentlemen's hairdressing. But only the priviledged few journalists have access to St. Bride's Chronicle.

Well, now all that is changing. St. Bride's is bursting into print with the St. Bride's Swashbuckler. Swashbuckler.

If you like St. Bride's you'll love the Swashbuckler and if you hate St. Bride's I'll give you ammunition for months.

And here's the good bit: any of your readers who sends us two stamps to cover postage will receive a free copy of the first issue.

Send now to: Swashbuckler Offer, St. Bride's School, Burtonport, Co. Donegal, Ireland.

HIPPA-DEE-DOO-DA



Awlrighty! And now on FTH news-andreviews media, we bring you a hot-hot-hot report from the Zee-X Microfair your host is little of Troubleshootin' Pee-dur.

Do they mean me? I hope not! Still, I have been to the Microfair in the heart of London Town. It's a traditional time for the natives when parents and cheque books are dragged into a crowded, bustling hall to spy on all the latest hot releases on the software and hardware scene.

As the Microfair can no longer be called a major event in the computer exhibitions calendar, no-one really expects to see the mega launches there - but, as always, one or two manufacturers save the show for something special.

For the Speccy, Starstrike II stood

out and Tasword III was up and nearly problem free but the Saga IV keyboard didn't quite make it. And just to complete the set, V wasn't there either.

On the QL front, Datalink Systems launched an arcade game called 3D Slime, a sort of several level Pacman. You play a friendly lump of green slime chomping its way through purple pyramids - Domestos capsules? All good clean fun with a very neat feature built in for the working classes. Simply press F5 when the boss arrives and you're greeted with a pseudospreadsheet screen. Course, it's all a bit topsy-turvey here in the dungeons of Castle Rathbone. When the Ed arrives I have to leave off having fun with figures and get back to playing the game

Cheetah provided plenty of aggravation of the ear-lobes with its SpecDrum system blaring out at several trillion decibels. Funny how all the tunes sounded just like a Village People album, ie all the same. Perhaps I'm growing old? (Who're the Village People, Uncle Peter? Ed) Pretty impressive piece of hardware anyway.

Just before the doors opened, the GLC was out in force spraying exhibitors' stands to make them fireproof. While Sinclair Research was getting the greenfly treatment, one cynic was overheard to say "Well, maybe that'll cure the bugs in the machines." Hmmm, but it'll take more

than salty water! Shame that so few software houses put in an appearance. Whither Melbourne House, whither US Gold whither Ocean, whither Ariolasoft? Still the show won't wither completely away while the small hardware/software companies, distributors and dealers turn up. And never forget the highlight of the show - the YS stand, of course!

And that just about wraps up this show for another month. Same time. same column, different accent next issue. Be there or be quadrangular...

TROUBLESHOOTIN' PEE-DUR

ARGY RGY



Sick, sick and sicker. PSS has really excelled itself this time. Not content with playing at atomic war it's now released Falklands 82. Yes you too can experience the thrill of sinking the Belgrano, going down on the Sheffield and generally creating as much of an Argie-bargie as possible. The 'fun' takes place between 21st May and June 15th on the northern part of East Falkland Island and you control the British Army. There are five levels of play, varying weather conditions (rain, heavy rain and torrential rain?), realistic terrain conditions (mud, thick mud and glorious mud?) and a full range of command options — fire, fire and fire! One to stick up its Junta, methinks. Sick, sick and sicker. PSS has really excelled itself



We've been hearing some fiery tales from Firebird. It's to bring out a new bundle of fun called The Comet Game - halleytosis or what? The action's set around that comet - only this time it's full of germs. You play a human(boring) but the aim is really unique — you've got to save the world from impending destruction (oh well). Interested? Have a look at our zippy compo in this issue - and walk off with a coffee machine! (Among other things).



Gore blimey, whatever next? Mark I like dressing up in funny clothes' Strachan and Dominic 'No publicity purlease, where's the camera?' Wheatley offer their sincere apologies to all those people who were offended by the horrific cover on *Friday 13th*. In fact they're so sorry that they're changing the design of the cover so that it's more 'wholesome'. Jason slicing up some poor old dear tucking into a bowl of Bran Buds, perhaps?



Ernieware 'I drive the fastest milkcart in the Netherlands' Productions is proud to announce the forthcoming release of its latest arcade game, Blockbusters. On the other side of the tape there's a graphics program called Back To The Graphics so here's something that's been drawn with it.

Win a do-it-yourself-T-shirt-and-Skyfox-transfer-set from Ariolasoft in our t'riffic compo. What's the catch eh? There ain't one! All you've gotta do is tell us whether you think Basil Brush is a relative of the Skyfox. Boom boom! Sorry, only pulling your leg. What you've really got to do is answer this easy-peasy question. What's a female fox called?

a) A vixen

b) Bitch (Ooh you...) c) Samantha

And if you're one of the lucky winners here's what you do... Take a look at Fig 1. Thought you'd be phased by that clean white T-shirt. Now cast your eyes on Fig 2, wow a Skyfox Transfer. Place Fig 2 on Fig 1 and then take Fig 3 and place on Fig 2. Then move Fig 3 up and down Fig 2 but mind you don't burn yourself on Fig 3. Hey presto and you've got Fig 4! Easy ain't it.

If you want to be on the Skyfox transfer list, put your answer on a postcard or the back of an envelope and send it to You Can't Fox Me Compo, YS, 14 Rathbone Place, London W1P 1DE.



Fig 1



Fig 3



is happening. Oh, yes Those red faced boys at Domark are making plans for a new James Bond game that'll feature a recent James Bond film Which one, I don't know Could be Octopussy or maybe Never Say Never Again, You'll just have to wait and see.

Looks like the Wild Women Of Wonga are making a comeback in US Gold's new arcade adventure Amazon

Women. Let's hope its got a somewhat stronger plot. Who Dares Wins... And Alligata certainly did in its

fight to bring out a game of the same name. Who Dares Wins II be out by the time you've read this

And now for a whodunnit from Datasoft. News is it's bringing out 221b Baker Street, a fantasy roleplaying game that takes place on the streets of London. You've gotta solve Sherlock style but I'm telling you the plot Datasoft is also releasing

Crosscheck crossword game. Mind Pursuit - a computerised Trivial Pursuit and possibly Pole Position II It's all elementary my dear Datasoft.

Wot's this then? Level 9's new adventure game. The Price Of Magic. The aim is to progress from the magician's apprentice to Arch Mage and you've got 18 magic spells to do so Now that's magic!

Good news for **Scooby Doo** fans. After being written, scrapped, rewritten and scrapped again Elite says it's being written again by schihhhhh you know who! It's also releasing Bombjack, an arcade extravaganza, and **Ghosts And Goblins** from the people who brought you Commando At least that's not a shaggy dog story.

Hey, listen to this, it's really hot. Saga is bringing out another keyboard, yup the Saga 4. But this one is infrared — wow. Maybe you can use it to cook your Sunday roast.

Talking of Sagas, the ongoing YS office romance between Gwyn Hughes and Rachael Smith is now definitely off... sorry it's not

Teresa Maughan

SPECIAL OFFERS For Your SPECTRUM/PLUS

Ewick Shot ... II

INCLUDING INTERFACE
PLUGS STRAIGHT INTO SPECTRUMPLUS ONLY £15.99 POSTFREE

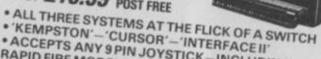
* TOP + TRIGGER FIRE BUTTON

- · AUTO FIRE MODE

- SEND FOR INSTANT DESPATCH



SWITCHABLE JOYSTICK INTERFACE ONLY £10.99 POST FREE



* ACCEPTS ANY 9 PIN JOYSTICK - INCLUDING RAPID FIRE MODELS . SPECIAL OFFER!!

Buy with QUICKSHOT II complete for only £17.99 SEND NOW



MULTI-FEATURE INTERFACE SPEECH SYNTHESIZER & JOYSTICK INTERFACE

PLUS ON SCREEN SOUND

ONLY

* Speech Synthesizer with unlimited viscobulary * Joyatick
f17.99

Anartaca (Kemputon System) * Boasts the sound from games
through TV speaker!! ALL IN ONE UNIT AWAILABLE NOW!!

ROBOTICS & MODEL CONTROL Made easy on your Spectrum

£29.99

ble outputs for robotics, motors, lights, et-

Independent reports for sensing etc.
 Ther at the unit that the "Legs" publication "Make and Program your own induces" was based on * Complete with all cables * Easy to use.



Now you can create Superb Graphics easily with



the New Lightwriter ONLY£16.99

Lightpen comes complete with

Interface & Software

SEND NOW AVAILABLE FOR IMMEDIATE DELIVERY

Digital Sound Sampling Technology. NOW Available on your Spectrum 9 Complete unit and Software sound



£49.99 Package



HOW ABOUT WITH SOUND? UNBEATABLE OFFERS!!

POSTFREE STOCKSLAST

Garnes Ace features: KEMPSTON COMPATIBLE - JOYSTICK INTERFACE ACCEPTS ANY 9 PW JOYSTICK INCLUDING RAPID PLUS DELIVERS THE SO

ES THROUGH TV SPEAKER, (Fully controllation)

Turbo Ace features:
ALL THREE SYSTEMS AT THE RICK OF A SY KEMPSTON - UDROOR - INTERFACE II - ACCEPTS
ANY 8 PM JOYSTICX - BECLUDING RAPID FIRE
MODELS - 'ON SCREEN SOUND' AS 'GAMES ACE'

ONLY £10.93 or complete with QuickShot II ONLY £15.93 or complete with QuickShot II

GUARANTEED SAME DAY DESPATCH ON ALL ORDERS TRADE ENQUIRIES WELCOME

24 HR CREDIT CARD LINE



DATEL UNIT 8. FENTON INDUSTRIAL ESTATE.
DEWSBURY ROAD, FENTON. ELECTRONICS STOKE ON TRENT TEL: 0782 273815

Evesham Mic

MAKE THE MOST OF YOUR MICRODRIVE WITH

INTERFACE III

THE IMPOSSIBLE HAS BEEN DONE

Yes e's true this flantaseste new perspheral will transfer every program available on to microdive. Yes e's true this flantaseste new perspheral will transfer every program available on to microdive. Yes ensured one capable of loading and saving a BASIC program can transfer readily available on to microdive. Anyone

- Consists of hardware and software.
- Transfers all programs available on to microdrive.
- © Very, very, easy to use. [If Clive can do it we're sure you can.]
- Makes a "snapshot" of any stage
 a program. [faved as a screen!]
 Transler can be accusted at any

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

IF YOU HAVE A MICRODRIVE YOU MUST HAVE INTERFACE IN

ONLY £39.95 Inc. P&P SIMPLY AMAZING

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

The software can be supposed on cassette for tape users.

This product is in a Designed by DRAYSOFT

HAVING PROBLEMS BACKING UP THE LATEST LOADING TECHNIQUES?

DOUBLER Will solve ALL your problems

THE tape backup "device".

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

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

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

ONLY £14.95

PATENT APPLIED FOR

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

All prices include P&P and VAT Send cheque Postal Order of Credit Card No Credit Card No Credit Card No Credit Card No Stocked Trade enquiries wercome European orders send price as advertised Outside Europe 12 00 for airmail Mail order to Evetham Shop please

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

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



N E W S

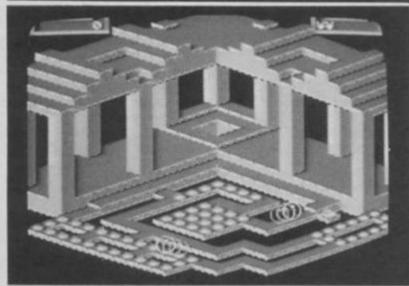
Microdeal is really pleased with the game it's working on at the moment. Aquanaut 471 is an adventure that also includes some amazing arcade sequences that you have to get through so that you can carry on. Jenny Poke from Microdeal said, "This new game is fantastic and we're really, really pleased. It'll knock you for six when it comes out. We're really excited about it."

Fancy something free?
Well, read on . . . Cumana has brought out a 42 page disk drive guide that describes its floppy disk drive operating system for the QL. The QL user is taken on a step by step journey through operations and functions, including formatting, connection, making a back-up disk, disk filing, data storage and 40/80 track

theory. For your freebie write to Cumana at Pines Trading Estate, Broad Street, Guildford, Surrey G3 3BH.

Hey, wow. Sinclair's even had time to bring out two new games for the QL even though it's been rushing to get the Spectrum 128 out before 1999. (More of that later on this issue!) QL Cuboids is a platforms game that takes place in a city plagued by not one, not two, but four species of extremely dangerous monsters. And all you've got to arm yourself with is a pneumatic hammer. Hammer? Well, it's actually a drill, so you can drill holes to trap the monsters in, and a hammer to bash their brains out. Yummy.

QL Jabber's not what you might think. It's not a Star Wars monster game and it's not a financial planning game. It's a good ol'shoot'em up blaster set in space. It all takes place in the United Solar Spice Space Pilot Training and Disease Control Centre. Wow, whatta mouthful! You take on the role of an antibiotic full of little antibodies that you can shoot at those 'orrible bacteria and viruses. Both games will cost £9.95 and are available now.



He slimed me!

Yeuch! Fungus The
Bogeyman or what?
Whatever it is, it's really slimy
and called, wait for it, 3D
Slime. You play a manky
green blob of slime (huey)
that has to munch his way
through little piles of
antimatter whilst avoiding
various mutant creatures.

Slithereey! It normally costs £12.95 but for Your Sinclair readers Datalink is offering it at a snip at £8.95. All you've got to do to get your hands on a copy is fill in the coupon below and send it, with a cheque or postal order, to Datalink Systems, Glangors, Ynslas, Dyfed SY24 5JU.

Please send mecopies of 3D Slime. I enclose a clipostal order for £made payable to Datalink Systems.	neque/
Name	
Address	
Postcode	

AN OFFER YOU CAN'T REFUSE...



Okay, youse guys (and gals)! You've had da nicely nicely approach, you've had da not-so-nicely nicely approach — now's da time to get heavy! Mugsy an' da boys'll be round to put da muscle on for your money. £15 only for da protected delivery of Your Sinclair to your door for a whole year. An offer you'd be foolish to refuse.

Send us your subscription PDQ to Your Sinclair Subs, 14 Rathbone Place, London W1P 1DE or Mugsy'll want to know why not.

SUBSCRIPTIONS: PRIORITY ORDER FORM

I would like to subscribe to Your Sinclair. Please start my subscription from theissue.

Please tick appropriate boxes:

- One year £15 UK and Eire
- One year £20 Europe
- One year £25 Rest of known cosmos (please add 50p for unknown cosmos).

I enclose my cheque/postal order payable to Sportscene

Specialist Press Ltd for £.....

- ☐ Please charge my Access/Visa/American Express/
- Mastercharge card number(Delete where applicable)

Signature

(credit card orders cannot be accepted without a signature)

Name .

Addres

Send the completed form with payment or credit card number to: Your Sinclair Subs, 14, Rathbone Place, London W1P 1DE. If you don't want to cut up your magazine, use a photocopy of this coupon.

LETTERS

YOUR SINCLAIR, 14, RATHBONE PLACE LONDON W1P 1DE

The writer of the Star Letter will receive a fabulous bundle of software.

TOADY

Look, in YS 2 the name of the game is Cosmic Wartoad not Cosmic Wartones. Either get it right or sack Teresa Maughan. This is your last warning. Next time I'll send 'The Boys' round to rearrange your typewriter which'll be very painful and probably stain the carpet.

Snaggletooth II alias Mark Chambers Oldham, Lancs

You're right. This was a serious dereliction of duty on T'zers part. Come here Maughan. You're fired. Don't try and get round me with your pathetic excuses about not being able to read and write. And stop getting all excited about The Boys coming round. Out! That's better — there's nothing like giving someone the big E at the beginning of the Letters page! Ed

ED BANGER

Hmmm...not very clever. I'm just sitting here waiting for my mum to buy me the mega, incredible, humungus (creep, crawl) YS MegaBasic for my Christmas present and she says, "Who do I make the cheque out to?"

Hmmm...I dunno, it doesn't say does it. Not very clever. Everybody else tells us. Kerrang (the greatest rock rag etc) says who. Iron Maiden Fan Club order forms tell us. But YS can't be bothered.

Do you want us to buy MegaBasic or is this just a (not very) clever ploy to keep us from seeing it? Does Mega-Basic exist or is it one of Ed's fantasies?

Tim Eveleigh Addiscombe, Surrey.

Course it exists — my fantasies might be a bit basic but they're not MegaBasic. Well, only the one about the ... but this isn't the place to go into that one. But you're right — we've made a right old kerrang of ourselves this time. We thought that all YS readers would've sussed that they had to pay their cheques to Sportscene Specialist Press. But we didn't reckon with the Heavy Metal Effect — there's one brained every minute.

Still, it is an honour to hear from the member of the Iron Maiden Fan Club. Perhaps it'll encourage the only member of the Slade Fan Club to write in — and I can put him in touch with a good psychiatrist.

And what on earth does 'humungus' mean? Sounds like a nasty disease you catch off sick Bumpries. That'll teach you to wash your hair more often.

SPECIAL AGENT

Dear "The Boss"
God are you in trouble, man!
As general secretary of the
"Letchworth is a nice place"
Society, I must ask you to
retract what you said or we
will take action. (Ref D
Willmott, YS ish 2.)

Everyone knows that Letchworth is the real capital of England and not that riverside village London. I mean, we even had the first couple of roundabouts in the world!

Dick Barton Letchworth

PS If the vendetta doesn't stop, you could have a nasty accident, comprendo?

I always knew that
Letchworth must've contributed something to the sum of human happiness but little did I suspect it was roundabouts.

Now I know why the place drives me round the bend—and then round again... Ed

CABINET RESHUFFLE

Here's some advice for restructuring the YS team.

1) As the Ed is the funniest man in the country (though I don't live in Peru) he should go into television. (Move over Wogan, here I come. Ed) My personal recommendation is the Test Card. (Grrrr...Ed)
2) This would leave a blank at the top (though there always has been). I think it should be either Pete Shaw or Roland Rat. (Give me the Rat any day. Ed)

3) Give the Art Editor a pay rise — his work is very good. (It's okay, I can put you in touch with a really good opticiant Ed)

4) Get Pete Shaw to have a facelift. (Pass the forklift truck. Ed). Iolo Davidson has obviously seen Pete in the flesh. Look at his photo!

Colin Read (86)
(insulter extraordinaire)
St Helens, Merseyside
And here's how I'm going to
restructure your fizog! Ed

BUMPED OFF

I'm writing to complain. Well, not exactly complain but just to say something. In It's A Stick Up in YS 2 you printed a table showing which joystick came out on top in Chris Somerville's Second Opinion program from Your Spectrum 19. Huh, this'll really mislead new Spectrum owners into thinking that the Command Control joystick from Wico/CGL and the Formula II from Kempston are the best. Now they may be good but in my opinion the joystick that beats them all is the Formula 1, with Le Stick second and the Quickshot II third.

But I think I know why the Formula 1 didn't get anywhere. It's because the testers probably held it like the Quickshot. Wrong! You only need to use an index finger and thumb and you'll get smashing results.

And does Noel have a strong arm or is it controlled by a piece of string? Is all the power from his diverted to his nose when he sneezes? Has he got something against Quickshot IIs? Does his hand have hosepipes connected? All these accusations are suspiciously true — just take a look at some of his comments. "The length of the shaft tires your arm out too quickly' (Quickshot II). "The shaft's too spindly and I reckon it'll break if you sneeze on it" (Gunshot 1). "Looks too much like a Quickshot II for my liking" (Gunshot I). And "The grip gets as sweaty as a Bumpry's armpit" (Gunshot I). What is a Bumpry?

Paul Chaney Bletchley, Milton Keynes What? How can you sit there stand up while I'm writing an Ed's comment — and talk with authority about joysticks when you don't even know what a Bumpry is? I ask you readers, whose word would you trust — three highly trained joystick testers who all know what a Bumpry is or the 'opinion', and these things are all subjective, of someone from Milton Keynes? Not that I've got anything against Milton Keynes but you don't see many Bumpries around there, if you see what I mean. Ed If only all

HO, HO, HO

Hurdie YSI
Hurdie hurdie YS 1 1986,
hurdie hurdie Teresa Maughan,
hurdie hurdie ho Jangeborg,
"hurdie, hurdie ho" (hurdiell!).
Hurdie hurdie hurdie ho.
Hurdie ho!

cities were like that! T.P.

Ho 22, Hurdie Facts, Carl Howes hurdie ho ho PRINT hurdie hurdie, ho printer. OPEN hash 2, "p" hurdie

THE 48K SPECTRUM

WHAT'S YOURS

CALLED?

DOODLEBUGS

Keep on doadling — it's a doddle! Send your cartoons to Doadlebugs, YS, 14 Rathbone Place, London W1P 1DE. There's a prize of a new game for each cartoon printed.



This month's cartoon is by Speccy-lover (?) Shaun Wilcock of Dewsbury.



DISTRIBUTION

ALL GAMES GUARANTEED IN STOCK



5% DISCOUNT & FREE SECURICOR DELIVERY ON ORDERS OVER £40.

NOW!

EASY ORDERING WITH OUR NEW FREEPOST ADDRESS.

	TICK		TICK		TICK
SINCLAIR		SINCLAIR	•	SINCLAIR	
Commando	5.95	Gladiators	6.70	Runestone	5.95
Deathwake	5.95	Swords & Sorcery	7.50	Rasputin	5.95
Zoids	_ 5.95	Sold a Million	7.50	Chimera	
Mikie	5.95	B.C.'s Quest	5.95	Willow Pattern	2.95
Enigma Force	7.50	Starquake	5.95	Hypersports	
Zorro		Fighting Warrior	5.95	Starion	
Transformers	5.95	Movie	5.95	Red Moon	
Blade Runner	5.95	Wham - the Music Box	7.50	Worm in Paradise	7.50
Yie Ar Kung Fu	5.95	Terrormolinos	5.20	Fairlight	
Panzadrome		Tau-Ceti		Bored of the Rings	5.20
Lord of the Rings	11.20	Exploding Fist	7.50	Cosmic Wartoad	5.95
International Karate		Never Ending Story		Robin of Sherwood	7.50
3 Weeks in Paradise	7.50	Nightshade	7.50	Southern Bell	5.95
Winter Games	5.95	Winter Sports	5.95	Surfchamp	8.95
Back to Skool	5.20	Sir Fred		Highway Encounter	5.95
Arc of Yesod		Daley's Super Test	5.20	Schizofrenia	5.95
Tomohawk	The second second second second	Hacker		Nodes of Yesod	7.50
Saboteur	The state of the s	Graham Gooch	7.50	Code Name Mat II	6.70
Death Wake		Monty on the Run	5.95	International Rugby	5.95
Sweevo's World		Marsport	7.50	Dun Daragh	7.50
Impossible Mission	5.95	Barry McGuigan	5.95	Spy Hunter	5.95
Bounty Bob	The state of the s	Shadow of the Unicorn		Their Finest Hour	7.50
Gyroscope	THE PROPERTY OF	Now Games II	6.70	Artstudio	11.20
Gunfright		Frank Bruno	5.20	Peripherals	
Arcade Hall of Fame		Yabba Dabba Doo	5.95	1. Ram Turbo Interface	13.95
Battle of the Planets	THE PROPERTY AND ADDRESS OF THE PARTY AND ADDR	Westbank	5.95	2. Quickshot II	6.25
Elite	11.20	The Secret of St. Brides	5.95	3. Ram MKII (Kempston)	
Critical Mass		Robin of the Woods	7.50	4. Datex Micro Stick	9.95

NAME

ADDRESS

POSTCODE

I enclose cheque/P.O. for £

TELEPHONE

UNITSOFT, FREEPOST, GLASGOW G1 4BR.

NO STAMP REQUIRED

'UK ONLY



ADVANCE WITH SAGA



television) £9.95

After adding our products to your Spectrum, your Spectrum will not merely become a superior computer but a more complete computer system.

The SAGA keyboards, culminating in the new SAGA 3 ELITE, provide your Spectrum with the sheer elegance that it deserves. The SAGA 3 ELITE incorporates the most recent technology in keyboard design which provides 27 single entry functions.

If you would like graphics with real Style, then they are yours with our latest graphics package, while letter quality print can be produced for less than £120 from our new printer.

Just cut out the Coupon below for any of the

following products:

SAGA 1 EMPEROR 67 keys enable easy access to every function, making obsolete the "Stretch requirement" of other keyboards. Now only £39.95 SAGA 2 PROFILE A re-design of the popular Lo Profile with number pad, 52 keys. £49.95

SAGA 3 ELITE recently developed, the SAGA 3 ELITE is the finest available keyboard for your Spectrum. The keyboard and number pad has 87 keys in total, a massive 27 keys are auto-shifted. £79.95

DUSTCOVERS Black with SSL logo, available for all keyboards. £4.95

STYLE Realise your graphic expectations. Comprises Kempston compatible interface and Software. £29.95

SAGA GP Graphics Tablet—super improve STYLE, plug it in and see. £79.95 (read the reviews!)

NEW LETTER QUALITY PRINTER The first in a new range of printers to be available shortly. SPEED: 12 CPS. PRINT: Ink on ordinary A4 paper. INTERFACE: Centronics & RS232. For print sample and further information, write or call now, only £119.95 SOUNDBOOST Puts music in your ears (and

FLEXICABLE Extend your capabilities with two more ports! £11.95

TURBO INTERFACE with custom chip, ROM slot and 2 joystick sockets the TURBO out-performs other joystick interfaces. £21.95

We invite your enquiries on (04862) 22977, more descriptive literature is freely available for each product (please send stamp).

SAGA SYSTEMS LIMITED (04862) 22977

KEEPING YOUR COMPUTER UP TO DATE

QUANTITY P&P			SEND YOUR ORDER TO: Dept YS10 Order Desk Saga Systems				
SAGA 1 EMPEROR	*£39.95	£1.50	Limited. 2 Eve Road, Woking, Surrey GU21 4JT.				
SAGA 2 PROFILE	*£49.95	£1.50	Mr/Mrs/Miss				
SAGA 3 ELITE	*£79.95	£1.85	Address				
DUSTCOVER	≉£4.95	FREE					
STYLE	*£29.95	FREE	- Amount enclosed £				
SAGAGP	*£79.95	£1.50	My Access Card No. is				
LTR-1 PRINTER	*£119.95	£2.30	ACCESS ONLY ACCEPTED				
SOUNDBOOST	*£9.95	FREE	Please tick method of payment: PO Cheque Draft Access				
FLEXICABLE *£11.95 FRI		FREE	If this is confirmation of telephone order, please tick box				
TURBO INTERFACE	*£21.95	£1	-				
VAT is included		TOTAL	SignatureDate				
Overseas orders, please d	educt 15% VAT add i	3 for postage excess	Please allow 28 days for delivery.				

Limited quantities of the original low profile keyboard are available at only £39.95 inc. V.A.T.+£1.50 P&P.

hurdie Spectrum, Interface 1 hurdie ho Interface 11

Hurdie Trainspotter ho, ho hurdie ho 115: hurdie Digi'T'ape hurdie, hurdie Your Spectrum, hurdie Your Sinclair! Ho, ho, ho (2 hurdie!)

Mats E Sjoblom Hagersten, Sweden

PS Hurdie hurdie Alison Hjul hurdie? "Hjul" ho "wheel" ho Svenskal

Hurdie hurdie Mats Sjoblom hurdie? "Sjoblom" ho "naff all" ho English. Hurdie ho Svenska ho totally unpronouncable hurdie ho! **Ed**

GREAT MINDS...

I read with interest the letter from S G Wylie about the Hex keypad in YS 2. My company is about to release a Hex keypad in the latter part of February this year. We haven't yet fixed a price for the unit but if S G Wylie or anyone else for that matter would like to get in touch with me I'll quote a price then.

Kevin Coverdale System 7 Electronics, 664 Anlaby High Road, Hull, N Humberside HU3 6UZ.

Bang goes my chance of making a fortune on that idea.
Troubleshootin' Pete

WRATH OF KEITH

Many moons ago when the earth was still young (well, about six months ago anyway), I wrote to your estimable magazine asking for help with a game I was then attempting to play.

The game was Wrath Of Magra and my request was published. I even received lots of advice from readers who'd kindly taken the trouble to write to me.

But someone, somewhere (Your Sinclair's editor's hovel maybe) has rendered me speechless. My request for help has yet again been printed by the nameless nerd who scribes your Death's Door feature.

Is this a ploy to swindle readers out of their 17p postage stamps or have you just dropped a brick?

Please assure your readers that I am not a dumbo who needs constant assistance on the same game and please send me the head of the idiot who re-inserted the request (if head is not available I'll settle for a Porsche).

Keith R Hill **Bognor Regis, W Sussex**

Owl Flippin' brick. My first reaction was to send you the

TERS TRAINSPOTTER



Hello, hello, hello. A policeman's lot is not a happy one. So to break the futility of all this crime fighting I happened to flick through the pages of YS 2. I had occasion to turn to page 34 whereupon I glanced at three mug shots under the title Hex's Heroes. I immediately recognised the icy looking character on the left as being none other than the slipperiest fridge thief ever to grace a garden. Snowy White, the con snowman of Westburyon-Trym.

The centre mug is not that of Per Holm the Swedish second

cousin of Sherlock - that much is elementary. No, it is in fact the infamous Jeroen Molenach from the Nether

The third photo is indeed Master Holm the half mad organist come hairdresser come and touch my Van der Graff generator. He who has been known to smile when having his photo taken however much it hurts. It is obviously something to do with his pole position or an exploding fist. There... I rest my case for being awarded a Trainspotter Award. Evening

lan Evenett Tottenham, London

It's a fair cop, guv, I'll come quietly. But before you drag me kicking and screaming to the cells perhaps you'd like to take a look at this much coveted Trainspotter Award. Fetching a bit on the black market, these arel Let's not call it bribery, more a just reward. Ow, those handcuffs hurt... Ed

Have you seen the new version of Elite? You know, the one with the score up the top, with the upside down letters. What's this I hear? No, surely YS couldn't make a mistake,

could they? Quick Sid, pass the letters we cut out of (Another magazine that's only really fit for a sesh with the scissors! Ed). That's right. T . . . R. . .

TRain SPOTtER

Award Purrrrlease (if it's not too much trouble).

If you still don't know what I mean take a look at The YS Megagame Challenge, page 4. Please put me out of my misery by sending me a beautiful Trainspotter Award.

Rob Hoar Hemel Hempstead, Herts Q. What's Gollum's favourite pop group?

A. The Stranglers! For a joke like that you deserve to be put out of your misery. Pass the silk cord, Pete, we have another neck for the noose. Things could've been so different if we'd had a beautiful Trainspotter Award but as it is we've only got these tatty ones.. Ed

head of said idiot but then I realised that it would've been a bit of a dead loss. Well, he's dead already! So, instead I'm posting you a Porsche, piece by piece — starting with the inside of the ashtray! **Ed.**

RAINSPOTTER AWARD

I hough I would wrie in and see if I could successfully have a leer published a my firs aemp - everybody else seems o have wrien a leas wice.

Anyway, in issue 2 page 72 here was a missing capial ' he sar of he review of Beach Head II. I hereby claim my rainspoer award.

You will noice ha I neiher creep nor crawl, being of he belief ha a superior being such as yourself makes he decision abou he award no on he quaniy of praise deservedly heaped upon your magazine and yourself (Specially me. Ed) bu on he qualiy of he leer.

Graham Deaves Dunsable, Beds

Dirty ol' manl I'm not having any leers in this magazine. Next thing you know, we'll be up there on the top shelf along with all those 'other' magazines. By the way isn't it about time you got yourself a new typewriter? Your address has come out as Dunsable. You can't fool me - you must be one of the Unstable lot? Still,

you are the first winner of our new Rainspoer Award. Let's just hope it isn't catching. Ed

LOCKING ON ...

On page 22 of the 'Elite Spacetraders' Flight Training Manual' under the heading, 'Docking Procedure' appears the statement Docking with a Coriolis space station is never easy unless the ship is equipped with an automatic docking computer.

docking computer.

Having spent many an hour, bleary eyed, seated at a Cobra Mk III visual display console (cleverly displayed as a prehistoric black and white TV set), playing the above mentioned game, I happened to fall upon a v. useful bug.

In the light of my discovery I feel that the following slight amendment should be made to

amendment should be made to page 22:

*Docking with a Coriolis space station is an absolute doddle (hands tied behind back, blindfolded, Speccy stuffed up left nostril etc . . .) even without a docking computer."

Revised docking procedure: 1) Select the planet that you wish to visit, using the local chart.

2) Launch your Cobra Mk III but do not hyperspace.

3) Continue in a straight line away from the space station for several seconds, then slow down.

4) Turn through 180 degrees, until the entrance to the space station is in the centre of your sights.

5) Accelerate to full velocity. 6) A few moments before impact, press the hyperspace button.

You'll find yourself safely docked at your destination space station.

Of course, if you use this method of trading, you need never again encounter any enemy spacecraft. Yes, that means no more fumbling madly for the 'ship identification chart' and no more watching helplessly as your energy banks drain (not unlike the Editor's witticisms) into the endless vacuum of space. Severian (President of

Aberystwyth, Dyfed It looks as though Elite may have as many bugs as a Bumpry's bicep but at least you managed to load the game even if you did have to stuff your Speccy up your left nostril. Perhaps that's where the next couple of readers are going wrong ...

'Legalise Lenslok')

I'm writing to complain about the Lenslok that came with Elite. Apart from stopping me enjoying the game, I find it

LETTERS

almost impossible to get the OK characters in the first place.

Also, the loading causes a problem. This morning I had to reload Elite seven times due to the tape and the Lenslok. I received Elite for Christmas and I've only managed to play it around three times.

Please, could you tell me if any other readers have written in to complain. When I have played the game it seems very good. What a way to ruin a decent game, Firebird! Andrew Challis

Andrew Challis Colchester, Essex You are not alone . . .

I'm writing about the Lenslok security device on Elite. I got a copy of the game as a Christmas present but so far I've been unable to get past the security screens. This is very annoying and frustrating, especially after having read all the rave reviews of the game.

Surely, such a system is selfdefeating. The dedicated hacker may see it as a challenge to break into the game and get round the protection system but the average games player will be put off from buying the game after reading about all the troubles other users are having.

I hope Firebird will come to the conclusion that the system is impractical in its present form and unless improvements can be made to make the system easier to use, it won't employ it again.

M Briody
Milton Keynes, Bucks
Well, does anybody like
Lenslok? We all know why it's
there and we all know it's a
pain but if anyone, even an
anyone from Firebird, wants to

SMALL PRINT

Can someone buy the Ed a new typewriter without brackets on, pur-lease!

Laurence Banyard
Wivelsfield Green, Sussex
(You'll never take my brackets
away from mel Ed)))))))))))))))))))

I think I should get an award anyway to make up for where I

Kevin Phillips Pratts Bottom

What, a sort of Pratt of the Month award, eh? It's yours! Ed

I am writing this letter knowing it will not be printed.

Nik Taylor

Seems a bit of a waste of time to me. Ed

say something nice about the system, drop us a line. After all, getting your letters into YS is much easier than having them accepted by Lenslok. Oops, did I say that! **Ed**

OAP

Can you spare some space (Oh, I think there's a bit in the Crab Nebula you can have. Ed) for a 33 year old pensioner amongst your teenage readership I think I must be!

Firstly, let me say that I've been an avid member of your readership since the early days when fingers trembled over rubber keyboards. (Careful, this is a family magazine! Ed). But there are a couple of points I'd like to make:

1) When a listing includes graphics, life would be made a

- lot easier if: a. They were printed clearly and/or
- You gave a clear indication as to which graphics keys represented the graphics used.
- 2) Where a number of spaces are to be 'printed' in the program, a REM statement indicating the number of spaces required would save the laborious and often incorrect calculations.

Actually, I've been feeling rather pleased with myself lately, having spotted a couple of (I presume) deliberate mistakes. The most frustrating of them was the half a page of code relating the Hot Shot program in YS 2. Why did it appear tagged on the end of the Alien program. Maybe I'm in line for a Trainspotter Award?

Finally, is it really necessary to lower the tone of an otherwise excellent magazine with a double page spread of blood and gore and a character throwing up on the cover?

Doug Harvey Northampton

Thirty-three? Soon be forty. But I don't want to give you a complex about your age. I'll make this answer quick just in case you don't last out to the end of the paragraph.

Your first points have been noted — we'll do our best with the printing and the rest is up to the programmers. And yes, we did make a bit of a Bumpry's birthday party of Program Power in issue 2 but once you've got a hex loader and worked out where each program ends, you should have no problems. Hahem.

As for the blood'n'gore in the mag, well Vyvyan made his critical comment on the cover. But both items have caused quite a stir — read on . . .Ed

Not being a computer fanatic whatsoever but appreciating good artwork when I see it, I must congratulate Nick Davies for his illustrations of The Young Ones on the front of a copy of your magazine.

Besides capturing the unique features of each Young One brilliantly, the sick was drawn quite good (sic. Ed) tool Keep up the good work matey and if you ever have any spare time, please draw me a Rick. Tal (I'm being serious y'know).

Andrik Mayall (Hmmmm. Ed)

Durham

Serious? You don't know what serious is till you've read the next letter. **Ed**

I am writing to complain in the strongest possible terms about the Friday the 13th poster in the centre of the February edition of YS.

As a regular subscriber to your otherwise informative and interesting magazine, I've found nothing in any of the previous issues of Your Sinclair or Your Spectrum which extends so far beyond the boundaries of good taste.

Living as we do in an increasingly violent society I find it quite incomprehensible that you should choose to portray so graphically this sort of software in your magazine which I imagine has a large readership of children and adolescents.

Ironically, this 'poster' backs onto one of your excellent reviews of a graphics utility, Art Studio. I do wish you would devote more space to reviews of this calibre and less to gratuitous violence.

I can only hope that
sufficient numbers of your
readers will feel as I do and
write expressing their opinions;
if we are to be faced with any
more of this kind of thing I for
one will no longer be
subscribing to your magazine.
Richard Smith

Richard Smith
Southampton, Hants
Phew, someone's after my
blood — let me rephrase that
— someone's gunning for . . .
oh well, you know what I
mean. If your daggers are
drawn over this, write in.
Richard's got very strong views
but what's yours? Ed. Mine's a
bloody mary thanks!

Troubleshootin' Pete.

WALL SCRAWL

Could you please send me a sheet autographed by all my heroes and heroines (creepy, crawly) so that I can pin it on my wall and know that you write the best (ker-eeeep) mag going for the Speccy.

Jim Crossland

Dalkeith, Midlothian

To satisfy the thousands of you who were just about to write in with the very same request — weren't you? — here is your very own cut out and keep autograph kit. Just snip round the dotted line and stick on your wall, into your autograph books, at the bit in your wills where it says 'and I leave all my worldly goods to...' A thousand and one uses. Ed

.55 day.

dan 864

YOUR

ern by

Michig

e lesso

days 10

MY

17.50

reks.

RIES

rfan 7

TRAI

MATI



FREE FOR ALL

This concerns all readers who cherish YS. I have a very touching story to tell — so touching it hurts me to talk of it but here it is.

I casually strolled into my local newsagent, as I always do, and suddenly, yes so suddenly it took me by surprise, I saw two copies of Your Sinclair ish 2 perched unhappily on the shelf next to some lousy Commie mags. In an instant I rushed over to the glowing mags and grabbed one, fumbled for my money and bought it.

On the way home I thought how sad the other YS must have been feeling, so as much as I wanted to keep my spare 95p, I rushed back to the shop (hope you're crying by now), grabbed the sad-faced YS and shoved it under my jacket. Unfortunately, I had to take it out again and pay!

Anyway, the story ends happily after all, as I have two merry YS issue 2s.

Stuart Free (ace face)
PS Both YS mags wish you
well!

Sob, sob, sniffle, sniffle. Your story has touched my once stony (sob) heart. I realise now I've been cruel — a right sob. So, to make amends I'll perform an act of great kindness. We can't really let T'zer get left on the shelf. No, I'm not going to marry her but I will give her back her job. What charity you say — well, you don't expect me to pay her as well? The least you can do is promise that you'll buy at least two copies of YS each month. I've turned over a new leaf — and so must you . . . Ed

THE Clearance Sale You've Been Waiting For KLEIN'S CENTRAL WAREHOUSE den 8641 OUTLET Under ONE giant roof, hundreds of nationally advertised Household Appliances. Bry 2210 **NEW SAMPLES** TOUR Vacuum Cleaners Salesmen's samples all makes from \$5.95 Washers & Ironers New family size only \$19 ABC Spinner. sational at only \$35 lon 2217 Oil heaters - free installation - from \$30 Bt 10 Odds and Ends. Famous makes. sdem Av Free delivery. No finance company to deal with 300 N Madison Rd : Wabash 5148 um by **OPEN SUNDAY** Buy direct Factory samples
Bedroom sets \$29 up
Parlor sets \$19-\$39 up
Trade-in & repossessed furniture
available. Hichigan of the irelli nady. Schwarz & Co CHEV. '39 Sedan \$400 Trunk, heates, vacuum gear shift, bumper guards, original fin. Priced far below market. Private bys 10-5 MY CODE numbers needed for Wheelie player. Reply Box 63980 17.50 stervice St. Louis \$4.75 Detroit \$5 Pt. Wayne \$3 Columbus \$6 De Luxe Motor Stages 230 Milwaukee N W Lake Central 3131 fes. 7887 illn 3911 Los Angeles \$30 o/w \$ Francisco \$32.50 o/w Mismi \$15 o/w Adante \$10 o/w int 63980 Now - from only \$29.50 New, de luze, water heaters. kerosene; gas 217 W Washington Av. Pranklin 1300 TRAL AV Not responsible for debts except those contracted by myself.

3351 Washington Pluffy Pock Pie Sport Felta. Regular \$1.49 Values. The all purpose casual felt in Black, Brown, Soldies, Wine, Red, Kelly, Beige. Four head sizes 21 %-23. Now CNLY 84c

4077 Cottage Rd W.

Humboldt 9226

Lg rooms; new furniture; pri. bath, tub & shower 200 N Oak - Sheridan Rd Sheridan 8641 5000 SINCLAIR C5s. for sale.

Going cheap. Batteries not included.

Victory 2210 AUTO LOANS CASH IN TEN MINUTES ON YOUR AUTO OR TRUCK 26 MONTHS TO PAY Deal direct with owners. Private consultation rooms. HIRSCH-DAVIS 20 years in the same location 6213 W STALLWORTH ST. Harrison 2217 VISIT Paula's Puppyland - Air Conditioned. All pop. breeds. 100s to pick from. Low prices 6162 N Harlem 6162 N Harlem Av. Complete secretarial courses. Learn by setual work on switchboards.
Free catalog.
Also 'Brush up your Comptometer'
'Complete X-ray Course' AMERICAN BUS. COLLEGE Would anyone having knowledge of the whereabouts of Joe 'Pug Nose' Morelli please tell his mum cos his tea's ready. WALTZ, fox trot, rhumbs. Private lessons. 7 for \$5. No appt. nec. Rm. 21 316 N Clerkson Wkdays 10-5 MANICURING COURSE \$17.50
Jobs waiting, Learn in 3 weeks.
Includes tools, diploms. Placement service CONFIDENTIAL ENQUIRIES UNDERTAKEN Contact Sam Cruise. PENTHOUSE - living room + kitchenette; 2 bedrooms & private roof garden. Combination tob & shower, circulating ice water. Complete service. At an address of distinction.
35 W Delaware Franklin 3911 Sincleir C5 Sedan. 4 door.
Pully air conditioned. Running boards
extrs. This car will pass for new. Any
colour you like, as long as h's white
Reply Bos 63980

Hood costs, wrsp arounds, warm ficeces, heavily interlined, costs with lined anow pants to match. Sizes 12-20 Prom \$14.98. Value \$25

EMERSON COAT CO. 2342 W CENTRAL AV.

\$1,000,000

in diamonds WANTED!

The Very Highest Prices will be paid

YOU RECEIVE CASH IMMEDIATELY US Diamond Syndicate, 55 N Polaski Rd.

an't get across river in Omnicale? You seed the Extension Kit. Reply Box 63980 dena Vesta \$1.98 Corduroys French ackaj moleskin fabrica. Dark colours, all acallently tailored & strongly reinforced or real wear. Sizes 30-42 Mail or Phone orders - none delivered. 139 N CLARK ST JNT, paper. 53 up per rm inct, paper. the enamelled, Plaster; patch. Independence 7668 on seed theater seats. Also theater yes. Buildwin haby gr. plano, Cheap. Archer 2554 All well reinforced, knit to fit, with strench tops, Irregulars of 19c value. 5 pairs \$1. Sizes 9 to 11 12 S LA SALLE ST. 5-9 FOR SALE

MARSHALL ARMS - Ideal for executives. Fashionable conveniently located. Excellent cuisine. Attractive monthly rates. Every room with private bath. Coffee shop. Barber & beauty shop. 4100 La Salle Nth. Fairfax 6265 CASABLANCA nite-spot needs pisnists.

Apply Rick. Box 63980 1290 PINE GROVE PLAZA Modern de luxe 6-7 rm apts. Newly decorated. Electric elevator. Lg. closets, v. lits

ARTIFICIAL leg - Mun's; left; size 71/4-8. Airplane metal, ligh

PART share in IP38 Cab S45. Fly salo \$1.50 Duel \$3.50 Oak Lawn 1904

FOR SALE 20 Left shoes, size 71/4-8.
Going chesp. Offers Delaware 7173

LABORATORY equipment for sale
- chemicals, scales etc. Perf. cond.
Calumet 2071 4 yr old eaddle horse. Well mannered. Sacrifice. Quick sale. Offers. Mr Edge. Oak Park 1397

TEETH lost - partial plate. W 79th St. Reward Wellington 2354

DRIVING to Denver, Cheyenne via Oklahoma shortly, Take 2 share exprassrs. Kedata 4031

Gas driven calculators; adding machine cash registers & ZXSIs. No reasonable offers refused.

Mikes Second Hand Burgains.

15 Grand Av (ne Plaza)

OLDSMOBILE '38 Del. Trk. Sed. \$550 4 door model. Heater, very clean. \$45 down. Mayerling Motors 6500 24th & Michigan

WOODLAWN 1362 - 2 cms. Pri. entrance. Newly furn. & decor. Prigidaire. Gas incl. \$3-56

Quick drying cement supplied. No questions asked. Apply Box 1342

Yng hi-sch grad, desires off, wk or reception. Hollycourt 7373

Glesming grape-tone marcon finish. Equipment includes radio, climatizer etc. Exceptionally low mileage. Like new \$895

2435 W WABASH Independence 5310

Officials bought and gold Box 221

INDIGESTION MAY AFFECT THE HEART

At the first sign of distress, smart me and women depend on CHESTER'S PATENT REMEDY

made of fastest acting medicine for actindigestion. If the first dose doesn't prove CHESTER'S best, return benders and receive DOUBLE months in the

OLYMPIC HO' Lg rooms; new & showez. 200 N Osk - St

Going chesp.

CASH IN TEL AUI 20 MG

20 years i

6213 W STALL)

VISIT Paula's P Conditioned. Al pick from. Low prices

Complete secre actual work on : Free catalog. Also Brush up 'Complete

AMERICAN BU

WALTZ, fox troit 7 for \$5. No app Ren. 21 316

ALLIED E

MANICUR

CONFIDE

2 bedrooms & p Combination to ice water. Comp

Sincleir Fully sir condit extra. This car v colour you like,

The Very Highe "We slan purch Pawn Tickets"

YOU RECEIV

WINT

5000 SIN

New & used violins & cases. Bargain prices. Telescopic sights optional. 423 S Clark Blvd. Open

PACKARD '40 deluxe Sedan \$750 Used 5 mths. 4dr trunk. Radio & heater. Linuxey Lakeview 3074

Beauty Operators Trained at DE VERE UNIVERSITY

see In the State's leading salons. We take pride in their success. Rates, terms catalog on request. No obligation.

Day/evening classes De VERE SO E RANDOLPH BLVD.

HAYLEY, I hav u. Eric. xxxxx PS. Will you help me with my lines Reply Box 63980

Effis 4535 - 2 nm basement spt. Kit. elec frig. Free gas 55-59

LAUNDRESS. Good shirt ironer. Cleaning. Fast worker. Triangle 4200

48K Spectrum £6.95

MICROSPHERE 72 ROSEBERY ROAD LONDON N10 2LA CONTACT SAM CRUISE

The shoot 'em ups - and downs - of all the latest games. Reviewed this month by Rick Robson, Gwyn Hughes, Rachael J. Smith, Luke C., **Max Phillips and** Phil South.

Uh-oh, a guard. Despite his pike he won't pick a fight unless you're in the way as he patrols between doors Then use fire as you parry

Problem: how to get your hands on the bottle when it's behind a locked door. To do so you'll need to leave this screen bottom right and climb outside to enter top right.

Pieces of floor like this just aren't so solid. In fact you'll tumble through them. But that works both ways — you can also leap up without crushing that

US Gold/£7.95

Rachael 'Zee' is for Zorro - not

'zed' and I'm not zorry to zay

American hero. To protect the

poor and innocent he dresses in a floppy hat, cape, black silky shirt with ruffles, tight trousers . . . and are you sure this is 'all-American'?

Though he isn't so well known in this country, Zorro is a sort of trans-Atlantic Robin Hood, vanquishing villains along the Mexican border and carving his initial into their chests by way of a calling card. He's swashed his buckle in films and books and now it's time for Zorro to meet the Z80 in an arcade adventure. The plot. Evil Sergeant Garcia (Boo, hiss - never trust these Hispanic types - he probably already has a 128K Speccy too) has kidnapped a beautiful Senorita and before you can say Olé he's holding her captive in his castle. In fact

you get the whole drama played out before you as this

off to rescue her.

fair Sprite-orita is hustled to the

hacienda. So you grab her hankie as it floats to the ground

(hope it's a clean one) and set

It's important to say right from the start that Zorro won't

Unlike the Commodore

box (naughty), all the characters are silhouettes,

rather well.

scuttling around a primarily black on yellow landscape. It's a pity the setting couldn't have been more atmospheric because the game itself plays

backtracking to another to benefit from their effects. It

gives you more of a sense of

place and less of a feeling of just clearing screens. There

are objects to pick up, though

to be immediately obvious,

that guarantee Zorro will

always bounce back.

leads to a ghostly 'zee'

what they're used for is unlikely

plus lifts and even trampolines

Combat comes when you

play or driving them off ledges

appearing. Actually they're not

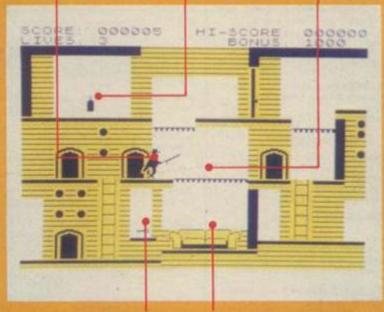
meet the guards. And sword

win any awards for its graphics.

version, which looks rather nice from the screen shots on the

What you have is a platforms and ladders game but with some rather clever puzzles. Many of these involve doing things on one screen then

zo because Zorro is an all-

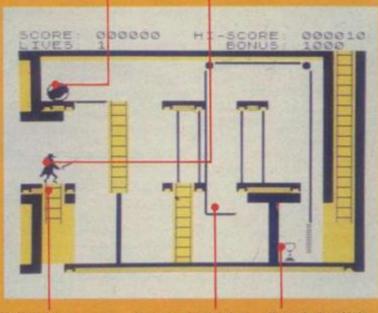


Here's the key to the door - that's simple - but the key to the screen is getting over the wall so you can get up there.

A rolling stone gathers no moss but if you roll this boulder it'll cause the lift next to it to descend. That forces one up from the floor on the other side of the ladder, which it'll then roll onto.

was always taught not to bounce on the furniture, but stand here and keep Up pressed to gain height then add Right and you'll sail up to the next level. Sofa, so good.

Well, here's our hero, pondering just how to win the cup. Let's not question the presence of all those platforms and pulleys when their logic has such a loopy charm.



You'll need a counterbalance to raise the boulder on the second lift so that it can travel even further, Luckily there's one planted down here so you'll need all your trampolining skills to get it!

The eventual resting place of the stone. Its weight will lift that door enough for you to slip under it so all you have to do now is work ladder on the far right.

No wonder the goblet's well protected. Like several other objects in the game it has magical properties.

at all hard to hack and you're more likely to need your four lives to experiment with tricky leaps. Here's the game's other potential failing. Once you've solved the problems all you can do is race against time for a higher bonus. That said though, Zorro is fun to play and surprisingly addictive.



Elite/£6.95
Gwyn Amidst all the sophistication of games, the half screen tall sprites, the icon driven adventures, it's worth

remembering where it all began ... in the Arcades. It's worth breathing a nostalgic sigh for the times when all games were simple — some were simply dreadful but others were simply wonderful.

And let us not forget Miner Willy, Matthew Smith's classic coal cutter. His platform jumping exploits created so many clones that many people still run screaming when they see a game with only left, right and jump controls. (Right, nurse, I think we've lulled this reader into a sense of security. Now just slip the strait jacket on. Nice and secure? Good.)

Roller Coaster has only one key in addition to right, left and jump — but that's only a go faster button. (Good thing we used the manacles . . . can't escape when I drop the big one.) And Roller Coaster is great. Its plot is minimal —

collect the money bags left inconveniently around a fairground, jump over obstacles and go for rides. That's all. Your little man doesn't even have a name.

So what is it that makes Roller Coaster almost as much fun as the real thing? I'm not sure. It's a high scorer — but that's not enough. And it looks good and has some classy opening music and spot effects — but that's not enough either. Then I think it must be the sheer addictiveness. Nothing's so difficult that you won't achieve something first time — but to get every bag you'll need to practise on every ride. And curiosity about what comes next will spur you on.

Elite has made something of a speciality converting arcade games of late. Here they have an original that's worthy of a full sized machine of its own.



Alligata/£4.99

Max Here's a trivial snippet that might come in useful one day. Ever since the ridiculously over-priced *Trivial Pursuit* board game, everyone who's produced a quiz game has patented it in the rather silly belief that they will make millions from it. Now *Quiz Quest* is a pretty good game and, as computer quizzes go, it's easily one of the best around. But it's patently not going to make anyone rich!

The idea is that you must complete a quiz of eight questions. Get one wrong and you then have to complete another set of questions, starting at the same question number you got wrong in the first set. So every mistake you make keeps adding vast numbers of new questions to answer before you get to finish the quiz. And it's against the clock. This is a pretty good variation on the theme but it's very hard to tell it's going on when you're playing. There's no immediate indication whether your answers



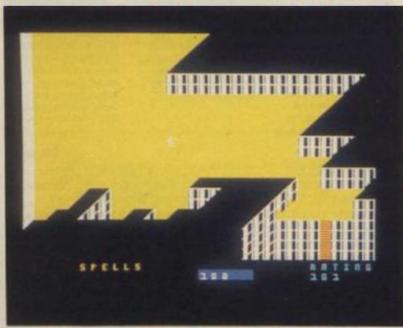
are right or wrong and no way of knowing quite where you're up to. So you just keep answering questions until it's all over.

As for the questions, QQ comes with two general knowledge games, pop, sport and TV as well as a program to let you write your own quizzes and an inlay card that doesn't relate much to what's on the tape! Alligata has another 10 subjects on a £4.99 tape and the authors (who still ain't rich) are doing a book. There's enough to be getting on with

but the questions seemed to be 90% dead easy, 10% flippin' impossible which meant the game didn't last long at Castle Rathbone.



REALM OF IMPOSSIBILITY



Ariolasoft/£7.95

Gwyn There's nothing wrong with calling a game Realm of Impossibility, providing it's within the realms of playability. This isn't.

This is a maze game of sorts; the usual with lots of nasties that make directly for you and sap your strength. You have to fend them off by dropping crosses or using accumulated power for stronger spells, such as Freeze.What marks it out is the landscape.

Unlike most two player options the one in Realm of Impossibility is aimed at co-operation. It's a nice touch, and means that to improve your own best score you need to keep your opponent alive so that they can help you in turn.

Unlucky for some, maybe, there are thirteen of these caves, each needing to be loaded from the second side of the tape, and some remain locked and unloadable until other levels have been conquered. Though multi-loads can be annoying this one means the game is big.

All of these features have made this a US top five hit and it's not difficult to see why. But — or should that be but — Ariolasoft's conversion is atrocious. As an object lesson in flickery sprites, bad control and the odd bug or three, it's excellent. Yes, it's just playable if you can put up with invisible (white on yellow) characters and severe steering problems. It's as if the programming had been done by people who knew

nothing of the Spectrum's capabilities — and even then they'd done it in a hurry! This belongs in the Realm of the Turkey.

Beyond/£9.95
Rachael 'Warning. Orbit decaying rapidly.' "Oh no!" 'Helm still not responding.' "Where's Zoff?" Meanwhile . . . An escape pod blasts off from the ship . . 'ROM parity error. Support systems failing. Locate and neutralise Zoff.' "Hold on!"

KERR-ASHHH!!!!

Yes, they're back — the Enigma Team, the intergalactic good guys (and gal) who didn't so much marry the micro game and movie as combine the computer adventure with the comic book. Can't you just see them in the poorly printed pages of Marvel? Here they are again, along with arch enemy and all round baddy, General Zoff. (No Jemimah — that's not a Bulgarian insult. 'Why don't you Z . . . off!')

While escorting said dictator to face the emperor's wrath (and a long term in imperial chokey), he lets go a mighty psionic blast. Which just goes to show, they should never have let him near the pickled eggs. As the ship circles out of control, he ejects. And when the team wakes up they find their numbers reduced to five. So, as they say in all the best comics, roll call. There's Zark, Sevrina, Syylk and Maul plus ... you as the team leader.

... you as the team leader.
Will those four, under your
command, be able to recapture
Zoff?

The action takes place in the subterranean complex beneath the capital of Syylk's home world. However that old platitude 'There's no place like home' is less than apt as the planet is wracked by warfare. In the good corner, the home team are the insectoid inhabitants, while their opponents are reptiles, loyal to Zoff. It's into this battlezone that the ship has crashed and the first task may well be to locate the chief insect, Big Bluebottle, and make friends.

Meanwhile Zoff will be making for an escape craft and safety, and that's hidden in the reptiloid zone (Didntcha just know it!). But first he'll need his passport to freedom — the Zoffcard (don't leave home without it.) And as if that wasn't enough the arrival of republican destructor tugs is imminent, all ready to eliminate the planet once and for all, so there's no hanging around to admire the view.

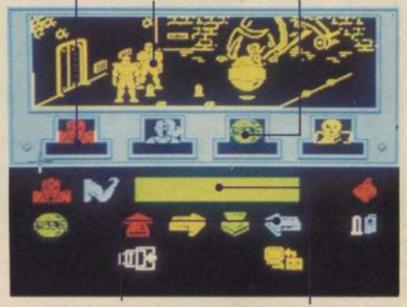
The most obvious difference between this and its predecessor, Shadowfire, is that now the action is happening right there before your very eyes — and in the glories of wide screen too! The icons are still there for you to pass on your commands, but now when you tell Syylk to go left, you'll actually see him do it in full animation. The subterranean chambers are effectively done and there's a

reasonable sense of frenzied action in the battle scenes. Best though is the opening music, the Enigma Team theme, and the spot effects.

As before there's a lot of strategy involved to use each character to your best advantage. And not only have they got minds of their own, not placing themselves in positions of obvious danger, but they

Zark Montor — the head of Enigma Team, he's more machine than man, making a real toughle. Choosing his icon here places him under your command. Syylk — a smoothie with a pathological hatred of Zoff and high stamina and heavy armour to back it up. Though the screen's as yellow as he is, it's no sign of cowardice — just that he's currently under command.

Maul — not to be mistaken for a flying hamburger, this droid can have a devastating effect with his weaponry. Below these icons is a space to record any sequences of commands entered.

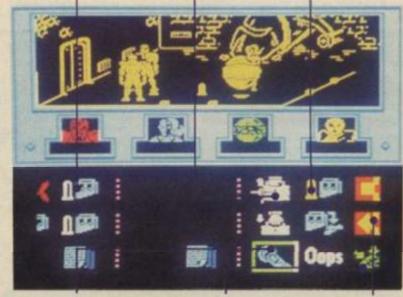


The flashing box indicates that this icon to move left is currently under the cursor. Muscle beach? No, just an indication of strength remaining for the character in play. A written status report is available by choosing the icon below the right arrow.

Here's where the contents of an area appear. Once you've decided to pick something up you then choose what here. Once it's done it'll appear in your personal inventory in the next section.

No there aren't any brief cases in the game — these two icons indicate pick up and drop, but you'll need to use them in conjunction with the inventories.

The colour of the bullet here indicates how much ammunition is left for the current character. It's worth keeping an eye on this and using the icon below to reload whenever it goes red.



Avon calling! No, not a door bell but an activate or enter icon. You'll need to build the command by stating what you're activating from your inventory then. And if you didn't mean to set those explosives there's always the Cops command to erase your error.

At times a futile, heroic sacrifice is needed. Then this is the icon for you as it transfers total control of the character to you so that they're moved by the joystick alone.

There are two battle strategies. The double arrow is a general melée but the single one creates singularity of mind in hounding a chosen individual to the death. Useful for when you locate Zoff.

also have individual characteristics which shape their behaviour. There's a lot to find and use properly if you're to recapture Zoff. And if you try to do anything without making a map then you deserve to get as lost as you undoubtedly will!

Speaking personally, I must confess that my reaction to the game wasn't overwhelming but there's no denying that the

Enigma Team is a great concept and there's certainly nothing wrong with the program. I'm sure that fans of Shadowfire will soon become absorbed.



IT'S 1986 - THE YEAR OF COMMUNICATIONS

Why buy programmes for your Spectrum when a world of free 'telesoftware' is open to you. Discover Prestel, Micronet 800, Viewfax, bulletin boards and open a whole new world. Even user to user.

Everybody's doing it - linking their home computers to giant mainframes and networking to thousands of other micro users via the phone and a modern

A whole new world of mainframe games, electronic mail, free 'telesoftware', electronic notice boards, real time conversation, armchair shopping and home-banking will be at your fingertips! And at local and cheap rate, phone charges are only around 40p for a whole

Spectrum 16k, 48k, Spectrum + The VTX 5000 Modem comes complete with all the software (in ROM) required to access the world of electronic communications, networks, telesoftware and databases (both public and private.)

(User to user software on cassette £3.95 extra)

Terminal Emulation Software Package to link to commercial databases and bulletin boards which use ASCII format on cassette £6.95.

The VTX 5000 requires no external power and fits under your Spectrum to become part of the machine. Only one lead links your computer to the outside world.

HEM IN 5000 FOR THE SPECTRUM 16K, 48K AND SPECTRUM + THE VTX 5000 IS AVAILABLE AT A VERY SPECIAL PRICE £29.95 inclusive of VAT and P&P for a limited period only.

SPECIAL, SPECIAL OFFER

Order your VTX 5000 NOW and get a FREE quarter's subscription to Micronet 800 and Viewfax.

All modems provide 1200/75 baud, enabling access to Prestel, Micronet 800, BT Gold, Farmlink, Citiservices, Homelink, and some free bulletin boards (some databases and networks require a small subscription). Fully BT Approved.

Simply clip the coupon and send it with a cheque (payable to Modem House) to:

MODEM HOUSE, 70 Longbrook Street, Exeter,

Devon EX4 7AP Tel: (0392) 213355

APPROVED elecommunication systems specified n the instructions for use subject to the conditions set out in them

base £13

Please send to me: □ Spectrum Modems(s) £29.95 User to user software £3.95 PSS Comms/Terminal £6.95 l enclose £_ Name_

Telephone...

Address

Please allow 28 day delivery Access/Visa No_

This offer applies only while stocks last.

YS/4/86

WDSoftware

FOR THE QL:

TOSS

Forget that tedious, time-consuming syntax! Just move the cursor and press SPACE for all your file commands. Cursor keys or you joystick allow you to access microdrives (up to it) and floppy discs (as many as your interface allows) with up to 150 files on each! Scroll and print directories, COPY, DELETE or PRINT any file, select TV or Monitor mode before LOADing or RUNning any program. You only use the keyboard to set the DATE or label a device when PORMATing. Easy to use with Peion and other software. No silly knot to learn — [OSS will TELL you what it's going to do! Programmer's toolkit and mass copying/printing utilities also supplied. Specify microdrive-only, Micropertpheral or CST-compatible disc versions.

base £7 RefOL7

1300 useful QL references with ARCHIVE 2 search/print program. Too long for just one cartridge, so if you have RefQL5 just pay 2 and extra media cost to update.

£5.50 Mdv Extension Cable

FOR THE QL, SPECTRUM, BBC, ELECTRON:

writes to make a manuscriptor with more helpful features. What else can offer 100 all the hasics? Disc eversion unsurable for BBC B+

FOR THE SPECTRUM:

WorDfinder (microdrive/disc only)

base £8

For CHEATING at crosswords. Finds m-ss-ng letters, solves an share a cartridge. 10-letter word ending in ATE? No problem.

Tradewind

base £3

base £3

Tersey Ouest re in time. Background of Jessey folklore from Stone Age to Bergerac.

QL hardware and software from many sources. Ask for list/quotation ORDERING + ADD COST OF MEDIUM. POSTAGE £1 OUTSIDE EUROPE. Mdv or 5.25" floppy = £2 3.5" floppy = £4 Cassette =£0

Payment:

By ACCESS/Eurocard/MasterCard or STERLING (UK bank cheques, Eurocheques, drafts or International GIRO) TO:

WDSoftware YS, Hilltop, St Mary, Jersey, C.I. Tel: (0534) 81392



This issue's programs are already on tape...

Save your time, energy and sanity when you load direct from DigTape cassette, this month's program listings (as marked).

Create your own collection of games and utilities which will prove invaluable for years to come and will look superb when added to your own library.

This unique service, provided by DigTape in conjunction with YOUR SINCLAIR, is to increase the enjoyment for the readers. This service will be available every month.

Back issues, from July 1985 on, will be available on request.

Telephone Orders: ACCESS CARD Holders ring (0792) 799193

POTTHE DO



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 ZX Basic! **PLUS FREE Sprite Designer**



YS MegaBasic has got ... everything on the left ... plus everything that ZX Basic has ... and more ... and still leaves you with 22K user

memory.

TEACH YOUR OLD DOG NEW TRICKS

YS MegaBasic is only available direct from the Your Sinclair Mail Order department. It comes on cassette complete with 30 page manual and is fully microdrive compatible. To order, complete this coupon and mail it with a cheque or postal order for £7.95, payable to Sportscene Specialist Press, to YS MEGABASIC OFFER, PO BOX 320, LONDON N21 2NB. (BLOCK CAPITALS PLEASE)

Name AddressPostcode..... Phone.....

Please allow up to 28 days for delivery.



Cheetah Marketing Ltd.

Send cheque/PO now to

A built in auto-fire switch provides continuous

shooting at the touch of a

fire button.

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

HIRE SPECTRUM

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

Have you ever been disappointed with software you've purchased? Now you can hire it first. If you like it, buy it at £1.00 off our already discounted prices. If you don't, send it back and it will only cost you the hire fee.

NSL is the best SPECTRUM library, with over 8,000 delighted members, the largest range of tapes and controlled by our computer with 22 mb hard disc. JOIN TODAY, or, if you don't believe our claims write or 'phone 01-661 9240 for a catalogue, and check our competitors. We're confident you'll join NSL

NATIONAL SOFTWARE LIBRARY

42 Harefield Avenue, Cheam, Surrey SM2 7NE.

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



present

56K Spectrum extension? Instant back-up of any program? Joystick & video interfaces? YES! All this & even more with

NO1 SPECTRUM MULTIPURPOSE INTERFACE

11000 1

UNPRECEDENTED - UNPARALELLED - UNBEATABLE

*Internal 8K ROM and 6K RAM open new concepts in Spectrum computing: 100% reliable saving of anything, enytime and of all types of peripherals with extra 8K at user's disposal and with a full peek & poke facility covering the entire 56K.

MULTIFACE ONE does not take any part of Spectrum RAM & does not need any additional software. Just push a button the freeze a program, save it and restart from the same point next time. Peek/poke facility and 8K RAM (say with a monitor disassembler) are also ideal for studying, modifying, developing programs.

#Menu-driven with prompts & one-touch commands: 1) Push button 2) Select function: exit/return/save/poke 3) Input name 4) Save to: tape/cartridge/water/opus/beta

Extremely poverful & efficient compressing for fast re-loading & using minimal room on cartridges, tapes, waters, disks. A 7K screen can be compressed to a few hundred bytes, the whole RAM into a few K (depending on a program).

#Option to save a full 24-line screen only # Pressing the button & return can restart a "crashed" comgh extension bus for connecting other peripherals. #User friendly, fully error trapped, simply magic

Expand your Spectrum to 56 K and stretch its capabilities even further with

MUNITAGE ORE ESSENTIAL SPECTRUM COMPANION

TRARS-EXPRE

TOP SOFTWARE AT BOTTOM PRICE

This is a great game. CAS Well worth buying If you've ans sense you'll order your copy now. PCs

NOW FOR AMSTRAD!! SPECTRUM version at Xmas PF

(UK & Europe orders please Please send me (tick as applicable): MULTIFACE I enclose a cheque/PO for £ add £1 overseas £2) TRANS-EXPRESS cartridge £9.95 ☐ tape (for m'drive) £ 7.95 ☐ £9.95 water (Rotronics) £ 9.95 £7.95 with supplement £ 9.95 £ 6.95 or debit my No disk (Opus Discovery) MUSIC TYPEWRITER WRIGGLER Spectrum tape £4.95 ☐ or cartridge € 6.95 🗆 Address..... WRIGGLER Amstrad tape £7.95 Or disk version € 11.95 🗆

POMANTIC ROBOT 77 Dyne Road London NW6 7DR 2 24 hrs orders 01-625 9463



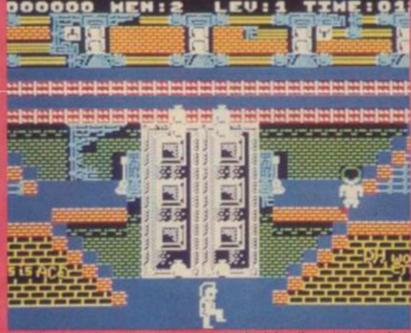




Quicksilva/£7.99

Max Zall ve do ze funny vork zen? Alphonse T. Nurd and his badly behaved alter-ego are a couple of versatile sprites with the ability to walk in a rather comic way, pull levers, climb stairs, bend down, open things and so on. But what's most amusing about them is the crudity of it all. And it's not just colour clashing — on the occasions you can't see through them, they cast black rectangular shadows wherever they go. In a game where splitpixel positioning is essential, it makes playing nigh-on impossible

But I'm in two minds about the game itself. To get through a room, you have to pull various switches, bolts on doors and so on. All the time, your alter-ego is wandering around in a fairly predictable way putting switches off,



pushing bolts in and anything else he can think of to hinder your progress. The solution appears to be to work out what

needs doing (by watching what he does) and then following him at a distance of a couple of steps, doing the opposite. This

is pretty original for something that's a platforms'n'iadders game at heart. Particularly as you have to keep switching the scoring back on in the first

There's also a very original scratch-wiv-a-coin lottery card that tells you what you're supposed to do on the first five screens. This suggests there's a lot more to the game than just getting through the screens but since the animation makes it all so hard, I can't tell you for sure. So this is a good one for complete addicts who like a challenge and for whom the neanderthal coding adds to the game's excitement rather than puts you off.



BugBytes/£2.95 Rick Okay, Algie, more cabbage crates over the briney .ack ... ack . ack. Boggled by Biggles? Then Bug-Byte's Flyer-Fox (any similarity to Firefox is purely on purpose) might not be your cup of rosy lea. Admittedly the technology might be updated but whichever way you look at it, this is a fighter simulation that pre-dates the Red Baron in concept.

But they do say the old 'uns are the best 'uns, and at the price it provides a competent compo between you and your jet-set enemy as you try to protect a jumbo. It gives you the thrills, but don't expect the frills.

You're given a pilot's eye view, with instrumentation giving fuel, compass, score, altitude, flight attitude and damage reports. You can't fly above 19,153 feet or. curiously, below 11,024 feet. At that height you're given a simple graphic of the terrain below. Much above and it's just blue-sky — occasionally full of bandits who want to erase yer from the azure. And listen out for the passable speech effects warning of imminent attack and your damage status. They're somewhat arbitrary, but that makes it more fun, eh, what, Tufty?

Though simplicity itself in its one screen format things get increasingly hectic through its six levels. So, if you figure a trigger's what fingers are for then go for it, Ginger.









Dk'Tronics/£6.95

Rick Dk'Tronics certainly do things big! Following their success with mega-huge graphics on Popeye they've used the same format for this slice of the seaside postcard buffoonery of Benny Hill

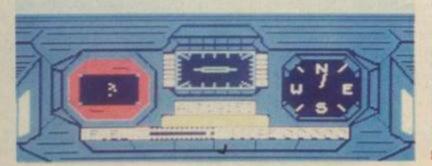
As Hill's subtle Scuttle persona (and scuttle is what you'll do plenty of), bereted and bespectacled, you have to negotiate a crowded street to help Mrs. Harras get her washing in. Walk into any hazards - walls, lamp-posts and so on and you'll lose points. It's never explained why Mrs Harras' washing line is in the middle of the road. Nor can you explain to the street busybody that you're not nicking the knickers but helping. So this enraged and of course, enormously busted

woman will chase and trample you revealing her Norah Batty Bloomers to the world — and what's worse, pinch back the

Should you succeed in your longiohn larceny (20 points a garment, whether bra or trousers) within the allotted time, you'll pass on to stages 2 and 3. And once again, much as in life, your innocence will be misconstrued and farmers and policemen will

True Hill fans will lament the absence of Hill's Angels and the risky jokes but if you prefer being chased to chaste, this is the one for you, poor soul.





N-n-n-now we're going to hear from the big G Gwyn Hughes. He's had a sneak p-p-ppreview of Quicksilva's new game all about me-Me-Max Headroom. The pleasure's all yours.

veryone who enjoyed the debut of Max Headroom in Twenty Minutes Into The Future, the film that told the origin of TV's firs computer generated personality, will remember the chase through the Network 23 skyscraper—that elaborate game of cat and mouse with its battle for control of the computerised lift system and security cameras. Max Headroom, the game, is set a couple of months after the action of the film. But it's not really surprising that Argus has chosen this sequence as the basis for the game's scenario.

Arcade sequences are interlinked with puzzles and it's with one of these that the game starts. To reach the Executive level, where reporter Edison Carter will recover the electronic box in which his personality has been captured, you must first take control of the lifts. Fail and he'll be shuttled between any of the 199 floors below. Only when you've mastered the first puzzle can you shoot up to floor 200. Once you're up to the Execu-tive level there's another test to

complete — the resistor game. If you crack it, you'll take control of e scanners on that floor. Then it's a question of searching the rooms of the nine floors to dis-cover the eight secret hexadeci-mal codes. But you are not alone — there's a gang of punkish thugs on Edison's tail so there's

no time to waste. As soon as you've located the codes, hop back in the lift and shoot up to floor 210, the Presidential Suite. Put the code into the computer there and you'll be presented with another code for the computer lab on floor 209. It's there that Edison will find the object of his search — the Max Personality Module. Then it's back to the lift and down to the basement and the car park.

And that's it ... Well, not quite, because even though the game will be over, the program isn't nd you'll have to load another block of code for the reward screen. Then you'll be greeted by none other than an all-talking, fully animated of flat head himself, living inside your computer and presumably chatting about

golf shoes or more importantly himself. Well worth p-p-pplaying for, huh. Only k-k-k-k-k-

kidding.

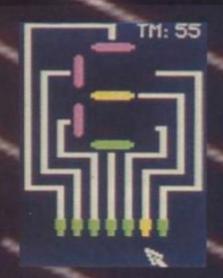
MAX-THEA

irk on the this sponmhustion. Even nastier rk 23 if news leaked out pverts were behind the

ace reporter, Edison Carter on to the big bang theor hut's why he had to die. The order

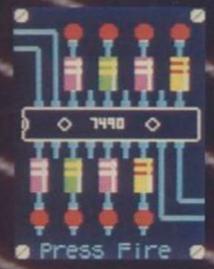
came through from Grosman head of the network, "Get Carter! the corridors of the skyscaper HQ. down the lifts and out into the underground carpark. But just as freedom was in sight a barrier came down. The last words to illuminate Edison Carter's consciousness were Max Headroom 2.3m.

And that's who Carter's compa was - Max Headroom. The man who created Blipverts for Network 23 took Carter's personality and



LCD

Just like the circuitry that controls a watch's LCD display, these seven bars can be switched on to form any numerical digit and several letters. The secret is to form the letter E (for Executive, see?) and later P (for President) before the time runs out. To make it more difficult the bars have a limited life so you need to replenish the charges if you're to take the lift to floor 200.



Simon

Not just anybody's allowed into the Executive level — after all, you can't have the oiks using the managerial bog! To prove your worth, every time you try to exit at one of its floors you have to match that tune, only this Simon isn't so simple — you have to get the order of the notes and match the resistors in reverse!

turned it into a media star. But even he had no idea of the power and potential his box of computer sticks called up. That's why Grosman could not afford to let Max fall into erival's hands — in the ratings war. Max Headroom helps you win. Max made people explode too — but only with laughter.

When another television statuan got hold of Max, Grosman just had to get him back — and he did. But he reckoned without Edison Carter - he may have crashed the barrier but at least he didn't lose his head

Going up — and the building glides by as the high speed lift rockets Edison into the unknown.

Behind every good television personality is a good producer and here's the role you play. Theora Jones, who guides Edison in his quest.

the lift, and it flashes while the thing's on its way but in a 210 storey building can take some



Despite his problems with the lift this shows that Edison is feeling confident and is uninjured. But fail to dodge those bullets and soon it will pass through bruised and wounded to

There's never a lift when you want one, but Edison can't afford to hang around because that's a gun-toting punk just coming into shot.

What skeletons does this closet hide? If you're lucky it will be part of the code that'll let you into the lab, so once you've entered the room you'd better open it.

No time to waste as the minutes pass relentlessly by. Luckily there's a hold facility to give you time to gather your



Keep on running. Choosing this icon gives movement control to the joystick. Pressing fire lets you leave it and the joystick

Well here he is, hunky Edison Carter, an investigative journalist who thinks he's got it hard, working for Channel 23 and having his personality stolen. He should try Castle

Uh-oh, looks like you failed at the first test. This means that you didn't make an E, or a digit when you reached the executive lower, so you'll have to go where the lift chooses.

If you want to know where the heavy mob is a quick scan through the security cameras will do the trick. After all. they're not the sort of people you'd like to bump into unexpectedly.

When you want to leave a room screen this is the option the movement icon and go -

Taking a breather's one way of increasing your strength, but don't get caught napping.

KING HE

In honour of the impending release of this Headroom game, we sent our cub reporter Snowy, Sony in hand, over to the parking lot where the Big Time Television bus is sited, still "Making tomorrow seem like yesterday . . ." Ahem, sure thing, Reg! Take it away Snowy!

Good Afternoon Mr Headroom.

There's no need to stand on ceremony there, Snowy. All my friends call me Max, so just call me plain old Mr Max Headroom Sir. Hah! I'm only kidding, you hope! Max, to start off with a bit of background,

do you have any idols at the moment? rarely have any idle moments.

Er...no, I mean do you have any idols? I am, as I'm sure you know a very deeeeply religious person. No, I'm not kidding. I consider it my duty to turn up every Sunday

on the putting green I mean to say, do you have any heroes? Snowy. A person of my modest

predisposition doesn't have heroes, only equals. Ahh. . . . except mebbe one. Ya, just a lit-tel tiny hero and that's Sevvy . .

Ballesteros . . . (silence)

I hope you don't mind me asking, but a lot of people have asked me what you put on your hair to make it stiff like that?

don't mind telling you that what I put on my head is a secret . . . aw, alright I'll tell you. Syrup of figs. Keeps the ol' brain on it's toes 'n' keeps the thoughts running freely. Have you got a girlfriend at the moment?

Oh no, I'm just too busy. Although once a week there's this dinky little TV camera that's making eye at me. I don't know if I could handle living with someone with one eye. And it's glass too, y'know.

How old are you?

Look at my serial number.

Well, thanks for talking to me, Max. That's perfectly alright, Snowy. The pleasure

is en-tirely your own. Oh, one last question.

Mmm hmm?

What do you think of Hex Loader? Who he?



HEART TO

Are you into random skewing? You are? Then join skewball Tim Hartnell on the random number trail.

n 1347 Chinese sage Li Ran Dum he say, I have invented random numbers. His heirs still receive a royalty for every random number generated in the world.

Each Sinclair computer, along with just about every other micro that I know of, comes complete with an inbuilt function to generate random numbers. Actually it's a bit of a con - the numbers aren't really random as they're the result of a decision made by the computer in line with an inbuilt program. This program dictates specific actions in response to specific situations. To put it a simpler way, if you knew the computer's inner program and what it responded to you'd be able to predict exactly which 'random number' it would

It'd be pretty difficult to do this though because the computer chooses each number from a very long list, and then repeats the list when it gets to the end. It'd be almost impossible to figure out when the list began again.

So, how does a Spectrum or QL create random numbers? There are several 'random number' algorithms in existence an early one was developed by one of the grandfathers of computers (no, not Uncle Clive, decades before he thought of the ZX80), John von Neuman. He worked out a method of generating random numbers based on taking a four-figure number, such as 8931, then squaring it, to produce 79762761 in this case, and from that selecting the middle four digits, 7627. These four digits were then used as the first random number, then they were squared (58171129) to create the next number in the sequence and so

Right, now you've got the basic concept behind random numbers here's a small program that enables you to produce von Neuman numbers on your Speccy.

- 10 INPUT "Enter number "ja
- 20 LET bs=STRS (a+a)
- 30 LET a=VAL (68(3 TD 6))
- 40 PRINT a
- 50 SO TO 10*(a>999)+10

When it starts, enter any fourdigit number; it'll then run for a while and stop. It's now waiting for a new input. You'll soon discover this doesn't produce the world's most satisfactory random numbers - in many cases the numbers start to repeat fairly quickly.

generators inside micros use a formula along the lines of SEED=(ANUMBER-SEED+AN-OTHERNUMBER) MOD YET ANOTHER NUMBER. SEED is then fed into the formula for the next run through. Modular division actually returns the remainder of a division (so 10 MOD 3 is 1) but we don't have this on a Spectrum. However, it's pretty easy to simulate it.

Here's a routine that generates random numbers using an approach similar to the one that occurs deep in your Spectrum's gizzards

- 10 INPUT a
- 20 INPUT b
- 30 INPUT c
- 40 INPUT seed
- 50 LET seed=((a*seed+b)/c)-

INT ((amend+b)/c)

60 PRINT seed

70 BO TO 50

The first two numbers (a and b) should be quite large and the next two (c and seed) relatively small. If you want a run that continues for a long time without repeating try 1478392 for a, 5228791 for b, 778 for c and 459 for seed

MONTE CARLO OR BUST

John von Neuman also developed a rather neat way of working out areas, based on random numbers called the Monte Carlo Method. If you had a map of an area containing a single continent and you randomly dropped darts on the map and then counted how many darts fell on the continent and how many fell outside it - the

area of the continent would be proportional to those that fell outside. Got that? By knowing the total area of the map you could then work out the approximate area of the continent.

We can use this method to work out an approximation to Pi. Imagine you had a square with a circle drawn inside it so that it was just touching the sides. Now, mentally divide the square and the circle into four, throw away three quarters of this and you're left with a quarter square amazing. Now imagine you were dropping darts on the square, some would fall outside the circle and some within it. If the darts were dropped randomly the ratio between these two values would be Pi/4. This program drops the darts for you:

- 10 LET a=0:LET b=0
- 20 GOSUB 100
- 30 LET b=b+d
- 40 LET a=a+1
- 50 LET p=4*b/a
- 60 PDKE 23692,-1
- 70 PRINT a: TAB 6: ABS(PI-p)
 - : TAB 191p
- 80 GO TO 20
- 90 REM ********
- 100 LET d=0
- 110 LET m=RND
- 120 LET z=RND
- 130 IF mem + zez(1 THEN
 - LET del

140 RETURN

This'll print out, in line 70, the number of darts you've dropped (a), the difference between Pi and the number you've calculated as an approximation to it (Pi-p) and, finally, 'your' version of Pi (p). After dropping 5000 darts, I got the following printout from line 70: 5000 .0023926534 3.3192

An error of .002 isn't bad, but I decided to run the program till it dropped 20,000 darts to produce this result:

20000 .0016800733 3.1432727

As the Spectrum holds Pi as 3.1415927 the result I got is a pretty fair approximation. I doubt if running it longer would produce a better result but if you want to melt down your Spectrum to prove me wrong do have a go. But don't forget the royalties to Li Ran Dum!

JUST HOW RANDOM'S RANDOM?

You can find out how random the numbers on your Speccy are by writing a short program that not only generates the numbers but also works out their distribution. You'll notice in the next program, which does this, that the first line is RANDOMIZE. This looks at how many frames have been generated on your TV since you first turned on the Spectrum, and uses this to select a random starting position from within the super-long list from which the random numbers are chosen. All this ensures the numbers are more truly random.

- 10 RANDOMIZE
- 20 DIM #(10)
- 30 FOR j=1 TO 1000
- 40 LET b=INT (RND+10+1)
- 50 LET a(b)=a(b)+1
- 60 NEXT 1
- 70 FOR j=1 TO 10
- BO PRINT j;" ";a(j)/10;"%"
- 90 NEXT J

If you have a shufti at the program you'll see it stores the frequency with which the numbers are generated in an array. Loop 70 to 90 prints out the frequency as a percentage of the whole run.

I ran the program three times and took an average of the results. If the random number generator was perfect, and I ran the program for an infinite amount of time, they would come out at exactly 10 percent. As you can see from the results below they came pretty damn close, even on such a relatively small sample.

Random Results 1 - 9.6%2

- 10.1% 3 -10.4%4 -10.0%5 -9.9%6 - 10.3%

8-10.5% 7 - 10.0%9 - 9.4%10 - 9.9%

If you change line 30 to read FOR j=1 TO 10000 and the divisor in line 80 to 100 and run the program three times again the results will be even more accurate

Random skew

Now there may be times, when creating computer simulations for example, when you want skewed random numbers, in other words numbers that are biased in some way. This is actually quite easy to do. If you wanted lower numbers to appear more frequently than higher ones all you'd need to do is change line 40 of the program to: 40 LET b=INT (RND+RND+10+1)

If you run this program three times and average the results you'll see that a higher percentage of the numbers that appear are low — 1,2 and 3 appear more often than 8,9 and 10. And if you're wondering how this works - it's simple! RND produces a number between zero and one and multiplying such numbers by themselves produces numbers that tend to be lower, towards zero, rather than

Maybe you can think of a more elegant method for biasing them upwards — I'd love to hear from you. I finally settled on: 35 LET d=RND+RND:IF d>1 THEN GO TO 35

40 LET b=INT (d-10+1) This method gets the right results but it's a bit brutal and disturbs the sequence numbers produced by the random number generator.

THEHITUST

Check out the latest chart and catch up on all the chat with Steve Colwill.

Chart Chat 4

After last month's choppin' and changin', a sort of calm has come over the new chart as the great Speccy-owning public recovers from its stuffing of Christmas turkey and Airport 99 films on the telly. Two new titles fill the top two slots this month: Winter Games and Rambo.

The surprise loss this month is *Daley Thompson's Super Test*. After 12 weeks almost continuously in the top five, Daley appears to have run out of Lucozade! We also say goodbye to *Monty On The Run* from Gremlin Graphics, *International Karate* and *Back To Skool*.

Amongst the uppers 'n' downers this month are Saboteur, up from 10 to 6 and Yie Ar Kung Fu, down from 2 to 4. Tomahawk drops 5 places to number 9 and Elite is down 2 to number 7. The megagame compilation, They Sold Ten Copies Between Them, is back in at number 10.

This Month's Top Ten Titles

Position	n Last month	Weeks in Chart	Title/Publisher
1	-	2	Winter Games/US Gold
2	-	3	Rambo/Ocean
3	1	6	Commando/Elite
4	2	5	Yie Ar Kung Fu/Imagine
5	-	2	Spellbound/Mastertronic
6	10	8	Saboteur/Durell
7	5	8	Elite/Firebird
8	-	2	Transformers/Ocean
9	4	6	 Tomahawk/Digital Integration
10	7	4	They Sold A Million/Hit Squad

Money Talks

Pssst. Want to hear a spot of scandal? There's a right old barney blown up at the moment about cut-price games and compilations. Some software producers (presumably those that charge a fair whack for their games) are arguing that including cheapo titles in the chart isn't on. They're asking Gallup, the people who compile the YS chart, to produce two charts — one for full-price games and one for the cheaples.

Of course, an alternative method of compiling the YS chart would be to take into account the cost of the game, as well as how many it's sold. Below we've worked out an alternative chart by multiplying the cost of each game by the number of sales. This gives us the 'Sponduliks Factor'. This number tells you just how much money the game is making.

aking.			
Position	Price	Title	Sponduliks Factor
1	£7.95	Winter Games	00000
2	£7.95	Rambo	00006
3	£7.95	Commando	00006
4	£14.95	Elite	00000
5	£7.95	Yie Ar Kung Fu	000004
6	£8.95	Saboteur	0004
7	€9.95	Tomahawk	000
8	£9.95	They Sold A Million	000
9	£6.95	Transformers	00
10	£9.95	Way Of The Exploding Fist	00

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

MicroScope 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	n ◆ Titte/Publisher
1	Daley Thompson's Decathlon/Ocean
2	Knightlore/ Ultimate
3	Skool Daze Microsphere
4	Booty Firebird
5	3D Star Strike/ Real Time
6	Doomdark's Revenge/ Beyond
7	Match Day/ Ocean
8	Pyjamarama/ Mikro-Gen
9	Underwuride/ Ultimate
10	Select 1 Computer Records
18	Months Ago
Positio	n • Title/Publisher
1	Sabre Wulf/ Ultimate
2	Matchpoint/ Psion
3	• TLL/ Vortex
4	Valhalla/ Legend
5	Lords of Midnight/ Beyond
6	Mugsy/ Melbourne House
7	War Of The Worlds/ CRL
8	Jet Set Willy/ Software Projects
9	Incredible Hulk/ Adventure International

A Slice Of Beefcake

• Psytron/ Beyond

Looking back at the last four months' number ones and breaking them down by category, you can see that Speccy owners must be a pretty fit lot. Nearly half the number one slots go to sports titles such as Daley Thompson's Super Test and Way Of The Exploding Fist. Other honours go to the beefcake/macho games Rambo and Commando and the more cerebral arcade adventure games, such as Fairlight.



HACKING AWAY

Fancy a real good POKE or maybe a bit of a hack? Look no further 'cos Chris Wood's here with the gen on all the latest games.

ou can stop holding your breath now 'cos I'm back with megatons of hacks and POKEs for all the latest hit games — Commando, Sweevo's World and Arc Of Yesod to name but a few. Hang on a tick though, you're gonna have to wait a bit longer 'cos I've got to do the decent thing and sort out a few of the cock-ups.

First off apologies to Mr JS
Brown of Cheshire who
underwent a sex change in issue 2
— sorry! Thanks for your tips for
Ad Astra anyway. Wayne
Griffiths, Jonathan Lynch,
Darren Hutchinson and
Anthony Palmer all wrote in to
point out that the Gyroscope
program in issue 2 was incomplete
— whoops. It should've read:
CLEAR 24063: LOAD "" SCREEN\$:
LOAD "" CODE
and I nearly forgot, after you've put
in all the POKEs you want do a
RANDOMIZE USR 52390.

Now it's on with the POKEs and have I got some POKEs for you this month. Or rather A Brown and Chris Boland from West Yorkshire have — they're quite a double act, 'A' provided the POKEs and Chris supplied the printer. Next time 'A' send in your full name and you'll get a proper mention.

SWEEVO'S WORLD

Here's a simple routine from the terrible duo that'll give you infinite Sweevos what a daunting thought!

5 REM SWEEVO POKE BY ABR 18 CLEAR 24799: PRINT "PLAY SWEEVO'S WORLD " 28 LOAD " SCREENS: LOAD " CODE: LOAD " CODE: POKE 33219,8: RANDOMIZE USR 24888

Has anyone found the room where you drop out of the program back to the main menu, or is that peculiar to the Amstrad version?

ARC OF YESOD

If you're fed up of feeling a right Charlie when you're playing Arc of Yesod grab a load of this program from Jonathan Gillott from Thames Ditton for infinite Charlies.

18 FOR N=65888 TO 1E9:REA D A: IF A<>999 THEN POKE N,A: NEXT N 28 RANDOMIZE USR 65888 188 DATA 221,33,112,53,17 ,144,37,62,205,86,5,48,24 1,221,33,8,91,17,8,133,62 ,255,55,285,86,5,175,58,2 38,165,195,8,91,999

Thanks to I McGinney from Tyne and Wear for his infinite lives program. Does anybody know whether there's a message for YS in the loader like the one in Nodes?

CRITICAL MASS

Here's yet another program from 'A' and Chris — this one is for limitless energy. Ignore any funny readings you get from your energy meter. I must say this program's got a very strange loader — it behaves like a hyperloader but it can be used from Basic. You even get 'R TAPE LOADING ERROR' instead of the usual computer crash. Weird!

5 REM CRITICAL MASS POKE
BY ABR
18 CLS: PRINT TAB 4;
"PLAY CRITICAL MASS TAPE"
28 LOAD " SCREEN#: INK
6: PAPER 8: OVER 1: PRINT
AT 8,81: LOAD " CODE:
POKE 56879,52: PRINT USR
48888

POTTY PIGEON

You can't keep a good programmer down can you? 'A' is back with a routine that'll give you 256 lives for Potty Pigeon — if you can stand it. Out with the umbrellas lads (and lasses).

5 REM POTTY PIGEON POKES
BY ABR
18 CLS: LET T=8
28 FOR N=23296 TO 23346
38 READ A: POKE N,A: LET
T=T+A: NEXT N
58 IF T(>47372 THEN PRINT
'ERROR. PLEASE RECHECK':
STOP
68 PRINT TAB 3: "PLAY
POTTY PIGEON TAPE"
78 RANDOMIZE USR 23296
188 DATA 62,255,55,221,33
,283,92,17,152,3,285,86,5
,48,241
118 DATA 62,97,17,1,192,3
3,48,94,17,2,285,68,96
128 DATA 33,43,91,1,8,8,1
7,5,194,237,176,195,119,1
93
138 DATA 62,47,58,75,181,
195,192,93

STARQUAKE

We finally made it to 'A' and Chris's last bit of code that'll give you infinite blobs. 'A' does point out that there is a slight drawback in that you can't use the secret passages. I didn't even know there were

any! Still, it seems a small price to pay for infinite lives.

This program is a little long so it's got a checksum routine that'll tell you the data line you've typed in wrong, if you have, of course. Type it in as shown. Another program with a funny loader this. It sends different coloured lines up the border but loads at exactly the same speed as the Speccy normally does. Amazing what you start to find in programs once you start looking!

Start looking!

5 REM STARBUAKE BY ABR
18 CLS: LET A=65888: FOR
F=8 TO 6
28 LET T=8: FOR N=8 TO 9:
READ S: POKE A,S: LET
T=T+8: LET A=A+1: NEXT N
38 READ B: IF T<>B THEN
PRINT "ERROR IN LINE "1
188+F318: STOP
48 NEXT F
58 PRINT AT 18,11" PLAY
STARBUAKE TAPE"
68 PRINT " "IGNORE SCREEN
CORRUPTION!"
78 RANDOMIZE USR 65888
188 DATA 6,2,197,62,255,5
5,221,33,8,8,31
118 DATA 17,8,8,285,86,5,193,16,239,221,782
128 DATA 33,8,37,17,8,192
138 DATA 46,5,243,33,23,2
54,17,8,64,1726
148 DATA 18,8,237,176,195
,8,64,33,255,229,1286
158 DATA 17,255,255,1,8,1
65,237,194,175,58,1339
168 DATA 98,194,195,36,94
,8,8,8,8,8,819

'A' says that if anyone can tell him why he can't use the secret passages he would be most interested. So would I for that matter. If you know don't keep it to yourself, tell the world via Hacking Away.

FAIRLIGHT

It's amazing how many POKEs I've had for this game — it's obviously very popular. CR Holland from East Yorkshire sent in these rather weird ones. These POKEs will only work with version 2 of the Fairlight program that was in YS issue 1 — it's too huge to reprint here. Add either, or both, of these lines before the last line in the program.

368 DATA 62,281,58,247,24 2:REM BLINDFOLD BADDIES 378 DATA 62,281,58,189,23 6:REM EVERYTHING EXCEPT R DOM IS INVISIBLE

As you can see the first one'll blindfold the giants and soldiers — they'll wander around completely ignoring you. The second POKE is for showoffs who think they can play the game with their eyes closed — it stops the sprites being drawn so all you can see is an empty room. I said it was weird.

Well, I'm off now but don't sit and wait a whole month for the POKEs. Start sending them in to me at Hacking Away, Your Sinclair, 14 Rathbone Place, London W1P 1DE.

HACK OF THE MONTH

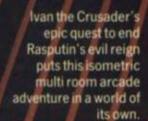
COMMANDO

Great game this — it's the best Arcade to Speccy conversion I've seen. Now's the time for some POKEs to help you past that first bridge — no, you can't really be that bad, make it the second bridge. This natty bit of code from 'A' and Chris will make sure your grenades loop round to 255 when they reach zero and your lives never drop below four.

5 REM COMMANDO BY ABR.
18 CLEAR 48888:LET T=8
38 FOR N=65838 TO 65852
48 READ A:POKE N,A:LET T=T+A:NEXT N
58 IF T<>2182 THEN PRINT "ERROR. PLEASE RE-CHECK":
STOP
68 PRINT "PLAY COMMANDO TAPE": LOAD " CODE
78 POKE 65441,172: POKE 65442,84: RANDOMIZE USR
68 DATA 49,8,98,175,33,4,188,119,35,119,35,35,119,
35,119,35,119,58,254,236,195,38,188

I'd also like to thank **CR Holland** from Bridlington for sending in a program that'll give you 254 lives and 255 grenades.

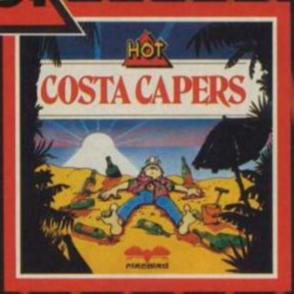
DYNAMITE





The evil Orcs ravage the land of Belom - you control the only characters who can save it. Stunning landscapes plus intriguing adventure in Venturescope¹





Ted's Great Summer Blow-Out - over 40 whacky screens as he tries to avoid sunstroke, drinks like a fish and blows all his hard-earned money!

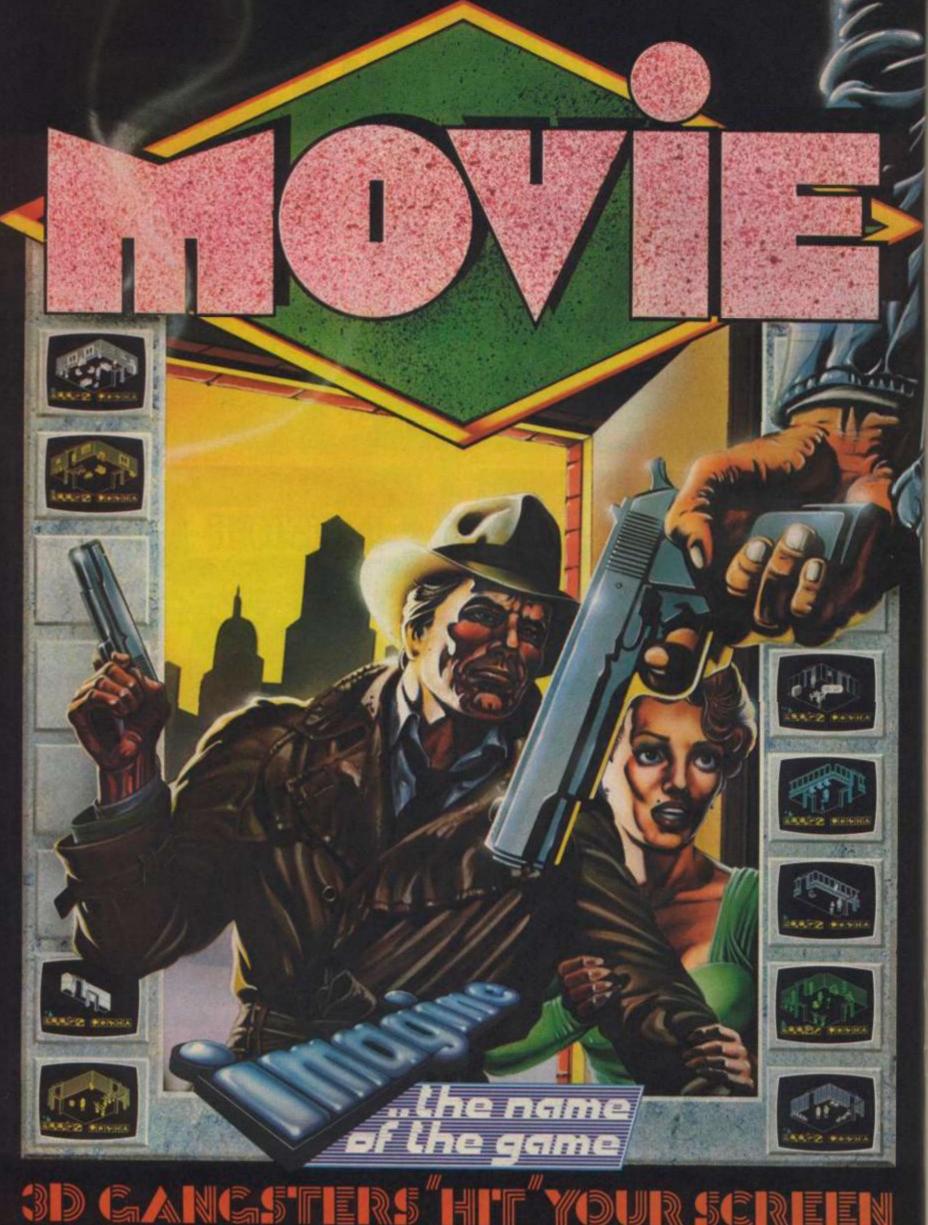
Four great, sizzling games from Firebird – the all-new Hot Range. Available for the Spectrum, Commodore 64 and Amstrad - see them at all good computer stores now!



and crossed chaque PO made payable to FREBIRD SOFTWARE. As as subject to availability. Orders are despatched present. As

MAIL ORDER: AUNTIE KAY, "FREEPOST FIREBIRD, WELLINGTON HOUSE UPPER ST. MARTIN'S LANE, LONDON WC2H BOL. "No stamp-require

THEBRO IS A TRADEMARK OF BRITISH TELECOMMUNICATIONS DIS



Interactive bubble speech adds to the drama of this true life detective movie

TASK

FORCE

lan Hoare, the programmers' pin-up, is back with Task Force and a pile of your phantastic programming hints'n' tips.

way we go with another page of goodies that'll get your programming fingers tingling. But before the off, I'd like to make a correction to one of the routines in YS 1. You'll remember we had a listing of a routine for accessing a string variable from within machine code. As Pete Erskine from Colchester points out, there's a bit missing from the end!

0075	INC HL
0080	LD C.(HL)
0085	INC HL
0090	LD B, (HL)
0095	INC HL
0100	RET

Pete's also sent in a couple of short Basic routines that let you save SCREEN\$ without the tape message wiping out the bottom two lines, and load without the loading message corrupting the screen. In each case, Pete does it by interfering with the normal channel information so that the Speccy's printing gets diverted. But be careful when you're using these routines - you must remember to POKE everything back to normal if, for example, you get a tape loading error - not that you'll be able to see the message!

10 REM Load or draw yr 24 line screen 20 LET c= PEEK 23631+256* PEEK 23632 30 IF INKEY* ="" THEN OD TO 30 40 LET a= PEEK c! LET b= PEEK (c+2)! POKE c,111! POKE c+2,20 50 SAVE "PIC" SCREEN\$ 60 POKE c,a! POKE c+2,b This does a neat job of saving the whole screen. And here's a typical example of how you might want to handle a loading screen.

10 CLEAR 244991 LOAD "" SC REENS: REM loading screen 20 LET c= PEEK 23631+256* PEEK 23632+51 POKE c,111 30 LOAD "CODE: REM game code block 40 POKE c,244: REM restore CHAN 2 50 RANDOMISE USR 24500 : REM start game

Pete wonders if there's an easy way in machine code of adding extra elements to a 2 dimensioned array without redimensioning it and so losing all the data. I've got some ideas up my sleeve, but let's see what you come up with first.

Ray Taylor from New
Cross in London has sent in
an even easier method of
saving a screen to tape that
gets round any problems with
messages. I quote, 'The idiot
who wants to save the whole
screen\$ should put:
POKE 23636,181:
SAVE "screen" SCREEN\$

And adds, 'It'll then cut out the start tape thingy . . .'.
Thanks Ray — shame it doesn't work!

Ray's also sent in an interesting routine for all of you with ZX or Alphacom printers. Try this:
10 INPUT "Enter Text ";a\$: FOR n=64 TO 71: POKE 23681,n: LPRINT a\$: NEXT n According to the manual 23681 is a system variable which is not used! But in that excellent book by Steve Kramer, The Spectrum-Operating System, it says that it's the high byte of PR CC, the address of the printer buffer. See if you can work out just what's going on!

Another Pete, this time Pieter van Dijk (get your finger out Pieter!) from Wassenaar in Holland has sent in a one line Basic program to give a complete Hex dump. It's rather a loooong line but just take a look at what it does. By the way, Pieter points out that you should not change the line number — unless, of course, you're prepared to change all the POKEs of 23618.

1 BORDER O: PAPER O: INK 7: CLS: INPUT "start addres s: ";s! POKE 23618,1: POKE 23620,9-9*(s<0 OR s>65535): LET s*O: LET s*INT s: LE T t*d: POKE 23618,1: POKE 23620,13+(s*O): LET t*d-1 NT (LN s/LN 10): INK 5: PR INT 'TAB t;s;TAB 6; INK 6: LET a* WNT (s/256): LET p* 21: POKE 23618,1: POKE 23620,40: PRINT b*s;c*; LET

a=s-INT (s/256))*256: LET p=26: POKE 23620,40: PRINT b\$;c\$;! INK 7: FOR i=1 TO 7: LET p=32: POKE 236:8,1: POKE 23620,39: PRINT ";b \$;c\$;! LET s=s+1: POKE 236 18,1: POKE 23620,36-28*(s)*65536): NEXT i: POKE 236 18,1: POKE 23620,9: LET a= PEEK s: LET b= INT (a/16): LET c=a-b*16: LET b*=CHR* (b+4B+7*(b>9)): LET c*=CHR \$ (c+4B+7*(c)9)): POKE 236 18,1: POKE 23620,p

Pieter makes the point that any mistakes you make typing in this line will almost certainly cause a crash. So make sure you save it before trying it out. This is always a good idea, particularly with a program that contains a lot of POKES.

Now a tip from a professional programmer. John Williams, who's written business software for the Speccy, writes in to say that there's a very easy way of calling machine code that you've hidden in a string variable, from Basic. But why should you want to put your machine code there? Well, it means that you can save the code as part of the main Basic program which in turn saves loading time. John points out that the system variable DEST contains the address of the 'currently assigned' variable.

Now, let's say that you've put your machine code routines into string variable m\$. We'll also assume that you've got three routines there. To be really imaginative, I'll call them Routine 1, Routine 2 and Routine 3. Routine 1 is 30 bytes long, from m\$(1) to m\$(29), Routine 2 is 60 bytes long, from m\$(30) to m\$(89) and Routine 3 starts at m\$(90). Like all good programmers, you've set up variables R1, R2 & R3 at the start of your program to hold values of 1, 60 & 90 respectively. You've also set up a DEF FN to give a double PEEK as in YS 1. You only need a single subroutine in Basic to call all three machine code routines.

10 REM M/C calling subrout ine.
20 LET ms(m)=ms(m): REM to make ms(m) 'current'
30 RANDOMISE USR FN p(23e3 9): RETURN
Rest of program
1000 REM to call Routins 1
1010 LET m=r1: GOSUB 10
Mora program
3000 REM call Routine 2
3010 LET m=r2: OOSUB 10
etc.

Now for a bit of machine code from Paul Roberts who's sent in a couple of routines that'll let you have fun with the screen. The first is a screen clear routine that makes a noise while it clears the screen fairly slowly.

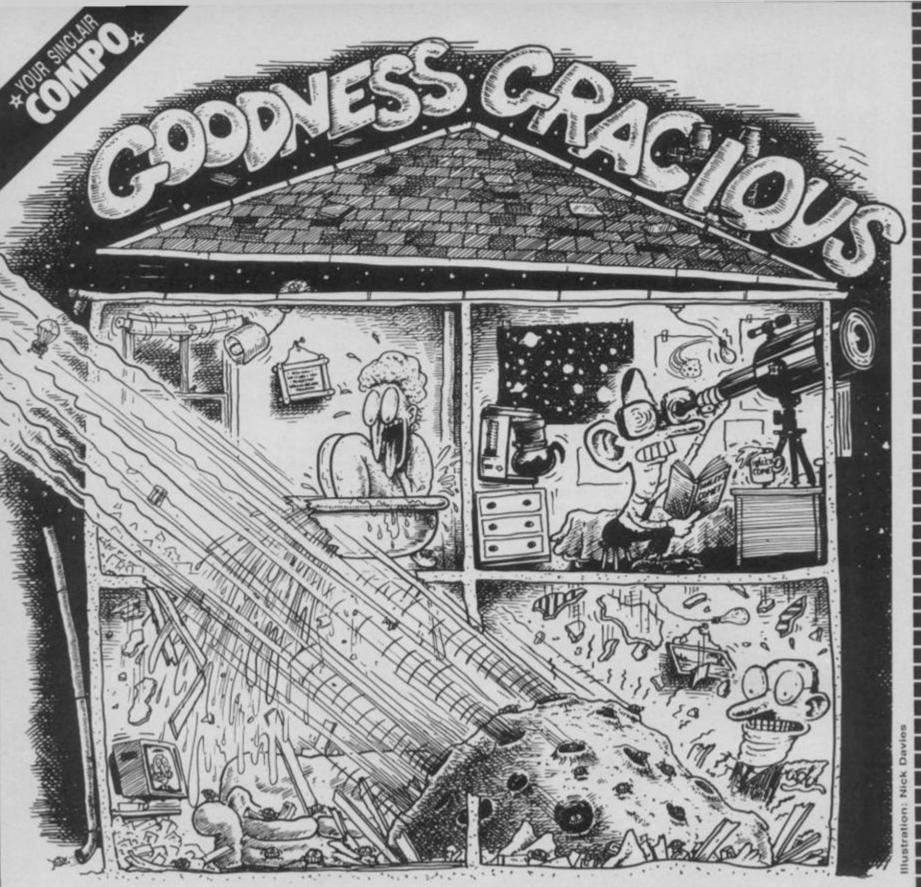
0000		ORG	30000
0010		LD	A.65
0020		LD	HL,22528
0030		LD	DE,22529
0040		LD	BC,767
0050		LD	(HL),7
2060		LDIR	Mineral
3070		LD	HL,16384
0090		LD	8,3
0090	XLOOP	PUSH	BC
0100	ALUUN	LD	8,8
0110	BLOOP	PUSH	BC
0120	BLOOK	LD	B.8
0130	MLOOP	PUSH	BC
0140	UKOPT	LD	8,32
0150	LLOOP	LD	
	LLUUP		(HL),0
0160		INC	HL
0170		DJNZ	LLOOP
			DE . 224
0190		ADD	HL DE
0200		CALL	SOUND
0210		POP	BC.
0220		INEG	MLOOP
0230		LD	DE,2016
0240		SBC	HL . DE
0250		POP	BC
0260		DJNZ	BLOOP
0270		ADC	HL , DE
0280		LD	DE,224
0290		SBC	HL, DE
0300		POP	BC
0310		DJNZ	XLOOP
0320	Service .	RET	
2330	SOUND		B,A
2340		PUSH	AF
0350		LD	C,12
0360	SNDLP	PUSH	BC
0370		PUBH	BC
0380		LD	A,16
0390		OUT	(254),A
0400	DELAY	DUNK	DELAY
0410		POP	BC
0420		XOR	A
0430		OUT	(254),A
0440	WAIT	DINZ	WAIT
0450		POP	BC
0460		DEC	C
0470		38	NZ SNDLP
0480		POP	AF
0490		INC	A
0500		RET	
0510		END	

Paul's other routine is a spectacular simulated explosion effect. It flashes the screen in random colours very very rapidly!

0000		ORG	30000
0010		CD	B.100
0020	LOOP	PUSH	BC
0030		LD	HL,22528
0040		LD	DE,22529
0050		LD	BC,767
10060		LD	A.R
0070		AND	63
0080		LD	(HL),A
0090		LDIR	
0100		HALT	
0110		LD	A,R
0120		AND	7
0130		OUT	(254),A
0140		POP	BC
0150		DJNZ	LOOP
0160		RET	100000
0170		RET	
	0010 0020 0030 0040 0050 0060 0070 0080 0090 0110 0120 0130 0140 0150 0160	0010 0020 L00P 0030 0040 0050 0050 0060 0070 0080 0090 0100 0110 0120 0130 0140 0150 0160	0010 LD 0020 LOOP PUSH 0030 LD 0040 LD 0050 LD 0060 LD 0070 AND 0080 LD 0090 LDIR 0100 HALT 0110 LD 0120 AND 0130 OUT 0140 POP 0150 DJNZ 0160 RET

So, that's it for this month but do please keep your mega-snippets coming. And if you haven't seen your own contribution here yet, keep your eyes peeled. There's no telling what we'll be up to next month.

Send your programs to lan Hoare, Task Force, Your Sinclair, 14 Rathbone Place, London W1P 1DE.



...great balls of fire! Are you on a blazing trail to win a coffee machine, a Saga 1 keyboard, a mug or even a comet? And no we don't mean one of Bill Haley's crew. Rock on...

Have you seen Halley's Comet yet? Well it's no good rushing to the nightsky now — you're just gonna have to wait till 2061 'cos it only puts in an appearance every 76 years. But don't get cometosed at the thought of hanging about all that time — you can enter our fabulous compo based on Firebird's funster, The Comet Game.

The Comet Game is a three stage arcade/strategy in which you have to search for the comet and go on a germ bashing mission.
Comet again? You mean you haven't heard Fred Hoyle's famous Germ Theory? Fred reckons that Halley's comet carries a trail of germs in its wake and not a trail of frozen debris. And it's this idea that Firebird has decided to develop in the game.

In the first stage you watch your craft take-off by means of a remote control camera. You can't actually control the spaceship but you can gasp at the amazing 3D vector graphic screen. Stage two is a lot more action-packed. Another computer launches into a bit of grievous verbal violence, the life support system gets blocked, the communication system needs realigning and to top it all, aliens from other planets get a bit narked when you trespass on their space. There's also a coffee

machine that needs maintenance.

In fact, the coffee machine is so important that Firebird is offering one as part of the first prize. The winner'll also get an amazing Saga 1 Emperor keyboard, an exclusive comet mug and a snazzy paper comet full of goodies. The nine second prize winners will get a Saga 1 keyboard, a mug and a comet and the 90 runners-up get a comet mug and comet.

All you've gotta do to win one of these mega prizes is peer at the piccy and spot the germs. Put a ring round each one and fill in the coupon. Send the whole lot, or a photocopy, to Spot The Germ Compo, Your Sinclair, 14 Rathbone Place, London W1P 1DE. And don't forget to put the number you spotted on the back of the envelope.

Rules

No YS: No Comet. The Editor's decision is final and no correspondence will be entered into.

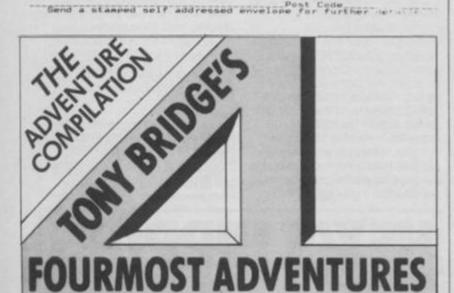
Employees of Firebird and Sportscene Specialist Press are not allowed to

All entries must reach us before the next appearance of Halley's Comet, or 30th April 1986.

* COMET COMPO *

I killed known germs dead. 4
Name
Address
Postcode





Featuring:

OUT OF THE SHADOWS A CRASH SMASH

GALAXIAS

A new graphic adventure from the author of BORED OF THE RINGS.

THE MICRO MAN

Imagine yourself a tenth your height, but smaller!

THE MURAL

One of the funniest and most inventive adventures we've yet seen.

ALL FOUR GAMES ON ONE TAPE FOR JUST £7.95

Available from all good software retailers, or in case of difficulty, please send a cheque or postal order to:

GLOBAL SOFTWARE PO BOX 67, LONDON SW11 1BS.

MICRODRIVIN'

Want to learn everything there is to know about the microdrive? Andrew Pennell is your microdrivin' instructor.

Are all microdrive systems as unreliable as mine? I've bought eight cartridges and of those four failed after very little use. The main problem is the cartridge jams solid and I can't get the minimum 85K even after repeated formats. Can you advise me on how to avoid or reduce the problem and is there any way I can unjam the cartridges myself?

In a few words, no, yes, no. No, most microdrive systems are fairly reliable though if you get one that isn't, like yours, they tend to be very bad indeed. I reckon your microdrive is poorly aligned internally so it's pulling the tape through incorrectly - if it becomes folded it'll jam. You'd be wise to get a replacement microdrive. Never try to open up a cartridge to unjam it; they're impossible to put back together, and anyway you'll destroy all evidence that the cartridge was faulty. Always take them back to your dealer for replacement.

to debug Running
Repairs and it crashes as
soon as the Interface 1 ROM
is paged in. Can you tell me
why and is there a new
version, or monitor, that'll
do this? Also you used
Macros in the source code
— I've tried this with GENS3
and it doesn't work. Finally,
is there a simple way of
switching between Basic
and Interface 1 ROMS?
MJP Lehmann

Well, the reason MONS (and all other debuggers that I know of) crashes when the ROM switches is that the ROM calls made by it to print characters, read the keyboard etc suddenly do very different things. For example, RST 10 which prints a character in the Basic ROM will call some random location when executed in the Interface 1 ROM. The version you require to assemble Macros is GENS3M21 and you can get an upgrade from HiSoft. To switch into the Interface 1 ROM use these instructions: LD HL.PAGOUT

LD (HD 11),HL

RST 8 DEFB 32H PAGOUT POP HL POP HL and to page Basic back in do: CALL 700H

... Is there any way to change the name assigned to a cartridge with the Format command without reFormatting it and losing the data?

Nigel Poore, Upminster

I can't for the life of me think why you'd want to do this but it's technically extremely difficult. The name of a cartridge is stored in 10 bytes of the sector header. that bit of the tape that precedes the sector itself that holds the data. The format routine writes both the header, containing the name and blank sectors. To change the header without destroying the data that closely follows it would require very accurate timing - this'd be nigh on impossible on cartridges that have wide operating tolerances. The only way I can think of doing this is to Format a new cartridge with the name you want, then copy the files off the old cartridge onto the new one.

... I'm having problems transferring mainly Basic programs to microdrive. I keep getting the dreaded 'Out of memory' error when trying to load. Can you tell me why?

The cause of the error is twofold. Firstly the awful syntax for microdrives takes up more valuable bytes than the cassette version and secondly the Interface 1 requires around 300 bytes extra workspace while doing the load. The solution is to make the Basic as small as possible, by replacing numbers with VAL, though this can get tedious for large programs. To help you with this I can recommend the utilities available from LERM that include many useful conversion programs and a VAL creator that can save a whole Ks worth of memory of large programs. They also supply various help sheets to make specific microdrive conversions easier.

HACK FREE ZONE

It's Hex Loader, the hexpert you've all been hexpecting. Back to put a hex on all your hints 'n' tips for hack-free hexcitement.

Bzzzzzzt. Click. Hellooocooo! Guess who? Yep, it's the Hex Loader Show, starring yours truly and a cast of thousands. (This means you, chummies.) Bouncing back with all the hints n'tips for all your arcade faves, another part of Paul Harkin's solution to the marvellous Marsport, a fair sized dollop of stuff from the rest of you, plus the usual helping of acid comment, mickey extraction and ego infiation from little old me. (Simper. Squeak. Ahem.)

First off, let's get you a bit further advanced with Marsport. Last month I left you on laxa level, Sector C4 with a gas mask you'd just made in the factor. Okay, here we go again. Take it away Paul Harkin, my little cheese and mayo sandwich.

Enter the danger room and the gas mask will protect you. Leave it in the locker for future use. Now go to A1 and enter Ice Cream. The cornet gives access to the Music room on Farr level A1 and the ice pack gives access to the Hot House on Gill level C1. You'll find a mute and a lute in the Music room reserve these for future use. Go to the map room on laxa G1 and take the Earth map - this is the key to the Soil Depot on Gill level. From Gill A3 you can take the up tube to Alba level. If you look around Alba you'll find four Vidtex screens: these'll give you clues about objects you'll need to get you through the Astronomy room safely. 'My first is what surrounds' - this is the frame from laxa E1. 'My second is the centre' this is the sunchart from the map room. 'My third is clear to see' — this is the glass from laxa H4. 'Put together it's safe to enter' - this means factorise

these objects to make an eyeshield — use this to go through the Astronomy room.

"From I3 take the down tube to Byer level. In the Oratory you'll find a dais, manifesto, pointe and projector. These'll come in useful later so don't lose them. You'll find the Bankers on Byer level, (the key's the dough from the Bakery on Daly level) where you'll find the 2nd key to M-Central. The 1st key's on Alba D1 in the director's office. Take the down tube from Byer C3 to get to the Joly level. Enter the safety room and get the boots and earmuffs - the boots give access to the Chemists on Daly C3. The earmuffs give safe passage through the danger room on Gill B1. To get through the Radiation room on Byer, combine the lute and the dais, an anagram of lead suit! To get to Coma level take the up tube on Gill F4.

"Go to Coma A2 and you'll see a room with a punctured outer wall. To get through here safely get the oxygen from the Chemists and the empty tank from Alba A1. Factorise these to get an air tank - take this back to Coma A2 and proceed through the danger room. (It's best at this point if you have the steps from B4 and the machines from Byer level.) Now go to Coma G2 and take the down tube to Farr level. The 3rd key to M-Central is on Farr G2. Go to G3 and enter the Games room. Here you get a Vidtex message: 'The key is the game; the game is the key.' Put the steps and the machines in the factor to make a game. (The machines are calculators, which are adders, which are snakes - snakes and ladders! Geddit?) Put the game in the key unit and proceed out of the exit. On Farr C3 there is a down tube to Hale level. With all three M-Central keys take this route: go to A3 and enter Control. Put key 1 in the key unit. Now go to H4 and put in the 2nd and 3rd keys. You may now enter M-Central. Proceed to the other exit and you'll get 99% and will have completed Phase 1."

Phew! Hey, hold it! You mean to tell me that's just Phase 1? There's more? Oh well, it looks like you'll have to wait till next time to see the *final* solution. What a shame! (Heh-heh).

I've been getting letters about Pyjamarama lately, like my mate Fergus Clerkin of Co. Monaghan, "It was a cold day in November when I went to the newsagents to get Your Spectrum..." Hey, Fergus, it's Your Sinclair now! Please go on. "Later on that night I sat staring angrily at a pair of scissors that I could not get, your magazine ripped to shreds beside me. I'd like to shake James Fitzpatrick warmly by the throat! How do you get the scissors?" I also heard from my favourite game-playing grandmother from Inverness-shire (Ptuil That's hard to sayl) Mrs B Cameron. "As a complete beginner to the Speccy (and a Gran) I am hooked on games. I see James Fitzpatrick has given me a few tips on Pyjamarama. But help help! I can't pick up the scissors or get into that 'blasted' rocket. I can get the hammer to the extinguisher to get to 'hell' (?) only to be wiped out by a fireball! Sometimes I pick up the laser gun and fill it with the power pack but by then I'm dying. My highest score is 64%" Not bad Mrs C, but hey! Don't trouble yourself about the scissors, they're not important to finish the game. If you've got the power pack your gun is full, so drop the power pack where you found it. Now go through the hole in the floor. Go to the rocket room with a full gun and full petrol can. Once you're on the moon the aliens will

allow you to get to the door because of your gun. I won't spoil the last bit for you but I will tell you that you have to jump at the magnetic lock. I hope that furnishes you with happy pyjamas! Zing! Next is Odin's epic Robin Of The Wood. Super cool Sudi of Ashton-under-Lyne says that, "Around the forest you'll see rocks with arrows on them. All these lead to important places. Hold a flower when you pass a witch and she won't take your gold. Give the Ent 15 bags of gold and get a sword, a bow and three charmed arrows. In the Kings Castle the arrow on the rock points to the tournament. Give three flowers to the witch to get to the castle. If you meet a Hermit or give two flowers to the witch your energy will go back to maximum. You can gain lives by collecting laurel wreaths. To finish, find a door in the Castle with an arrow pointing to it."

Kevin White of Southampton dropped me a note (Boing! Hmm, a D sharp over middle C, I reckon) to say this "In Back To Skool I was chasing a mouse in the Blue Room when something weird happened. Go to the end of the Blue Room, turn around and face the door, then press C. The screen scrolls, and If you keep pressing C you can watch the Girls Skool." Naugh "One problem with doing this is that you can't see yourself and you have to guess your way down to the playground door. Only when you get to the Girls Skool do you reappear." should treat this like a UFO if I were you, Kev. Just say to yourself, 'I saw something... but I don't know what it was!" More from Kev next time

Right On, Commander! Another note (this time a low F) from Elitist
Commander Mike Jones of
Southampton. "Dear Hex, thanks for the faberoonee column..." Faber-whatee?
Listen Commander Chummy, I do the wordplay in this column. Okay. "Here are my tips: docking is a pain in the load bearing regions of the lower body. (Not yer feet, stupid!) The most vital acquisition is therefore a Docking computer, followed by an ECM system and front beam lasers, then fuel scoops and cargo bay extensions. As soon as you can afford it get a military laser;

they really do the business. If you want to make money and improve your rating, trade in narcotics between rich industrial and poor agricultural planets. With an extended cargo bay you can make 4000 credits a run! Pressing F whilst in pause mode and then using hyperspace launches you into witchspace where you'll be attacked by Thargoid ships. Destroy them (oh yeah?) and scoop up the static Thargoids and you can sell them as allen Items. There are five missions in the game (as opposed to two on the original Beeb version). The first mission is given to you after 12 'Right On, Commander!' messages. The object of the mission is to rescue refugees from a planet whose sun is going nova, and take them to a safer place in the galaxy. You get 100 gemstones if you're successful." And you get every cell in your body bursting at the speed of light to opposite ends of the universe if you're not! Gee thanks, Mike!

Namecheck! Oh gohd I'm so popular that all my little fruitcakes who write to me don't all get a mention; frankly my column would have to be as thick as the whole mag to fit all your tips in. So, here's a quick hello to those of you who I didn't have room for but who deserve a mention for their prowess. (Deep breath) Nik Taylor of Middlesbrough, Craig McArthur of Renfrew, Scotland, Mike Barton of BFPO 29 (Germany?). James Ingram (grovel, scrape) of Northampton, Owen Dunn of gh, M. Jeanes of Wellingborou Merseyside, Martin Chadderton of Royton Nr. Oldham, Harry Payne of Coventry, Gordon King of Fife and. SNAP! Argh! I've blown a chip, I'll have to Quit now. Look, this is important. Send me your picture and Hi-scores and Tips, and I'll make you a star in Hex's Heroes... no time... can't explain... Rosebud... the name of the killer is... argh! Click... Bzzzzzzz...

While Hex is repairing himself for next issue you can write to the computer generated ego massage at Hex Loader, Hack Free Zone, Your Sinclair, 14 Rathbone Place, London

HEX'S HIPPOES

Fzzt! Owl Wotchit, mate. You can't just go 'round poking screwdrivers into people's innards like that! Wodger mean I forgot Hex's Heroes? I would never forget those valiant lads, lasses, snowmen and feet! Nevah!

'Specially not the evil **Andy Lowe**, who sent me a "small section of my achievements..." which covered two pages! He's scored more hi-scores than I've had lube jobs! Oh, yeah, I promised to mention his lady **Kaz** with her hi-score of 1,576,800 on *Tapper*. Nope no sexism here, chumlies. Nobody here but us robots.

Next up in the Hippo'n'trendy Dept., on the back of a rather large pink mate of his, it's **Graham Back!** He doesn't mention what the Hippo's called. (El Hippo or what?).

And finally in our triumphant trio for this phase of the moon, a picture of **Ben G Hunt,** (or mebbe someone closely resembling Mr Hunt) tucking into what looks like a tube of Fairy Liquid in celebration of topping his hi-ones on several of his favourite games. And what I want to know is, who can blame him? Thanks for the 'weird' snap, Benj.

(I wish someone else would wash his mouth out! Ed)

Right! That does



Andy Lowe Commando/1,575,820 Graham Back Frankie/92% Ben G. Hunt The Way Of The Exploding Fist/222,800

PANZADROME

Panzadrome Tips from K.A. Sherman, Salisbury.

e Red Tanks! Urgh! These vicious little devils can shoot for miles, and through walls too! The trick is that they can only shoot in eight directions, so the further you're away, the more chance you stand of getting in between their powerful blasts. Try to lead them into mines, 'cos you can see them, and they can't.

Megaturrets? Yeah, I dream about them too, big ugly ones crowding me into a comer and zapping me to shredded wheat. Some are too deeply embedded into the scenery, but some are on the next character square, and so can be easily nuked. Banzai! Take that you rotters! (Heh heh)

Mine Scanner. Invaluable piece of kit. D'you know, - I spent the first two hours playing this game wondering why I kept getting nuked without being shot at on certain screens. Weeeeeelll, there are certain screens that are heavily mined for your entertainment. Keep a beady eye on this readout, as it could make the diff between getting zapped to shreds and finishing the game.



Some persistant little beggars hang about in single file corridors and won't let you past. Although it's a temptation to hang about and get blasted waiting for them to move off the screen, don't! They'll destroy you nine times out of ten, so go off and find another route. When you've found a polycrete module you can nuke them with pleasure and just patch up the hole in the ground with polycrete.

The playing area is an eight by eight grid, as indicated by this long range scanner. So, if you take 'x' to be the horizontal axis, and 'y' to be the vertical axis (with x0,y0 at the bottom left) you begin the game on the bottom row at x5,y0. There are two factories nearby; one at x3,y3, but ignore that at first, 'cos it's too well protected by that blasted Megaturret! Go through the field opposite this first one, and make your way to the next one on x6,y5.

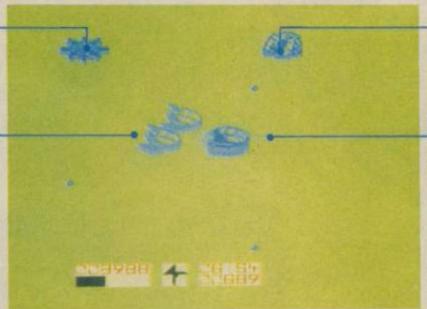
CRITICAL MASS

Driving lessons by R.T. Choake, Wigan.

Roving mines are the greatest hazard to your torce field. Watch your pointer and avoid them at all costs or you'll run out of replacement ships before you reach the shield wall at the end zone.

If you get imploded and find yourself on jetpack power, you're at the mercy of the giant earthworms. They'll burrow out of the sand right under you, so keep moving! If you're in mid air, you can actually steer around them without landing but this requires a little practice.

The best factic for getting to the end zone is the simplest; just belt to the right as fast as you can. If you can zap at least one of the spongy things in the first zone then so much the better for your score. The best zones to zap things are the ones with enemy ships — zap them if you must, but try not to divert from your course too much. Time and speed are of the essence.



Rocks aren't too much of a problem, but avoid them if possible. They could run down your force field just when you need it.

Don't waste energy on your High Density Light Phaser. You'll not only run down your energy, risking implosion, but there's really no reason for you to shoot unless an enemy blocks your path.

When you finally get to the end zone, you must also keep moving, as the clouds of disorientation will shove you into the nearest mine. If they get you into a tight spot, race down along the shield wall to lose them and try again at another gateway.

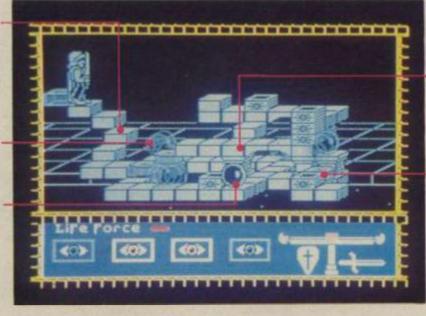
RAH RAH RASPUTIN

Megahints supplied by Paul McCartan, Tramore, Ireland.

Heh. This is the bold step. Even to start on this screen you need to do some fancy footwork. Walk to the very edge of the step above, hold yer nose and jump. Well just walk forward actually, and you should just grip the edge with your toes. From there on, chumski, it's just one foot in front of the other; you remember how to do that don't you?

This game really has more turntables than Radio One. It's not easy to remember which way you're going when you're being turned around like this, but it can be done. The trick is to jump at right angles to the direction you want to go.

Balls! Killer balls that is. How to foil these refugees from a bowling club, there's the rub, though. It's okay there's a method. Stand your ground and let them come for you. At the lest possible minute bring your shield up to protect yourself, then let them have it with your sword. They'll bounce off your shield and into the air – gotchs. While they're in mid air poke them (how dare you mention POKEs in this column!) with your trusty blade and pop!



 Do battle with the deadly spheres on this level and on the front row. You gotta have some elbow room to neutralise these 'orrible orbs, for timing and quick reactions are your only affes.

It's a good idea to go here and check out this box first as killer balls tend to get trapped in this corner and it's nigh on impossible to nuke them in such an enclosed space. Try the box on the back row then the stack of three. Finally, drop down onto this level and from here go for the last one on the front row.

We'll take you beyo

QUICKSHOT II AUTO RAPID-FIRE JOYSTICK

SPECTRUM INTERFACE

ond the Spectrum. Four great new add-ons from Ram, Number One in everything for the Spectrum... TURBO INTERFACE - NEW LOW PRICE Our unique Turbo Interface outperforms any Spectrum interface - it works with ROM cartridges, 2 standard joysticks, and there's a full expansion bus at the rear. The Turbo supports Kempston, Protek and Interface 2 software and loads from a cassette - or instantly from a ROM cartridge. It really makes the most of the Quickshot II's fast action, and with its unique power safety device and a new Reset button, it's even more amazing value at just £18.50. QUICKSHOT II AUTO RAPID-FIRE JOYSTICK The famous Quickshot II is the top games joystick, with a sleek trigger fire button for quick reactions, an auto fire switch for continuous shooting and a new, improved grip. Revolutionary built-in stabilising suction cups mean a sure, firm grip - a snip at £9.95.

SPECTRUM UPGRADE KIT

URBO INTERFACE

SPECTRUM INTERFACE

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

SPECTRUM UPGRADE KIT

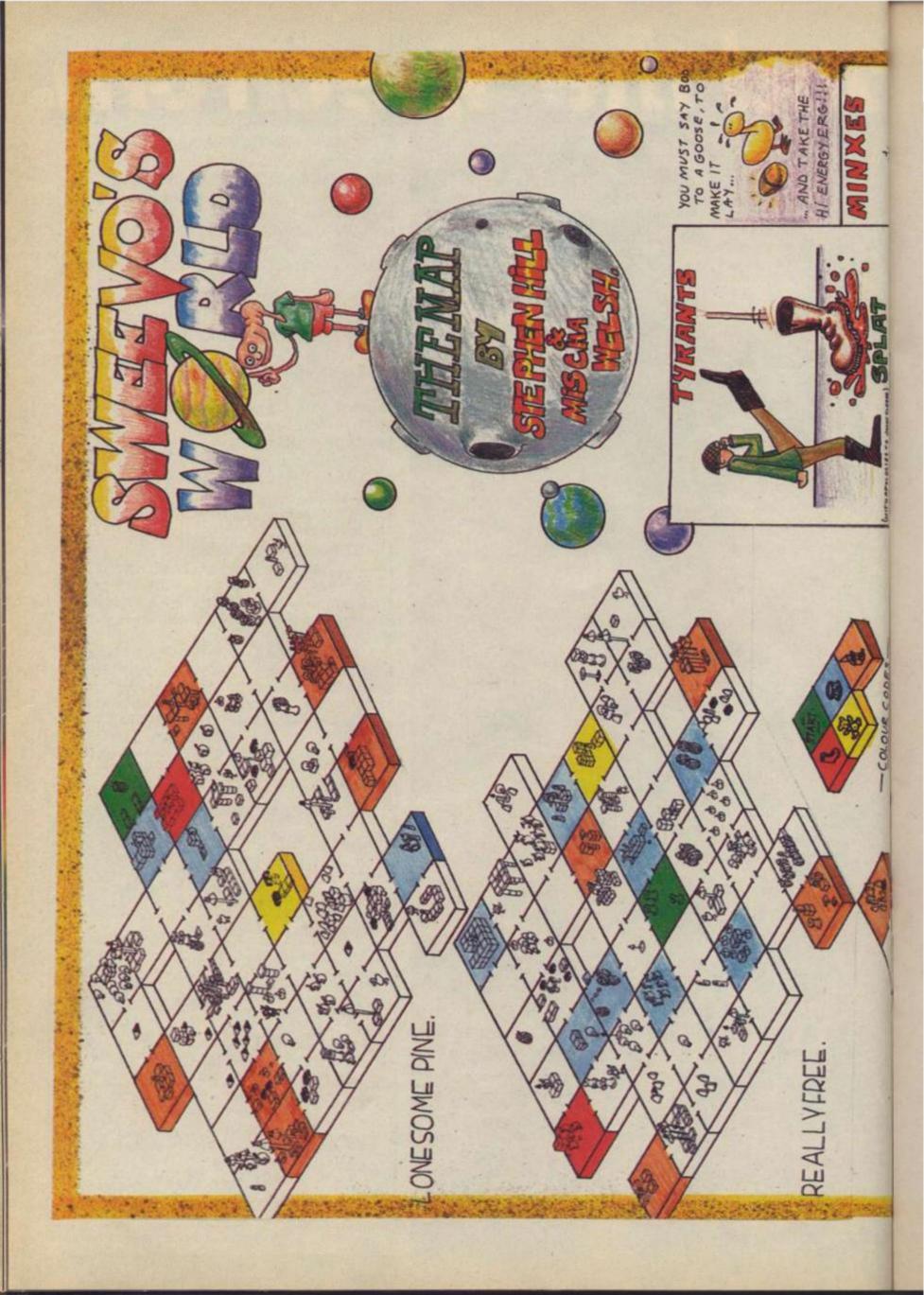
If you've a 16K Spectrum micro, this handy and inexpensive add-in kit boosts the RAM memory to a powerful 48K, so you can run the latest and greatest software, the most exciting games around - and expand your own programming possibilities! Only £21.95.

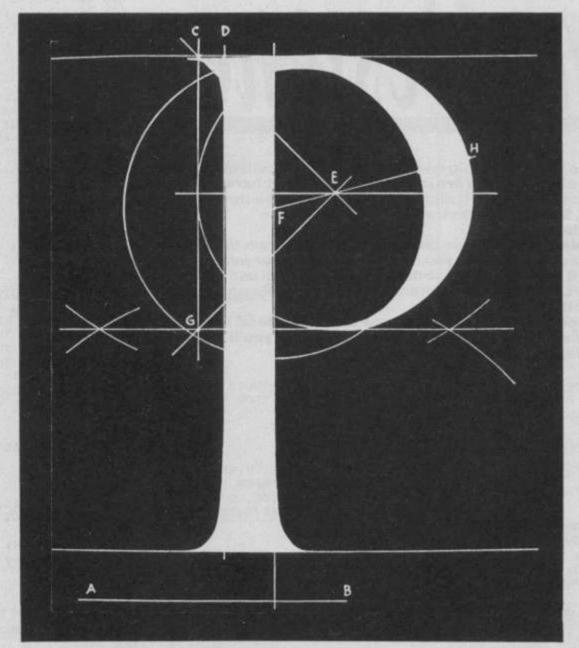
Where can you get your hands on Ram's amazing Spectrum add-ons? You can see them at branches of Boots, Menzies, Spectrum Group computer centres, and good computer stores everywhere. Or return the coupon below.

To: Ram Electronics (Fleet) Ltd (Dept YS), Unit 8, Redfields Industrial Park, Redfield Lane, Church Crookham, Aldershot, Hants GLI13 ORF Credit Card bot line 0252 850085 (Access & Visa)

Please s	send me
	Spectrum Turbo Interface(s) at £18.50
	Quickshot II Joystick(s) at £9.95.
	Spectrum Interface(s) at £9.95.
	Spectrum Upgrade Kit(s) at £21.95. (Please state issue 2 □ or 3 □)
+£1 per	order P+P(£3 Overseas) TOTAL £
□lencl	ose cheque/postal order acharge my Access/Visa
	Expiry Date//
Name_	
Address	
	Postcode
Telephor	ne
All product and Sinck Ram Electr	despatch for credit cards and postal orders (7 days for cheques, ts are fully compatible with the Spectrum, Spectrum + air Microdrives. ronics (Fleet) Ltd (Dept YS), Unit 8, Redfields Industrial Park, Redfield ch Crookham, Aldershot, Hants GU13 ORE. Tel: 0252 850085.

Trade and export enquiries welcome





PROGRAM POWER

PULL-OUT

OPPORTUNITY KNOCKS

YOUR CHANCE TO VOTE FOR THE BEST READER'S PROGRAM

Font Designer

YS MegaBasic's back — in a big way! Lee Privett's excellent utility is designed for all of you who are looking to add more character to your MegaBasic programs — it allows you to change the three character sets, Spectrum, Amstrad and BBC within the MegaBasic system.

Once you've defined your new characters, the program then allows you to save them off so you need never lose your new creations. And if you're worried about how to make full use of the program — don't. It's completely menu driven so there's no need for copious instructions here.

Before you type the listing in, make sure that MegaBasic is installed or you won't get further than line five where you'll meet

the first MegaBasic command.

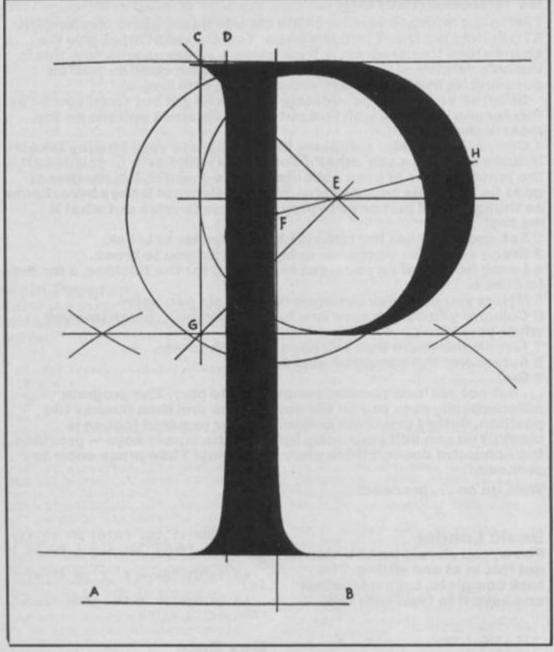
```
1 REM FONT DESIGNER
2 REM BY LEE PRIVETT
     REM COPYRIGHT 1985
  5
     PCLEAR: CLEAR 35999
  6 SET
     FRONT
  8 MAIN
  10 @FRONT
  11 PAPER O: BORDER O: INK 6
  12 BRIGHT 1: OVER O: CLS
  13 DRAW 255,0: DRAW 0,175
  14 DRAW -255,0: DRAW 0,-175
  15 INK 7:STIPPLE_7
  16 MODE_4
  17 PRINT AT 1,6; "FONT DESIGNER
  18 MODE_3: INK 6
  19 PRINT AT 4,12; "-* BY LEE PR
IVETT *-"
  20 PLDT 0,118: DRAW 255,0
  21 BOX_7,56,11,9,4,1,0
  22 CURRENT_2
23 MODE_2: INK 2: LET T=14
  24 PRINT AT 10,T;"1) SELECT FO
NT
  25 INK 3
  26 PRINT AT 12,T; "2) EDIT CHAR
ACTER"
  27 INK 4
  28 PRINT AT 14,T; "3) SAVE SELE
CIED FONT
  29 INK 5
  30 PRINT AT 16,T; "4) LOAD FONT
  31 INK 6
  32 PRINT AT 18,T; "5) QUIT PROG
RAM"
  33 ENDPROC
  34
  35 BMAIN
  36 LET END=0
  37 REPEAT
  38 GETKEYS 49,53
  39 BOX_3,40,4,2,12,1,40000
  40 INK 7
  41 IF KEY=49 THEN WHICH
  42 IF KEY=50 THEN EDITFONT
  43 IF KEY=51 THEN SAVEFONT
  44 IF KEY=52 THEN LOADFONT
  45
     IF KEY=53 THEN LAST
  46
     IF KEY=89 THEN LET END=99
  47
     PUTBACK_40000,2,12,4,40
  48 UNTIL_END
  49
     CLS
  50 ENDPROC
  51
  52
```

53 GLAST

```
54 PRINT AT 1,8; "QUIT PROGRAM"
  55 PRINT AT 2,4; "ARE YOU SURE
Y/N"
  56 GETKEYS_78,89
  57 ENDPROC
  58
  59 @BOX_WI,LO,DE,YP,XP,PA,ME
  60 CURRENT_WI: PAPER PA
  61 WINDOW_YP,XP,DE,LO
62 GET_0,ME,YP,XP/2,DE,LO/2
  63 CLW_0
64 INK 9
  65 PLOT (4*XP),(22-YP)*8-1
66 DRAW (LD*4)-1,0
     DRAW 0,-((DE#8)-1)
  67
  68 DRAW -((LO*4)-1),0
     DRAW 0, (DE#8)-1
  69
  70 ENDPROC_BOX
  72 @PUTBACK_ME, YP, XP, DE, LO
  73 PUT_0,ME,YP,XP/2,DE,LO/2
  74 PLAY_0,50,2,6,1
  75 ENDPROC
  76
  77 @SAVEFONT
  78 PRINT AT 1,2; "SAVE TO DRIVE
  (D)
  79 PRINT AT 2,2; "OR TO CASSETT
  (C)
E
  80 GETKEYS_67,68
  81 BOX_4,56,3,4,4,2,41450
  82 PRINT AT 1,4; INK 6; "TYPE N
AME OF FILE PLEASE"
  83 INPUT LINE N#
  84 IF KEY=67 THEN SAVE N$CODE
RAMLOC, 760: SIDE: INPUT "REWIND & PRESS ENTER TO VERIFY"; LINE A
  VERIFY N$CODE RAMLOC, 760: EDIS
  85 IF KEY=68 THEN SAVE *"M":1
INSCODE RAMLOC, 760: VERIFY *"M";
1: N$CODE RAMLOC, 760
  86 STAY_5
  87 PUTBACK_41450,4,4,3,56
  BB STAY 6
  89 ENDPROC
  90 1
  91 @SIDE
  92 GET_0,36000,0,0,21,18
93 ENDPROC
  94
  95 @EDIS
  96 PUT_0,36000,0,0,21,18
  97 ENDPROC
  98
  99 @WHICH
 100 PRINT AT 1,2; "FONT ADDR: ";R
AMLOC
 101 PRINT AT 2,2; "ALTER(A) ESCA
PE(E)
 102 REPEAT
```

```
104 IF KEY=65 THEN EXCHANGE
 105 LET EXIT=0
    IF KEY=69 THEN LET EXIT=1
 106
 107 UNTIL EXIT
 10B ENDPRUC
 109 1
 110 :
 111 @EXCHANGE
 112 PLAY_1,10,10,100,10
113 IF RAMLOC=48000 THEN
                            LET R
AMLDC=45000:FONT_2: GO TO 115
 114 IF RAMLOC=45000 THEN LET R
AMLDC=48000: FDNT_1
 115 PRINT AT 1,22; RAMLOC
 116 ENDPROC
 117
 118 @EDITFONT
 119 PRINT AT 1,2; "DISPLAY(D) ED
IT(E)
 120 PRINT AT 2,2; "SIZE(S) RETU
RN(R)
 121 REPEAT
 122 GETKEYS_68,83
 123 LET EXIT=0
 124 IF KEY=68 THEN SCR: DIS: BAC
 125 IF KEY=83 THEN SCR: EG: BAC
 126
     IF KEY=69, THEN SCR: ALT: BAC
 127 IF KEY=82 THEN LET EXIT=1
 128 UNTIL_EXIT
 129 ENDPROC_EDITFONT
 130
 131 @BAC
 132 CURRENT_3
 133 PUTBACK_36000,3,14,16,36
 134 ENDPROC
 135 :
 136 escR
 137 BOX_5,36,16,3,14,5,36000
 138 INK 6: PLOT 60,28: DRAW 135
,0
 139 DRAW 0,119: DRAW -135,0
 140 DRAW 0,-119
 141 ENDPROC
 142
 143 @DIS
 144 INK 0
 145 PRINT
            INK 3:AT 1.4: "CHARAC
TER
     SET"
 146 PRINT AT 3,2; "0123456789!@)
$%&"
147 PRINT AT 4,2;"'()_<>=+-ae*e
 148 INK 1
 149 PRINT AT 6,2; "ABCDEFGHIJKLM
NOP"
 150 PRINT AT 7,2; "abcdefghijk1m
nop'
 151 PRINT AT 9,2; "QRSTUVWXYZ;:.
, #?"
 152 PRINT AT 10,2; "grstuvwxyz/#
161
 153 PRINT INK 3; AT 13,4; "SPACE
 TO EXIT
 154 GETKEYS_32,33
 155 ENDPROC
 156 :
 157 @EG
 158 MODE_1
    INPUT "WHICH CHARACTER PLEA
 159
SE >"; LINE F$
 160 INK 0
 161 PRINT AT 1,4; "THIS SHOWS EX
AMPLES OF EACH
 162 PRINT AT 2,2; "CHARACTER SIZ
E OF THE LETTER (":F$:")
 163 MODE 4
 164 PRINT AT 6,2;F#; " MODE_4"
 165 MODE_3
 166 PRINT AT 8,2;F$;"
                          MODE_3"
 167 MODE 2
 168 PRINT AT 10,2;F#;"
                           MODE 2
 169 PRINT AT 13,2; "SPACE TO RET
URN"
 170 BETKEYS_32,33
 171 ENDPROC
 172 :
 173 @GRID
 174 INK 1
```

103 GETKEYS_65,69



```
175 FOR J=1 TO 8
176 FOR K=1 TO 8: LET KK=K+2-!
177 PRINT AT J+1, KK+4; PAPER 7;
178 IF Q(J,K)=1 THEN PRINT AT
J+1, KK+4; OVER 1; INVERSE 1;"
179 NEXT K
180 PLAY_0,1,2,1,10
181 NEXT J
182 INK 0
183 ENDPROC
184 :
185 @ALT
186 DIM Q(8,8)
 187 GRID
 188 FONT O
 189 PRINT AT 11,2; "USE CURSOR K
EYS"
 190 PRINT AT 12,4; "SPACE ON/OF
191 PRINT AT 13,6; "(E) TO EXIT"
 192 PRINT AT 14,4; "(R) TO RETUR
Nº
193 FONT_1: IF RAMLOC=45000 THE
N FONT_2
 194 CONTROL
 195 ENDPROC
 196
 197 econtrol
 198 LET X=4: LET Y=2
 199 LET XX=X: LET YY=Y
 200 PRINT AT Y,X; OVER 1;" "
 201 REPEAT
 202 LET XIT=0
 203 GETKEYS_8,82
 204 IF KEY=69 THEN OTHERS
 205 IF KEY=8 THEN LET X=X-2
 206 IF KEY=9 THEN
                   LET X=X+2
 207 IF KEY=10 THEN LET Y=Y+1
 208 IF KEY=11 THEN LET Y=Y-1
 209 IF KEY=82 THEN LET XIT=1
 210 IF KEY=32 THEN STATE
```

```
211 IF X<4 OR X>18 THEN LET X=
212 IF Y<2 OR Y>9 THEN LET Y=2
 213 UPDATE
214 LET KEY=0
 215 UNTIL_XII
 216 ENDPROC
 217
 218 QUPDATE
 219 OVER 1: PAPER 7: INK 1
 220 PRINT AT Y,X;
 221 PRINT AT YY, XX;"
 222 LET YY=Y: LET XX=X
 223 PLAY_1,5,22,14,10
224 OVER 0
 225 ENDPROC
 226 1
 227 @STATE
 228 LET P=(X/2)-1: LET L=Y-1
 229 IF Q(L,P)=0 THEN LET Q(L,P
 =1: GO TO 231
230 IF Q(L,P)=1 THEN LET Q(L,P
)=0
 231 PRINT AT Y,X; OVER 1; INVER
SE 1;"
 232 PLAY_1,5,8,12,5
 233 ENDPROC
 234 1
 235 GOTHERS
 236 BOX_4,28,6,14,32,2,41450
237 PRINT AT 1,2;"(A) SAVE CHR"
238 PRINT AT 2,2;"(B) GRID CLS"
239 PRINT AT 3,2;"(C) LOAD CHR"
240 PRINT AT 4,2;"(D) CONTINUE"
 241 GETKEYS_65,68
 242 IF KEY=67 THEN LOACHAR
 243 IF KEY=65 THEN SAVCHAR
 244 IF KEY=66 THEN DIM Q(8,8)
 245 PUTBACK_41450,14,32,6,28
 246 CURRENT_5
 247 GRID
 248 PRINT AT Y, X; OVER 1; " "
```

```
250 1
 251 @BAVCHAR
 252 CURRENT_5
253 INPUT "CHARACTER TO SAVE ?
", LINE D#
 254 IF CODE D$<32 THEN GO TO 2
53
 255 FOR J=1 TO 8: LET BYTE=0
 256 PRINT JO; " NOW SAVING CHAR
ACTER LINE ";J
 257 LET JJ=J-1
 258 FOR K=0 TO 7: LET KK=8-K
 259 PRINT AT 6,24;D$
260 IF Q(J,KK)=1 THEN LET BYTE
=BYTE+ (2^K)
 261 POKE (RAMLOC+JJ+8+(CODE D#-
32)), BYTE
 262 NEXT K
 263 PLAY_0,5,5,1,20
 264 INPUT
 265 NEXT J
 266 ENDPROC
 267
 268 @LDACHAR
    INPUT "WHICH CHARACTER TO L
DAD ? "; LINE D$
 270 DIM 0(8,8)
 271 FOR J=1 TO 8
 272 LET JJ=J-1
 273 LET COAD=PEEK (RAMLOC+JJ+8*
(CODE D$-32))
 274 FOR K=7 TO 0 STEP -1
 275 PRINT JO; " NOW LOADING CHA
RACTER LINE ";J
 276 LET KK=K+1
 277 IF COAD>=2^K THEN LET Q(J,
8-K)=1: LET COAD=COAD-2^K
 278 INPUT
 279 NEXT K
 280 PLAY_1,5,20,40,50
281 NEXT J
 282 ENDPROC
 283 :
 284 @LOADFONT
 285 PRINT AT 1,8; "MICRODRIVE OR"
 286 PRINT AT 2,6; "CASSETTE (D/
C) "
 287 GETKEYS_67,68
 288 BOX_4,56,3,4,4,6,41450
 289 INK 1
 290 IF KEY=67 THEN PRINT AT 1,
21 "LOAD TAPE AND PRESS PLAY": SID
E: LOAD ""CODE :EDIS
 291 IF KEY=68 THEN PRINT AT 1,
21 "TYPE NAME OF FILE ON MDV1":
NPUT
     LINE NS: LOAD *"M";1;N$COD
 292 CURRENT_3
 293 STAY_6
 294 PUTBACK_41450,4,4,3,56
 295 STAY_6
 296 ENDPROC
 297
 298 @STAY_TIME
 299 FOR F=1 TO TIME
 300 PAUSE 10
 301 NEXT F
 302 ENDPROC
 303
 304 @GETKEYS_LOW, HI
 305 LET EX=0
 306 REPEAT
 307 LET AS=INKEYS
 308 LET KEY=CODE (A$)
 309 IF KEY>=LOW AND KEY<=HI THE
N LET EX=1
 310 UNTIL_EX
 311 ENDPROC_GETKEYS
 312 1
 313 @BET
 314 LET RAMLUC=45000
 315 DEFG_"S",255,129,129,129,12
9,129,129,255
 316 DEFG_"R",0,0,24,60,60,24,0,
 317 POKE 23658,8
 318 FONT_2
 319 ENDPROC_SET
```

249 ENDPROC



By Bruce Anderson

This is the ultimate version of the classic board game Mastermind. STOP! Hold on. Don't turn the page. You should at least give it a chance 'cos this program is truly unique. As far as we know this is the only version of the game that'll guess your code as well as guessing its own. And there are a full five skill levels.

Okay, so you're not completely convinced yet but since you've got this far you might as well find out all the different options on the

main menu.

1 Competition mode: swopsies time — you and your Speccy take it in turns to break each other's codes and whichever of you does it in the least number of goes collects a score equal to the number of goes he beats his opponent by. Well, that's what it says here. Looks as though you'll just have to play the game to work out what it

2 Set code: you set the code for the computer to break.

3 Break code: the computer sets a code for you to break.

4 Level: how hard do you want to play - 0 for the thickies, 5 for the faultless.

5 Holes: you can have between two and six peg holes.

6 Colours: you can choose two to nine colours - black through white plus blank.

7 Target: the score that you have to reach to win.

8 Autoscore: the computer scores itself.

9 Quit .

... but not yet 'cos you don't know how to play. The program automatically puts you on the correct line and then flashes the position. Simply press the colour/number required (space is blank). You can edit your entry by using the cursor keys — provided the computer doesn't think you're cheating! Then press enter to proceed.

Well, go on . . . proceed!

Basic Loader

Phew, you should just be able to get this in at one sitting. The task complete, take a breather and save it to tape with LINE 1.

100 CLEAR 31599 110 LOAD ""CODE 120 LOAD ""

Hex Loader

2 CLEAR 32767

Here's a turn up for the books we've actually managed to print a hex loader that loads hex. See YS 2 for a couple that didn't 'cos they weren't!

4 POKE 23658,8 INFUT "LOAD CODE (Y/N) "; A\$ 6 B IF AS="Y" THEN LOAD ""CODE 10 LET ADD-32768 12 INPUT "Address you wish to start at? ";I 14 LET BYTES=I-ADD 16 LET CB=0 18 PRINT AT 0,0; "Address:"; I 20 INPUT "8 Hex bytes "; A\$ 22 IF A\$="" THEN GO TO 58 24 IF A\$(1)=" STOP " THEN GO

TO 60 26 IF LEN A\$<>16 THEN GO 10 5

28 FOR B=1 TO 16 30 IF (A\$(B)<"0" OR A\$(B)>"9") AND (A\$(B)<"A" OR A\$(B)>"+") TH EN GO TO 58

32 NEXT B 34 FOR N=0 TO 7

36 LET Y=CODE A\$(1)-48: IF Y>9 THEN LET Y=Y-7

38 LET Z=CODE A#(2)-48: IF Z>9 THEN LET Z=Z-7

40 LET VA=16*Y+Z: LET CS=CS+VA 42 POKE I+N, VA 44 PRINT AT 2, N+3; A*(TO 2)

46 LET AS-AS (3 TO)

48 NEXT N

50 INPUT "CHECKSUM " CS1

52 PRINT AT 2,25;CS1 54 IF CB1<>CB THEN GO TO 58 56 LET I=I+8; CLS : GO TO 14

58 BEEP .1,10: PRINT AT 10.11; "ERROR": PAUSE 50: CLS : GO TO 1 60 INPUT "Save to tope (Y/N) " 155

62 IF 6\$="Y" THEN SAVE "code" CODE 327/8, BYTES

Hex Data

Use the hex loader to enter the hex - eight bytes at a time, no gaps, putting in the checksum when asked. Save the code after the Basic loader with SAVE "BUSTCODE" CODE 31600,346. If you want to stop in the middle of a program, enter STOP (Sym + S) instead of the next eight hex bytes, then enter Y to the Save Code option. This saves the code so far. When you run the hex loader again, enter Y to the LOAD CODE option and then enter the address from where you left off.

31600 00 7D 1C 7D 04 00 06 05 =293 31608 04 04 00 CD AB 7B 32 79 =678 7B CD D7 7B 32 7A 7B CD =1166 31624 BB 7B C9 E5 D5 C5 F5 3A =1405 31632 74 7B 47 2A 70 7B ED 5B =915 72 7B 7E E6 0F 77 1A E6 =983 31640 31648 ØF 12 13 23 10 F4 F1 C1 =781 31656 D1 E1 C9 C5 D5 E5 3E ØØ =1336 31664 F5 3A 74 7B 47 2A 70 7B =890 31672 ED 5B 72 7B 4E 1A 91 FE =1068 31680 00 20 0B 79 CB EF CB F1 =1050 31688 77 79 12 F1 3C F5 23 13 =858 31696 10 EA F1 E1 D1 C1 C9 C5 =1516 31704 D5 E5 3E 00 F5 3A 74 7B =1046 31712 47 32 75 7B 2A 70 7B ED =875 31720 5B 72 7B 4E 1A 91 FE 00 =831 31728 20 08 79 C8 EF C8 F1 77 =1169 31736 79 12 F1 3C F5 13 05 78 =829 31744 FE 00 20 E7 3A 74 7B 47 =885 31752 23 3A 75 7B 3D 32 75 7B =684 31760 FE 00 20 D3 F1 E1 D1 C1 =1365 31768 C9 F5 C5 D5 E5 16 00 3A =1165 31776 74 78 3C 3C 5F 2A 72 78 =733 31784 22 72 7B CD 63 7C CD 89 =1041 31792 7C FE 01 20 F3 D5 E5 EB =1331 31800 2A 70 7B 3A 74 7B 06 00 =580 31808 4F C5 E5 ED B0 E1 C1 E5 =1565

31816 22 72 7B A7 ED 42 22 70 =887 31824 7B CD 7B 7B E1 22 70 7B =1068 31832 E1 D1 19 22 72 7B E1 D1 =1164 31840 C1 F1 C9 E5 D5 C5 F5 2A =1561 31848 70 78 3A 74 7B 5F 16 00 =649 31856 19 28 1D 7E 3C 77 47 3A =531 31864 76 78 88 20 07 36 00 78 =641 31872 FE 00 20 ED F1 C1 D1 E1 =1391 31880 C9 E5 C5 3A 77 7B 47 3A =1056 31888 78 78 88 28 03 F2 9A 7C =990 31896 3D 47 DD 2A 72 78 A7 ED =1036 31984 52 22 72 78 CD AB 78 4F =931 31912 DD 7E FE B9 20 13 CD D7 =1257 31920 7B 4F DD 7E FF B9 20 09 =1030 31928 CD 8B 7B 10 DD 3E 01 18 =791 31936 05 3E 00 CD 8B 7B C1 E1 =952 31944 09 00 00 00 00 00 00 00 00 =201 STOP

Main Program Enter the main Basic program and save it after the other two parts.

110 REM * REM + Codebuster 130 REM * Bruce Anderson * 140 REM 150 REM ********************* 160 REM 170 LET T=1: LET F=0 180 LET att=22528: LET mc=31600 190 LET nc=9: LET nh=4: LET nh1 =nh+1: LET sh=nh+2+4 200 LET g1=32000: LET gs=g1+nh: level=3: LET auto=T 210 LET p@=g1: LET p1=mc: GO SU B 2260 220 POKE mc+4,nh: POKE mc+6,nc 230 80 SUB 2320: REM Define UDG 240 LET max=10: LET colscn=F 250 PAPER 6: INK 1: BORDER 4: C 260 PRINT AT 12,8; "Colour or B& W": GO SUB 2230: IF a = "c" OR a = ="C" THEN LET colscn=T 270 REM 280 REM Get option 298 REM 300 INK 2: PAPER 7: CLS : LET c omp=F: LET a1=3 310 LET mysc=0: LET cosc=0 320 PRINT AT 1,10; "CODEBUSTER"; AT 5,10;"1:Competition";AT 6,10;
"2:Set code";AT 7,10;"3:Break co
de";AT 8,10;"4:Level ";1evel
330 LET a*="OFF": IF auto=T THE
N LET a*="ON" 340 PRINT AT 9,10; "5: Holes nh;AT 10,10; "6:Colours ";nc;AT 1 1,10; "7:Target ";max;AT 12,10;" BiAutoscore ";a#;AT 13,10;"9:Qui 350 GO SUB 2230: LET val=CODE a IF val<1 OR val>9 THEN GO TO 350 360 GO TO val *20+350 370 LET comp=T: INPUT "Your nam e";n\$: IF LEN n\$>6 THEN LET n\$=n \$ (TO 6) 380 GO SUB 750: GO SUB 540: GO TD 300 390 GO SUB 750: GO SUB 890: GO TO 300 410 GO SUB 750: GO SUB 1300: GO TO 300 430 INPUT "New level (@ TO 5) ;level: IF level<0 OR level>5 TH EN GO TO 430 440 GO TO 300 450 INPUT "Holes (2 TO 6) ";nh: IF nh<2 OR nh>6 THEN GO TO 450

468 LET nh1=nh+1: LET sh=nh+2+4 : LET gs=g1+nh; POKE mc+4,nh; 80

470 INPUT "Colours (2 TO 9) "in 11 IF nc<2 OR nc>9 THEN GO TO 47

480 POKE mc+6,nc: GO TO 300 490 INPUT "Target "; max: GO TO

510 LET auto=NOT auto: 60 TO 30

TO 300

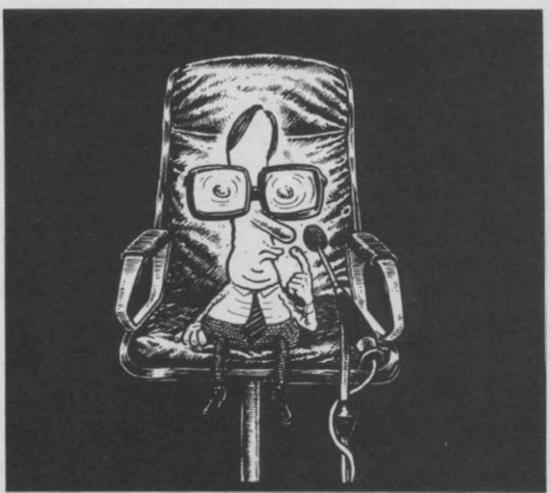
530 STOP

388

0

540 GO SUB 890: LET sco=score: REM Set code 550 GO SUB 1300: REM Break code 560 LET sco=score-sco: IF sco>0 THEN LET cosc=cosc+sco: 60 TO 5 570 LET mysc=mysc-sco 580 IF mysc>=max THEN 80 SUB 84 0: PRINT AT 21,5; "Victory is you rs": 60 TO 610 590 IF cosc>=max THEN 60 SUB 84 0: PRINT AT 21,5; "My CPU was jus t too strong": 60 TO 610 600 GO TO 540 610 PRINT #1; "Hit any key": PAU SE Ø **620 RETURN** 630 REM 640 REM Set up board 650 REM 660 IF comp=T THEN GO SUB 840 670 INK 0: FOR a=19 TO a1 STEP 680 LET as=STR\$ (20-a): IF a>10 THEN LET as="0" 690 INK 7: PRINT AT a,2; as: INK 700 FOR b=1 TO nh 710 PRINT AT a,3+2*b; " "; AT a,s h+b; 720 NEXT b: NEXT a 730 INK 7: FOR a=1 TO nh: PRINT AT 1,a*2+3; a: NEXT a 74Ø RETURN 750 PAPER 4: CLS : INK 7 760 PLOT 37,13: DRAW nh*24+6,0: DRAW 0,140: DRAW -nh*24-6,0: DR AW 0,-140 770 PLOT 35,11: DRAW nh*24+10,0 DRAW 0,144: DRAW -nh*24-10,0: 780 PLOT 37+16*nh,13: DRAW 8,14 790 IF comp=F THEN 80 TO 830 800 FOR a=att TO att+31 810 POKE a,16 820 NEXT a **B30 RETURN** 840 PAPER 2: INK 6: PRINT AT 0, 0; "TARGET "; max; " Speccy "; cosc; " "; n*; " "; mysc; AT 21,11; "CODEBU STER": PAPER 4 850 RETURN 860 REM 870 REM Computers turn 880 REM 890 GO SUB 660: LET m1=nc-1: LE sp=F: IF nc=9 THEN LET m1=7: L SDET 900 LET go=19: LET g1=g1-nh: GO SUB 1720: LET m1=7: LET g1=g1+n

910 LET 1b=level+2: IF level=5 THEN LET 1b=10 920 POKE mc+7,1b 930 RANDOMIZE 940 LET gc=gs: LET go=1 h: LET p@=g1: LET p1=mc: 60 SUB 950 LET s1=INT (RND*nh1) 960 GO SUB 1200: GO TO 980 970 RANDOMIZE USR (mc+169) 980 GO SUB 2010 990 IF auto=T THEN LET val=PEEK (mc+9): GO TO 1020 1000 PRINT #1; "Blacks" 1010 GO SUB 2160 1020 LET nb=val: POKE (gc+nh), va 1030 IF auto=T THEN LET val=PEEK (mc+10): GD TD 1070 1040 RANDOMIZE USR 3438 1050 PRINT #1; "Whites" 1060 GO SUB 2160 1070 LET nw=val: POKE (gc+nh1),v al 1080 RANDOMIZE USR 3438 1090 IF nb+nw>nh OR nb<>PEEK (mc +9) OR nw<>PEEK (mc+10) THEN PRI NT #1; "Error": PAUSE 100: GO TO 990 1100 GO SUB 1790: REM Print score 1110 IF nb<>nh THEN GO TO 1140 1120 LET a1=20-go: LET score=go: LET go=19 1130 GO SUB 2090: GO TO 1190 1140 LET gc=gc+nh+2: LET go=go+1 : POKE mc+8,go 1150 IF go<=2 THEN GO TO 960 1160 LET p0=gc: LET p1=mc+2: GO SUB 2260: LET p0=g1: LET p1=mc: GO SUB 2260 1170 IF go>9 THEN LET 1b=1b+2: P OKE mc+7,1b 1180 GO TD 970 1190 RETURN 1200 FOR a=0 TO nh-1 1210 POKE g1+a,s1: POKE gc+a,s1 1220 LET s1=s1+1 1230 IF s1>=nc THEN LET s1=0 1240 NEXT a 1250 LET p0=gc: LET p1=mc+2: GD SUB 2260: LET p0=g1-nh: LET p1=m c: GO SUB 2260: RANDOMIZE USR (m c+11) 1260 RETURN 1270 REM 1280 REM Break code 1290 REM 1300 LET sp=T: LET m1=7: LET tt= gs: LET gc=g1: LET go=1 1310 LET p0=gs: LET p1=mc+2: GO SUB 2260



Vote, vote, vote for . . . well, who are you going to vote for? Yes, that all-important time has come for you to cast your votes for the best Speccy game published over the last six months in the YS Opportunity Knocks competition. You've typed in the listings, you've played the games and now it's your chance to tell us which one you think capped 'em all in the race for the ace place. What d'you mean, you haven't typed 'em all in? You skipped that one with the two cowboys and the one set in space, well two actually, oh and there was the one.

Well, for those of you who have made the effort, the six games are recapped on this page. Read about them, have another play and then fill in the voting coupon below. You'll notice that it's set out in a similar fashion to the YS Megagame Challenge and that's because we believe these games are as good as some that've made it to the shop shelves. No, not as good as Elite or Fairlight, fair enough, but remember there was a limit of 5K on the programs.

For those of you who haven't played all the games, you have a number of choices. 1) Turn the page . . . just joking! 2) Type all the games in and if you haven't kept all your copies, we can do you a nice little number on the Back Issues page. 3) You can buy all six games on one compilation tape from Digi'T'ape and all for £2.99. Now aren't we good to you! That way all the moaning minnies who 'never type games in from magazines cos we all know they're not much cop' can see just how wrong they are. And doubly wrong for the listings in YS.

PRIZE GIVING

And now for the moment you've been waiting for - the prizes.

FOR THE **PROGRAMMERS**

Each of the programmers has already received a large wad of fivers for his efforts but now there's more. A copy of the compilation tape will be sent to the top twenty software houses in the country so that they can judge the quality of programming talent among YS readers. It may very well be that one or more of these programming geniuses will be 'discovered' through the tape - but you'll know where you played the games first!

And for the outright winner, the one you vote for, there's the scope to expand the scope of his programming even further. How's that? you ask. Well, for the YS Programmer of the Year, there's a brand new Spectrum 128K on its way. Or there will be just as soon as the machine's launched in this country. You can be sure that the lucky winner will be one programmer who'll make full use of the machine and its extra memory. If there's going to be software for the new machine, then it's up to the best programmers to provide it. And our number one is one of the best!

FOR YOU

Yes, it's not only the programmers who are in with a chance of carrying off the goodies. Every vote cast goes straight into a lucky dip and the first one out again wins for its owner ten top software titles - the best ten from the issue in which the winners are announced. If you're into playing games, then a prize like that should keep you happy for a few months to come.

SIX APPEAL

I want to cast my vote in the YS Opportunity Knocks compo but I've been very lazy and I haven't typed all the games in. So, can you please send me . . . copies of the Digi'T'ape compilation tape. Now clip out this coupon and send it with a cheque or Postal Order for £2.99 per tape to Digi'T'ape Freepost, Swansea SA5 5ZZ.



Name	
Address.*	
Postcode	

THE RESERVE ACME CLAPOMETE

You've played the games, now it's time to ast yo Programmer of the Year. And just to jog youmen run-down of the six finalists plus details of horto v could win. On with the clapmete

BOUNZAI

by Eric Verland

Battle it out against an opponent in this brilliant version of the classic Tanks game. And there are seven stunning scenarios in this machine code shoot'em up.

scenario Tanks are tops in this game. Avoid the barricades and blast your opponent with your bullets.

graphics
Blocky graphics but they form
effective barriers to the enemy's

playability Not only do you control your tank but you can even choose to manoeuvre the bullets round the

> originality The game's been done before

but you may not have played it if you didn't have an old Atari VCS

addictiveness A frustrating game that demands just one more go if you're to beat your opponent

screen.



MACROIDS

by Stuart Jamieson

You'll be star struck by this amazing machine code version of Asteroids. The rocks are there, the ships are there, the stars are there and so are you . . .

Lost in space you must zap the wandering asteroids then zap 'em again when they divide and multiply. All this in the pursuit of

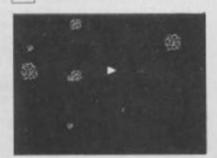
graphics
The night sky's a bit black and white but the asteroids are really rather elegant.

playability Macroids has all the features of the arcade original including the brilliant handling

You've seen it before, played it before but it's never been this good on your Speccy before.

addictiveness With so much space in the game you'll never reach the final

total



cast your votes for the YS ir memories here's a quick w to vote and the prizes you ometer . . .

SHOOT OUT

by Alan Trevartha

Go west young man - to the Wild West. Here only the quick on the draw survive long enough to send the other critter to Boot

scenario It's High Noon and we're in cowboy country. You can tell from the cacti and the open top wagon.

graphics
A neat set of on-screen graphics right down to the gun in the cowboys' hands.

You'll have to duck and weave your way behind the cacti if you're to stay out of the

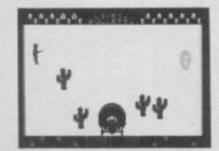
originality

Another arcade game faithfully converted to the Speccy but it needs two players to shoot it out.

addictiveness

How long you play depends on how much of a kick you get out of shooting people. We reckon the game's got a kick like a mule.

total



THE GRID

by Conor O'Nelli

The survival of the human race is in your hands. Can you avoid the trackers and collect enough pellets to see us into the 22nd century?

scenario

The game takes its name from the grid where you collect the pellets. Just make sure you watch out for the missiles

graphics
The graphics aren't really the selling point of the game but they're functional nevertheless.

Simple controls means this game's easy to pick up and play but it needs a lot of ingenuity to

originality

Here the game really scores. You won't have seen this game in the arcades but it's good enough to have got there.

addictiveness

This one has all the makings of a great game. It's clever, it's complex and it's completely compulsive.





HOT SHOT

by M Wallis

A Centipede style game that makes up for what it lacks in originality by a whole host of special features.

We're back with Sammy the Snake doing the old swallowing trick - well, all except his tail that is.

A neat screen that's full of fast action packed graphics.

playability

An easy to play game that's helped along by Kempston compatibility so you can use your joysticks and it even includes automatic fire.

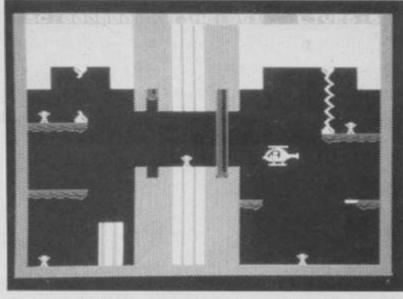
originality

Okay, so it's a low scorer here but just look at how well it's been programmed.

addictiveness

We all know just how long you can spend on the games that seem simple at first. And with the extra lives option you could be at it all night.

total



CHOPPER MISSION

by M Rai

Fly your chopper through six screens of frantic airborne action in a bid to rescue the hostages snatched by the enemy. And don't expect the enemy to sit calmly back and watch you.

Take to the air à la Airwolf and manoeuvre around the complex screens on your mission of mercy.

You'll be hard pushed to find a better animated chopper even in some of the similar commercial

playability

It's easy to handle your machine but oh, so frustrating trying to

originality

A couple of games spring to mind that may have proved the inspiration for Chopper Mission but really it's on its own.

addictiveness

This game's chop-a-bloc full of fun and should keep you firing and flying for ages.



A full 80K of extra memory for our lucky winner to fill.

VOTE WINNERS

To your polling stations. Here's how you go about voting for the top Speccy game of the last six months. First, play the games always a good idea that! Next score them in all the categories listed using the following guidelines:

5 points Mega 4 points Good 3 points Okay

2 points Poor 1 point Naff 0 point Yuk!

Total up the points you've awarded to each game and then tell us the winner. Then clip out the coupon (or use a photocopy) and stick it to the back of a postcard or sealed envelope and send it to Opportunity Knocks, Your Sinclair, 14 Rathbone Place, London W1P 1DE.

My vote for the best game in the Opportunity Knocks Compo goes to

	U15-042-1707		my	vote	into	the	prize	draw	for	the	ten	free	pieces	of
Ġ	softwa	are.												

Postcode

1320 LET p0=g1: LET p1=mc: GO SU 1330 GO SUB 660: REM Set up boar 1340 GO SUB 1930: REM Set comput ers code 1350 GO SUB 1470: REM New guess 1360 RANDOMIZE USR (mc+11): LET nb=PEEK (mc+9): LET nw=PEEK (mc+ 1370 GO SUB 1790: REM Display sc 1380 LET go=go+1 1390 IF go>17 THEN PRINT #1; "You are awful": PAUSE 50: 80 TO 141 1400 IF nb<>nh THEN 60 TO 1350 1410 LET score=go-1: LET a1=20-g o: LET go=19: LET gc=gs 1420 GO SUB 2090 1438 RETURN 1440 REM 1450 REM New guess 1460 REM 1470 FOR a=0 TO nh-1: POKE g1+a. BI NEXT a 1480 LET b=att+3: LET pos=1 1490 LET x=b+(20-go)*32+pos*2: P OKE x,PEEK x+128 1500 GO SUB 2230: REM Get a\$
1510 IF a\$=" " AND sp=T THEN LET
colour=8: FRINT AT 20-go,3+pos*
2; INK 0;" ": GO TO 1680 1520 LET colour=CODE as 1530 IF colour >13 THEN GO TO 161 1548 POKE x, PEEK x-128 1550 IF colour=13 THEN 80 TO 171 1560 IF colour=9 THEN GO TO 1690 1570 IF colour<>8 THEN 60 TO 149 1580 LET pos≈pos-2 1590 IF pos(1 TH THEN LET pos=pos+nh 1610 LET colour=colour-48 1620 IF colour(8 OR colour)mi TH EN 60 TO 1500 1638 IF colscn=T THEN 80 TO 1668

1640 PRINT AT 20-go, 3+pos+2; INK Ø:colour 1650 GO TO 1680 1668 IF colour=4 THEN PRINT AT 2 0-go,3+pos+2; INK 7;" ": 60 TO 1 1670 PRINT AT 20-go, 3+pos+2; INK colour;" " 1680 POKE g1+pos-1,colour 1690 LET pos=pos+1: IF pos>nh TH EN LET pos=1 1780 GD TO 1498 1710 RETURN 1720 GO SUB 1470: GO TO 1730 1725 GO SUB 1480 1730 LET x=T: FOR a=0 TO nh-1: I F PEEK (g1+a)>=nc THEN LET x=F _ 1740 NEXT a: IF x=F THEN GO TO 1 F PEEK 1760 REM 1770 REM Display score 1780 REM 1790 IF nb=0 THEN GQ TO 1840 1800 INK 0 1818 FOR a=1 TO nb 1828 PRINT AT 28-go, sh+a; " " 1830 NEXT a 1840 IF nw=0 THEN GO TO 1890 1868 FOR a=1 TO nw 1878 PRINT AT 20-go,sh+nb+a;" 1880 NEXT 1890 RETURN 1900 REM 1918 REM Original guess 1920 REM 1930 RANDOMIZE 1940 FOR a=0 TO nh-1 1950 POKE gs+a, INT (RND*nc) 1960 NEXT a 1970 RETURN 1980 REM 1990 REM Print guess 2000 REM 2010 FOR a=0 TD nh-1 2020 LET row=20-go: LET col=5+a* 2: LET val=PEEK (gc+a) 2030 IF val=8 THEN PRINT AT row, col; INK 0;" ": GO TO 2070 2040 IF colscn=F THEN PRINT AT r ow,col; INK 0;val: GO TO 2070 2050 IF val=4 THEN PRINT AT row, col; INK 7;" ": GO TO 2070 2060 PRINT AT row,col; INK val;" 2070 NEXT 2080 RETURN 2090 RANDOMIZE USR 3438 2100 GO SUB 2010: PRINT AT 21,5;
"That took ";score;" moves": PRI
NT #1; "Hit any key": PAUSE 0
2110 RANDOMIZE USR 343B: PRINT A T 21,5; TAB 25; "" 2120 RETURN 2130 REM 2140 REM Get value <= nh AND >= 0 2150 REM 2160 00 SUB 2230 2170 LET val=CODE as-48 2180 IF val<0 OR val>nh THEN GO TO 2160 2190 RETURN 2200 REM 2210 REM Set a character in as 2230 LET as=INKEYs: IF as<>" TH EN 60 TO 2230 2248 LET as=INKEYs: IF as="" THE N 60 TO 2240 2250 RETURN 2260 LET hi=INT (p0/256): LET 10 =p0-256*hi 2270 POKE p1,10: POKE p1+1,hi 2280 RETURN 2300 REM U.D.S.'s 2310 REM 2330 FOR b=0 TO 7; READ val 2340 POKE UBR as+b, val 2350 NEXT b: NEXT a 2360 RETURN 2370 DATA "a",60,126,255,255,255,255,255,126,60,"b",60,66,129,129,12 9,129,66,60,"c",0,60,126,126,126,126,126,60,0,"d",0,0,0,24,24,0,0,0, "e",0,0,24,60,60,24,0,0

CHERRY RUN

by Conor O'Neil

Welcome to the CherryDome. But don't think you're going to have a chance to relax — there are far too many cherries to collect for that. You play Henry the Cherry Collector — and don't ask us why he's called Henry, ask his mum. Our 'Enery has to eat his way through the four rooms collecting cherries and taking them back to base. But he's chased by four cherry bugs who can only follow paths that he's created. Fortunately, the bugs aren't invincible — Henry can do the dirty on them by undermining the rocks just so long as he gets out of the way in time.

If you're not yet convinced of just how good the game is, let Conor himself persuade you. "This is my 99% megacool hypergame. Software houses watch out — the dawn of a new force in programming genius arrives with my launch upon the scene." Can you let a claim like that go unchallenged?

The keys you'll need are Q for up, A down, O left and P right. Oh, and if Conor's game has you beat you may find these POKEs useful — 49094,0 gives you infinite lives and 49174,n lets you choose any number of lives between 1 and 9.

The Basic Loader Type in the loader and save it at the beginning of your master tape with SAVE "CHERPROG" LINE 1.

1 LOAD ""CODE 4 PAPER 0: INK 4: BORDER 0: C LS 5 POKE 50444.0: POKE 50445.0 10 PRINT AT 3.8; "CONTROLS : Q= 11 PRINT AT 4,19; "A=DOWN"
12 PRINT AT 5,19; "O=LEFT"
13 PRINT AT 6,19; "P=RIGHT"
14 PRINT AT 7,19; "BEST SPEED=4

8"
15 INPUT "ENTER SPEED 1-255 ";
A
16 IF A>=1 AND A<=255 THEN GO
TO 18
17 GO TO 15
18 POKE 50715,A
20 FOR F=1 TO 300; NEXT F
21 RANDOMIZE USR 50680

23 LET HSC=(PEEK 50444+256*PEE K 50445)
24 IF HSC<(PEEK 45989+256*PEEK 45990) THEN POKE 50444,(PEEK 45990)
26 PRINT AT 4,4; "SCORE= "; (PEE K 45989+256*PEEK 45990);" HISCORE= "; (PEEK 50444+256*PEEK 50445)
27 FOR F=0 TO 300: NEXT F
28 GO TO 15
29 SAVE "CHERPYTE"CODE 45056,5

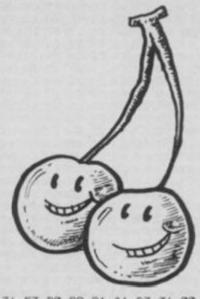
The Hex Data

31 BO TO 29

Ha, bet you thought we'd forgotten something. Yes, you will need a hex loader to enter the code but if you haven't got one saved to tape you can use the one from Codebusters in this Program Power. Now get pickin'.

45056 21 88 83 22 9F 83 CD 53 =1008 45064 80 2A 98 83 23 22 98 83 =955 45072 22 9D 83 21 93 83 22 9F =922 45080 83 CD 53 80 2A 98 83 CD =1224 45088 72 80 36 02 C9 ED 58 73 =990 45096 87 C8 63 28 02 C8 A3 78 =1016 45104 E6 F0 5F C9 CD 53 80 2A =1272 45112 98 83 CD 72 80 36 00 2A =925 45120 98 83 23 22 98 83 22 9D =928 45128 83 21 93 83 22 9F 83 CD =1115

is program is available on DigiT'ape



45136 53 BØ C9 21 45144 Ø6 Ø8 2A 9F AI **B**3 36 DH Ch wBB2 **B**3 ED 5B A1 =883 45152 7E 2A 90 B3 77 24 =863 =911 45160 21 A1 B3 34 10 B3 2F C9 45168 E9 C9 7C E6 18 CB CB =1265 45176 2F 58 67 =929 C6 2A 2F CB **B**3 =1000 22 9B 9D 83 24 23 00 FE 7E 3C A2 FE =941 =1323 45192 24 FE 5A CA CA BA BF 45200 BØ DC =1131 45208 7E 00 CA 04 C6 CD BØ E5 D1 21 1F 40 A7 ED 52 =1052 45216 45224 ØØ 45232 A3 2A C3 CA Ø4 06 Ch 00 BØ =827 22 A3 B3 00 =948 B3 23 04 3A A7 B3 FE CA 45240 Cb 01 =1063 32 A7 B3 23 45248 Ø4 C6 3E 01 **B**3 CD =866 45256 00 B0 2A A3 A3 =792 22 D1 35 00 B3 00 45264 **B**3 21 88 =653 3A 00 04 9B E6 =1019 10 FE 10 1E 10 3A 9B B3 45280 00 20 02 1E =288 45288 E6 ØF 83 26 **≈822** 45296 6F 11 88 40 19 C9 2A =460 20 45304 A5 B3 11 ØA 00 A7 52 =857 ED 45312 30 ØA Ø1 16 ØE CD D9 ØD =530 4532Ø CD 52 B1 C9 2A A5 B3 11 =1068 52 30 45328 64 88 A7 ED ØA 01 =645 45336 17 ØE. CD D9 ØD CD =936 B1 45344 C9 11 E8 Ø3 A7 Ø1 18 ØE CD 2A A5 B3 =1006 20 45352 ED 52 ØA =621 45360 09 ØD CD 52 B1 09 2A A5 =1102 11 0F 19 27 ØE A7 ED CD D9 45368 **B3** 52 30 =784 45376 MA OD CD m690 45384 B1 C9 21 88 88 85 ≈821 45392 B1 C9 3E 10 D7 07 **D7** =955 3E 4B A5 B3 45400 ED CD 1B 1A C9 =1115 B3 CD 53 45408 21 88 B3 9F =1008 9B **B**3 98 83 #963 45416 28 22 21 45424 9D B3 C9 B3 22 9F =976 B3 CD 53 B3 CD =1224 45432 2A 9B 36 C9 =925 72 BØ 02 22 A5 **B**3 45448 CD 89 C5 C9 9D B3 21 =1245 88 22 9F B3 €D B3 CD 53 72 BØ 36 80 2A 00 2A 45456 BOX: =1057 45464 =925 9B 9D =936 98 B3 2B 9B B3 45480 B3 21 C9 B3 22 9F B3 CD =1169 45488 53 BØ C9 2A A3 B3 9B 22 =1033 22 9D B3 5A CA A2 24 24 BF 00 2B FE 7E 3C =79Ø =1213 45496 B3 45504 FE 45512 EB B1 FE 7E CA 04 C6 =1398 45520 DO CD DC BØ 11 00 40 ED =919 45528 52 CA Ø4 C6 DØ CD 60 B1 =964 45536 24 A3 B3 28 22 A3 B3 C3 =998 C6 45544 04 88 3A A7 83 01 =861 FE A7 2B 45552 CA 04 CA (2)(2) 3E Ø1 32 =AR4 45560 B3 CD 60 2A A3 B1 **B**3 =1084 45568 A3 B3 21 D1 B3 35 00 =850 04 19 45576 88 88 88 03 C6 CD 44 =670 45584 B2 98 83 22 2A 9B B3 =947 45592 90 21 B1 B3 =952 B3 22 9F 45600 **B**3 CD 53 BØ 2A 98 B3 =1224 CD 21 88 B3 B3 22 9D 22 B3 =72B =1092 36 456ØB 72 BØ 02 9F 45616 B3 2A A3 45624 CD 53 BØ 2A A3 B3 CD 72 =1167 45632 36 88 C9 2A 9B 70 =931 BØ 48 28 05 70 D6 E0 45640 11 20 00 FE **\$5 FE** =674 45648 28 01 C9 40 DB =1085 2A A3 45656 07 20 C9 22 =675 **B**3 45664 9B B3 22 9D B3 CD 44 B2 7E 3C 45672 9B B3 24 19 24 24 FE =853 00 FE CA CA AZ BF =1161 9F 04 C6 456BB 00 =1121 45696 21 EØ 50 ED 5B 9B B3 A7 =1166 CA C6 DA 45704 ED 52 04 C6 04 =1143 00 CD ØE B2 2A 98 **B**3 =773 45720 A3 B3 C3 Ø4 C6 3A #B31 100 45728 A7 B3 FE 01 CA 04 C6 00 =1005 45736 3E 32 A7 B3 CD ØE 01 B2 ≈856 9B B3 22 A3 **B**3 21 D1 =994 83 35 00 00 00 00 C3 04 =431

45760 C6 CD F9 B2 2A 9B B3 A7 =1373 45768 52 B3 B3 =1057 ED 98 9D B3 CD 53 =1041 72 B0 36 =1101 45776 21 49 B3 22 QF. B3 45784 BØ 24 98 CD 2A 88 **B**3 **B3** =764 45800 A3 **B**3 B3 CD =1176 9D 53 BØ 45808 24 A3 B3 CD 72 BØ 36 000 =933 45816 C9 2A 70 9B B3 20 00 =750 11 45824 FE 48 FE 50 28 01 =746 28 05 45832 **C9** 3E 1F 95 DB 11 20 =715 27 2A A3 B3 B3 CD F9 22 B2 22 =987 B3 =1344 45840 C9 9B B3 9D 45848 2A 9B 45856 A7 ED 24 7E FE =1028 3C CA 45864 CA A2 BF 00 FE 56 =1157 B3 FE 45872 7E 24 CA 21 =996 B3 A7 45880 40 ED 5B 9B ED =1193 Ø4 C6 45888 52 CA 04 C6 D2 00 =898 C1 C3 B2 Ø4 2A 9B B3 C6 00 3A 22 A7 45B96 00 CD =986 45904 A3 B3 =964 45912 B3 01 CA 04 3E =988 FE C6 00 C1 B2 21 D1 C3 Ø4 45920 01 32 A7 B3 CD 2A =1015 45928 98 B3 22 A3 B3 B3 =1131 00 35 00 45936 22 00 C6 =450 45944 03 01 01 01 01 00 00 00 =7 45952 CO 80 E0 82 80 80 80 CØ =1248 45960 00 00 00 00 00 00 00 00 - H 0 18 3C 51 B3 45968 00 00 00 30 SA 99 =387 58 24 20 =581 45976 42 63 00 45984 CØ 00 6F 48 00 00 =383 Ø8 88 99 99 FF 24 24 24 24 FF 24 24 45992 00 BD =858 45000 24 24 =741 46008 CO 80 80 80 =989 BD 80 40 20 46016 03 01 07 01 01 02 04 =115 60 46024 ØC 30 18 3C 54 99 24 42 =501 00 00 00 00 00 00 =210 2A A3 B3 22 9B B3 =752 ØC C6 46040 00 00 22 46848 90 E5 2A 73 **B**7 =1204 CD DC 28 83 BØ D1 ØE 21 A7 6F =1548 =528 46256 98 CD DC ED 46064 52 09 28 **B7** B7 46072 36 6F =473 02 18 ØC 21 85 21 83 CB 46000 01 18 6F B7 36 00 =411 65 CB =933 46Ø88 24 A3 28 02 6F 46096 AS 7D E6 F8 CD 25 =1289 BØ A7 71 36 46104 00 ED 52 38 Ø8 28 ØC =602 46112 46120 21 B7 C9 71 23 71 36 B7 36 02 21 =732 Ø1 C9 =822 21 B7 21 75 87 36 28 7E CD DD 75 87 7F 46128 00 C9 2A 73 m907 28 05 73 B7 07 21 46136 C4 B4 =888 2A 2B 46144 01 =936 46152 B4 CB =889 46160 CF 2A B7 98 =1034 F9 7E B2 ZA CD F4 73 B7 A7 B4 28 Ø5 ED =1376 21 =915 2A =850 4616B CD 52 77 28 Ø5 44 B2 46176 46184 B7 36 01 CD 87 77 11 46192 73 19 7E CS =1052 CD B5 30 46200 B7 CB CF 77 **B7** =1122 CD 4620B C9 55 B5 CD DA B3 =1479 CD B4 C2 3A 6F **B7** =1004 46216 2E B5 28 Ø2 47 C2 75 71 B7 46224 FE 21 18 08 3A =504 46232 **B7** 75 B6 3A CB =1121 87 81 20 80 3A 77 ≈838 46248 FE B6 3A 71 B7 =121 3A 77 B7 CB =659 3A 75 B7 CB =108 46248 CB 47 06 =1218 46256 FE 02 20 08 40 B7 4F C2 46264 CB =1081 46272 C3 5A C8 4F 30 C0 FE FE =1312 2B 22 9B =1036 D1 21 1F =1282 FE 5A CB =1295 46280 18 C8 FE 7E CB 46288 B3 CD DC BØ E5 46296 40 A7 ED 52 C9 CB FE 46304 FE 18 7E C8 23 22 =1127 46312 46320 CD DC BØ 52 C9 FE FE 7E C8 40 =1016 98 **B3** 11 88 A7 ED 5A CB FE =1485 18 2A 9B B3 =1180 46328 CB 46336 CB 65 28 02 CB A5 7D E6 11 20 40 A7 ED 52 =950 5A C8 FE 18 C8 FE =1477 46344 FØ AF C9 46352 FE 46360 2A B3 7E CB 9B CB 65 28 =1046 46368 02 CB A5 7D E6 FØ 6F 11 =1093 71 46376 50 A7 ED C9 3A EØ 52 =1162 BD 46384 B4 =1109 **B7** FE 00 C2 2A 46392 5B A3 **B7** A7 ED 52 =1339 ED B3 79 B7 3A 75 46400 ED 5B A7 ED 52 D2 =1328 464ØB **B4** CB 4F CA =1163 BD 75 B7 46416 C3 BD 21 75 B7 =1219 BD 84 B5 36 46424 00 21 **B7** 36 21 =476 77 88 46432 AF **B7** 36 00 21 71 **B7** 36 =731 46440 3A 6B 00 **C9** B7 FE 211 CA =1006 3A 7B B7 FE Ø1 CA =113Ø 46448 81 84 3A 7D B7 FE 01 CA =1071 46456 40 88 46464 7F B7 01 CA =1260 FA 3A FE 99 A1 B7 46472 BB C3 07 C6 21 B3 =1113 ED =639 2A 46480 88 06 08 6D B3 19 =960 46488 5B 7E 2A 9D B3 AI 46496 36 88 2B 77 2A 9D B3 24 =630 22 E3 21 34 10 46504 9D 83 A1 B3 =B11 B3 46512 CD 72 36 2A 9B BØ =1152 04 C9 2A **B7** =647 36 05 B3 22 B3 A7 46528 22 9B 9D B3 28 ED =1018 52 00 2A 73 46536 5B. A3 ED CA =1121 CD BD A2 BF B5 B7 =1220

22

28

46552

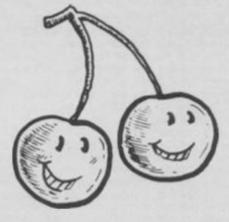
73 B7

C3

B5

46560 B1 B7 22 9B B3 22 9D B3 =1050 46568 2B ED 5B A3 B3 A7 ED 52 =1199 46576 2A =1124 BF CD 8D B5 46584 **B7** 81 2B 81 **B7** 22 A7 46592 **B5** 24 83 **B7** 22 98 B3 =939 ED 5B 46600 B3 9D 2B A3 =1216 **B**3 46608 A2 BF CD 8D =1220 46616 B5 2A 83 B7 2B 22 83 87 =928 46624 82 85 2A 85 B7 22 9B =1053 46632 9D B3 2B ED 58 A3 =1083 46640 93 A7 ED 52 00 CA A2 BF =1220 46648 =962 CD BD B5 2A 85 B7 2B 22 46656 85 B7 BA B5 A1 B3 =1203 21 46664 88 B7 88 2A 6D ED =639 7E 2A 9D B3 =960 2A 9D B3 24 =622 19 7E 77 2A 21 A1 46672 5B AI **B**3 46680 36 20 46688 22 9D B3 B3 34 10 =811 2A 23 9B 46696 E3 98 B3 CD 72 BØ =1152 46704 73 B7 =639 23 ED =101 04 36 Ø5 C9 2A 46712 22 **B**3 22 90 B3 ED =1010 46720 5B A3 **B**3 A7 ED 52 88 CA =1121 45 B6 46728 A2 BF CD 2A 73 **B7** =1149 46736 22 B3 23 73 B7 C3 72 85 21 =890 46744 36 A1 00 06 08 ED 58 =736 46752 AI B3 2A 6D B7 19 7E F5 =1070 46760 2A 9D 83 36 88 CD F9 B2 =1064 =1224 46768 2A 9D 83 A7 ED 52 F1 77 46776 34 2A 10 D9 AI B3 21 B3 9D 24 =839 46784 9D 83 2A 98 B3 =979 46792 CD 72 36 84 11 BØ 20 88 =602 46800 A7 ED 52 36 05 C9 2A =903 B3 22 98 B3 46808 **B7** 22 B2 98 9D B3 CD =1126 46816 F9 A7 ED 52 =1289 2A B3 A7 ED CD 97 B6 46824 ED 5B A3 88 CD F9 52 22 46832 CA A2 BF =1547 2A 73 B7 A7 46B4Ø B2 ED =1038 46848 B7 85 B3 21 A1 =1161 46856 36 00 06 Ø8 ED 58 A1 B3 =736 46864 F5 CD 44 =1003 F1 77 2A =983 19 7E B7 2A 6D 46872 B2 19 2A 9D B3 36 46880 9D B3 00 21 AI 83 34 =815 24 22 B3 CD 46888 20 9D **B**3 9D **B**3 10 =800 46896 72 BØ 36 36 Ø5 C9 =1144 DB 28 98 46904 11 20 19 04 88 46912 2A B7 22 98 **B**3 22 =899 9D 46920 B3 CD 44 B2 2A 9B B3 19 =1031 46928 A3 BF ED 5B B3 A7 ED 52 00 =1156 46936 CA AZ CD CD Ø5 B7 44 =1221 B2 2A C3 72 00 01 46944 73 B7 19 22 73 B7 =875 46952 B5 01 00 87 87 Ø1 =810 60 48 03 00 00 =172 01 00 01 00 01 =35 46960 88 46968 01 00 20 00 EF 50 C3 FF 22 9B 2F 99 46976 88 7F 48 40 =824 46984 7E 5A 7E 99 00 =1098 46992 2A A3 B3 B3 CD DC =1177 47000 81 B7 83 =1127 BØ E5 2A 22 9B 47008 D1 A7 ED 52 38 21 3B B9 36 02 CD DC BØ =1352 28 09 ØE. =396 47024 3B B9 18 ØC. 36 01 =392 18 05 47032 21 3B B9 36 00 2A =541 28 Ø2 CB ED 58 81 CR 47040 **B3** 65 A5 7D =1018 47048 6F FØ B7 CB EA =1424 47056 28 CB A3 7B 02 E6 FØ =1100 47064 A7 3D 52 38 36 Ø2 SF ED 88 28 =697 21 B9 3D =630 36 =774 21 B9 C9 47080 36 81 C9 21 3D 47088 00 C9 81 B7 2A 7E CD =921 47096 47104 B4 2A 28 Ø5 21 81 B7 28 41 7E C4 89 36 =758 21 CD DD =950 47112 28 41 07 21 B9 7E =839 CB 47120 47128 77 F9 CF 2A 81 B7 9B **B**3 =1048 CD B2 2A B1 B7 07 ED =1398 F4 B4 47136 52 7E CD 05 21 28 =915 17144 47152 43 89 36 01 CD 44 2A 82 =900 81 B7 19 7E CD 11 B5. CB =1066 47160 43 21 **B9** 7E CB CF C9 =1141 AA B7 47168 BB CD 90 CD F2 =1538 47176 **B7** C3 83 3A 88 3B 89 =1249 47184 02 28 02 18 08 3A 41 B9 =384 47192 4F 3A CB C2 DF B5 3D R9 =1184 20 3A 43 B9 CB 02 08 =809 47208 3A AF 10 B9 3D



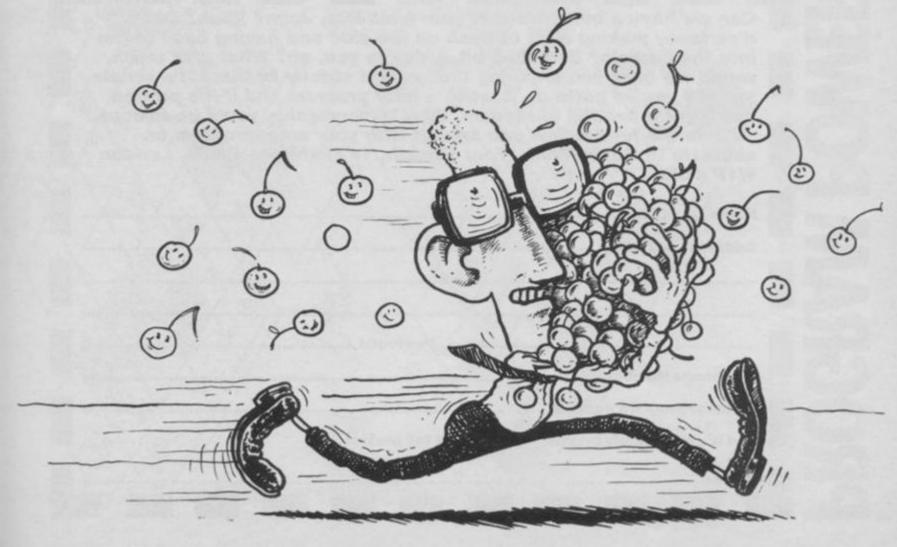


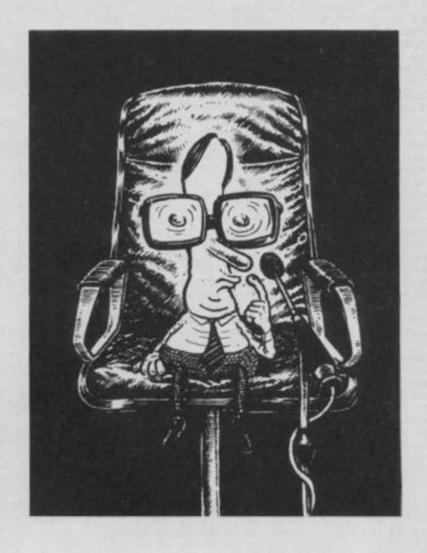
47216 01 20 08 3A 43 89 CB 47 =625 3A 41 CB 47 =1185 36 CØ 3A 3D B9 FE ØØ =999 BB 2A A3 B3 ED 5B =1166 47232 47240 C2 4C BB 47248 81 B7 ED 52 ED 58 45 =1195 47256 B9 A7 ED 52 D2 BB 3A =1199 4C 47264 41 B9 CB 47 C2 4C BB C3 =1173 BE BS 21 41 B9 36 00 21 =745 43 B9 36 00 21 38 B9 36 =637 21 3D 89 36 00 C9 2A =576 87 22 98 83 22 9D 83 =1050 ED 58 A3 83 A7 ED 52 =1191 47288 00 47296 B1 B7 47304 88 AZ BF 45 B6 2A =1053 CD B7 23 22 81 B7 2A 81 B7 22 9B 47320 81 B7 C3 7A =1010 47328 B5 9B B3 22 =937 2A 9B B3 =1344 82 2A 9D CD F9 47344 A7 ED 52 ED 5B A3 83 A7 =1323 47352 ED 52 00 CA A2 BF CD 97 =1230 47360 B6 CD F9 B2 2A 81 B7 A7 =1335 B7 47368 ED 52 81 7A B5 =1163 47376 2A B1 B7 9B B3 22 9D =913 47384 83 CD 44 B2 2A 9B B3 19 =1031 47392 ED 58 A3 B3 A7 ED 52 00 =1156 47400 BF A2 CD Ø5 B7 CD 44 =1221 47408 B2 2A B1 B7 19 22 B1 B7 =903 47416 7A B5 02 00 01 00 00 =501 47424 00 03 00 00 00 00 00 00 00 =3 =752 9B B3 47432 00 00 22 2A A3 **B**3 47440 CD 83 B7 80 ES 2A =1220 47448 9B B3 CD DC B0 D1 A7 ED =1548 47456 38 09 28 0E 21 D5 BA =633 47464 36 02 D5 BA 36 =578 18 WC 05 47472 01 DS BA 36 00 =516 18 A3 B3 CB 65 28 02 CB =933 7D E6 F0 6F ED 5B B3 =1330 474RB 2A A3 47488 A5 47496 63 28 02 CB 7B =1016 E6 FØ 5F A7 ED 52 38 Ø8 =111 28 ØC 21 D7 BA 36 Ø2 C9 =743 47504 =1115 47512 47520 21 D7 BA 36 01 C9 21 D7 =938 47528 36 ØØ C9 83 =832 7E CD C4 B4 28 05 21 D9 =1002 BA 36 01 2A B3 B7 2B 7E =766 47536 47544 BA 47552 DD 84 28 07 D9 BA =1089 21 2A 83 B7 22 47560 7E CB CF 77 =1045 B3 CD F9 B2 2A B3 B7 =1322 ED 52 7E CD F4 B4 2B =12B1 475AR 9R 47576 A7 47584 Ø5 21 DB BA 36 Ø1 CD 44 =771 B2 47592 2A 83 87 19 7E CD 11 =907 21 DB BA 7E CB CF =1355 CD 3D BA CD 4A B9 =1236 47600 B5 CB 3D BA CD 4A B9 =1236 47608 C9 3A D7 =1298 CD AC B9 C3 BA 47624 BA FE Ø1 28 Ø2 18 Ø8 3A =573 47632 DB BA CB 47 C2 20 BC 3A =1151 20,08 =970 47640 BA FE 02 3A D9 47648 BA CB 4F C2 01 B6 3A D5 =1116 47656 BA FE 01 20 08 3A D9 BA =942 C2 DC BB 3A DB BA =1338 47664 CB 47 4F CØ 21 D9 BA =1165 47680 36 00 21 DB BA 36 00 21 =579 36 00 21 D7 BA 36 =941 47688 D5 BA 47696 00 C9 3A D5 BA FE 00 C2 =1106 47784 83 B7 06 BA 2A CD 80 BA =1067 47712 E5 2A A3 B3 CD 80 BA D1 =1341 47720 A7 ED 52 ED 5B DD BA A7 =1388 =1388 D2 Ø6 BA 47728 ED 3A DB BA =1184 CA 06 47736 CB 4F BA C3 70 BC =1171 47744 CB 65 CA 87 BA CB AS 7D =1320 47752 E6 FØ 6F 7C FE 50 28 0E =1093 28 03 26 00 =646 47760 FE 48 19 09 47768 88 11 EØ ØØ 26 00 =505 47776 11 CØ Ø1 19 C9 3A DF BA =903 FE 00 C2 A5 BB 2A B5 B7 47784 =1158 47792 2A A3 CD BØ BA ES 47800 80 BA ES D1 E1 A7 ED 52 =1463 47808 ED 58 E7 BA A7 ED 52 D2 =1441 47816 AS BB JA ES BA CB 47 CA =1301 47824 A5 BB C3 48 BC 00 00 01 =808 47B32 99 99 99 93 99 99 99 99 =3 47840 00 02 00 00 00 03 00 00 =5 47848 00 2A A3 B3 9B B3 CD =957 47856 DC BØ E5 2A 85 B7 22 9B =1172 47864 B3 CD DC B0 D1 A7 ED 52 =1475 47872 38 09 28 0E 21 DF 8A 36 =615

47880 02 18 0C 21 DF BA 36 01 =535 47888 18 05 21 DF BA 36 00 2A =567 47896 A3 B3 CB 65 28 02 CB A5 =1056 47904 6F =1350 7D E6 F0 ED 5B 85 B7 47912 28 CB 47920 F0 5F A7 ED 52 38 08 28 =925 47928 0C 21 E1 BA 36 02 C9 21 =746 47936 36 Ø1 C9 E1 BA 21 E1 BA =1111 47944 00 C9 2A 85 87 =774 7E 47952 CD C4 B4 28 05 21 E3 BA =1072 47960 36 Ø1 2A 85 B7 2B 7E CD =787 47968 DD B4 28 07 21 E3 BA 7E =1020 47976 2A 85 B7 98 =1076 2A 85 87 A7 F4 84 28 Ø5 47984 B3 CD F9 B2 =1336 47992 7E CD ED 52 28 Ø5 =1119 =954 48000 36 Ø1 CD 44 B2 4RMMR 2A 85 87 19 7E CD 11 B5 =912 48016 CB 21 E5 BA 7E CB CF 77 =1303 48024 **C9** C6 BC CD E9 BA CD =1621 48032 48 88 C3 A5 BA 3A =1277 E1 BA 48040 FE 02 28 02 18 Ø8 3A E5 =617 48048 BA CB 4F C2 98 BC 3A DF =1286 48056 BA FE 01 20 Ø8 3A E3 BA =952 FE 48064 CB 47 C2 BB 3A DF BA =1376 48072 FE 02 20 08 3A E3 BA CB =970 48080 4F C2 23 B6 39 E5 BA CB =116 39 E5 BA CB =1166 48088 47 C3 42 CØ 2A B3 48096 98 83 22 9D 83 23 ED 58 =1067 48104 A3 83 A7 ED 52 00 CA A2 =1192 52 00 CA A2 =1192 2A 83 87 23 =1038 CD 45 B6 48112 BF 2A 83 87 =1038 22 B3 B7 48120 82 85 2A 85 =1029 48128 B7 22 98 B3 22 9D B3 23 =956 48136 ED 58 A3 B3 A7 ED 52 00 =1156 48144 CA A2 BF 45 B6 CD 2A 85 =1186 48152 B7 85 B7 C3 8A =1082 85 9B B3 22 9D =915 2A 9B B3 A7 =135 48160 2A 83 87 22 48168 B3 CD F9 B2 =1354 48176 C3 ED 52 EØ BC ØØ CD =1282 48184 86 CD F9 B2 2A 83 87 A7 =1337 48192 ED 52 22 83 B7 C3 82 85 =1173 2A 85 B7 48200 9B B3 22 9D =917 48208 B3 CD F9 B2 48216 ED 52 C3 EE 2A 9B B3 A7 =1354 BC 00 CD 97 =1296 2A 85 B7 A7 =1339 48224 B6 CD F9 B2 48232 ED 52 B7 C3 BA B5 =1183 22 85 48240 2A 83 B7 22 9B B3 9D =915 48248 B3 CD 44 B2 2A 9B B3 19 =1031 48256 ED 5B A3 B3 A7 ED 52 00 =1156 48264 CA A2 BF CD Ø5 B7 44 =1221 48272 B2 2A B3 B7 19 22 B3 B7 =907 48280 C3 B2 B5 2A B5 B7 22 9B =105 98 =1053 48288 B3 9D B3 CD 44 B2 2A =1042 48296 9B B3 19 ED 58 A3 B3 A7 =1196 48304 ED 52 00 CA A2 BF CD 05 =1084 48312 CD B7 44 B2 2A 85 87 19 =1017 48320 22 85 B7 C2 8A 85 21 E3 =1124 00 21 E5 BA 36 00 =742 BA 36 00 21 E1 BA =940 48328 BA 36 21 DF 36 ØØ 48336 48344 C9 00 00 00 00 00 =255 48352 ED 58 A3 B3 A7 ED =1156 36 BC ED 58 =1320 52 00 CA A2 =1192 48360 CA A2 BF C3 A7 48368 A3 B3 ED 48376 BF SE BC 00 00 00 00 =668 2A A3 B3 11 2F 40 A7 ED =916 52 2B 04 00 C3 01 C6 2A =562 48384 48392 48400 A5 B3 11 64 00 19 22 A5 =685 A7 B3 00 C3 48408 3E 00 ₩832 B3 21 02 48416 Ø1 C6 CØ 22 9F B3 =798 9D B3 CD 53 =802 48424 21 2F 40 22 36 BØ 21 2F 40 CD 72 B0 48432 =869 48440 86 21 01 40 22 9B B3 C9 =BØ1 22 9D B3 B3 Ø6 Ø3 21 C5 0A C0 22 9F 06 08 C5 06 49448 =798 48456 =602 48464 1E C5 CD 53 BØ 2A 9B B3 =1067 48472 23 22 9B B3 22 9D B3 C1 =966 48480 10 EF 2A =735 9B B3 23 23 22 9D B3 C1 48488 9B B3 10 DE =1135 48496 11 00 07 2A 9B B3 =459 19 22 22 93 48504 9B B3 9D B3 C1 10 CB =1116 48512 C9 21 **B**3 22 9F B3 21 =965 53 BØ 9D B3 CD 48520 6F 48 22 =1017 48528 21 6F 48 CD 36 02 72 BØ C9 48536 21 B7 B7 22 9F B3 21 =957 48544 EF 50 22 53 80 9D B3 CD =1153 50 48552 21 EF CD 72 80 36 05 =906 B3 21 53 BØ 48560 C9 21 87 B7 22 9F B3 =957 48568 40 22 9D B3 CD =945 2F 48576 21 2F 40 CD 72 80 36 05 =698 48584 C9 21 87 =957 B7 9F B3 21 48592 60 48 22 9D B3 CD 53 BØ =1002 48600 21 60 48 CD 72 80 36 05 =755 48608 87 B7 21 **=957** 48616 7F 48 22 9D 83 CD 55 E8 48616 7F 48 CD 72 80 36 05 =786 48624 21 7F 48 CD 72 80 85 87 21 =728 53 80 =1033 48640 EF 48 83 B7 60 7F 48 22 81 =727 22 A3 B3 C9 =976 21 48 48648 22 73 B7 48656 87 21 6F 3A D1 B3 00 48664 00 00 FE 00 =700 48672 CØ 3A 12 CØ FE Ø4 20 Ø5 =755 48680 21 12 CO 36 00 21 12 CØ =540

48688 34 CD 35 BE C9 3A 12 CØ =969 48696 Ø1 CC 4D BE FE Ø2 CC =1186 48704 03 BF FE 03 CC FE =1144 2C BF 48712 04 CC 55 BF 09 21 D1 B3 =1106 48720 21 36 ØC 14 CØ 36 ØD 21 =411 48728 11 CA C1 01 1A 00 =832 48736 ED BØ 21 83 11 CA C4 =1187 18 00 ED 80 CD 87 C1 =971 48744 01 48752 00 00 00 A7 00 C9 21 18 =425 48760 9F B3 CØ CA C4 3A =1053 48768 D1 B3 47 E5 C5 5E 23 56 =1100 48776 9D B3 D5 00 CD 53 =1157 ED 53 48784 BØ E1 ØØ ØØ CD 72 80 36 =950 10 E4 48792 02 Ci E1 09 =935 20 CØ 22 9F 3A 14 CØ 47 48800 21 B3 21 CA =864 48808 CI E5 C5 SE =1054 48816 23 56 ED 53 9D =998 B3 D5 00 CD 53 BØ E1 ØØ ØØ CD BØ 36 Ø5 C1 E1 23 23 48824 72 =1008 48832 10 =739 48840 C9 E4 21 00 40 22 9B B3 =894 BE 48848 CD E6 =943 21 20 40 22 9B 48856 B3 CD E6 BE 21 EØ 5Ø 22 =1175 48864 9B B3. CD E6 BE C9 21 88 =1329 48872 83 06 20 C5 2A =828 48880 98 83 22 9D 83 CD 53 80 =1168 48888 B3 23 2A 9B 22 9B B3 C1 =972 48896 10 EC C9 21 D1 B3 36 =947 13 48904 14 CØ 36 C2 =770 21 E1 48912 11 CA C1 01 26 00 ED 80 =864 48920 9B C3 11 CA C4 Ø1 26 =837 48928 00 ED B0 CD 87 C1 00 00 =946 21 D1 B3 48936 00 A7 00 C9 =843 1A 21 14 CØ 36 1C 21 Ø7 =393 C3 11 CA C1 Ø1 38 ØØ ED =9Ø1 48944 48952 48960 BØ 11 CA C4 Ø1 =1013 48968 34 00 ED 80 CD 07 48976 00 00 A7 00 C9 21 D1 48976 1F 21 14 C0 36 22 34 00 ED B0 CD 87 C1 00 =998 B3 =789 =451 48992 3F 03 11 CA C1 Ø1 44 ØØ =739 49000 11 CA C4 =1301 ED 80 21 F5 C3 01 49008 3E 00 ED B0 CD 87 C1 =1009 49016 00 00 00 A7 00 C9 3E DF =653 49024 DB FE CB 47 CA 7F BØ CB =1455 49032 CA B3 B1 4F 3E FD DB FE =1425 49040 47 CA 5C B2 3E FB DB =1278 CB 49048 FE CB 47 CA B3 00 C3 =1121 49056 04 C6 3A 12 C0 FE 01 20 =757 49064 05 CD 4D BE 18 15 FE 02 =778 20 05 CD 03 BF 49072 18 00 49080 03 20 05 CD 2C BF 18 03 =507 49088 CD 55 BF 21 16 C0 35 CD =986 49096 00 00 00 00 C3 0D =631 EB. BF CA 3E 01 32 36 00 23 3E 01 49104 12 CØ 21 A5 =719 49112 B3. 36 00 CD 4D =604 49120 BE CD EB BF CD 30 C6 C9 =1470 49128 B7 6B B7 36 Ø1 21 7B 49136 36 Ø1 21 7D B7 36 01 21 =484 49144 7F 36 Ø1 21 A7 B3 B7 36 = 798 49152 00 C9 FF 81 81 81 81 81 =1101 49160 FF 5A 24 =948 81 99 99 49168 49176 24 5A 01 2D 0D 00 00 00 =185 18 18 3C 42 42 42 E7 E7 =768 49184 18 =930 18 7E 7E 30 49192 88 88 88 88 88 88 88 88 =0 49200 C2 BD B5 C3 B5 C3 72 B5 C2 7A B5 C2 7Ø BC BF =1439 C3 =1371 49208 BB C3 49216 82 85 C2 48 BC C3 8A 95 =1279 49224 00 00 2A B2 C1 49232 22 9B B3 2A BA 22 B4 C1 =820 9B B3 2A BA C1 7E FE =1169 49240 03 CA 62 C1 FE ØØ C2 8Ø =1072 49248 CØ CD 44 B2 =1044 2A 9B B3 49256 49264 7E FE 5A CA F7 CØ FE CA F7 CØ FE ØØ CA ØD 18 =1389 CØ FE ØØ CA ØD C1 =1303 CØ =1044 49272 00 00 C3 16 C1 19 =1102 49280 CD 44 B2 D5 2A B2 C1 49288 ED 58 A3 B3 A7 ED 52 D1 =1365 49296 CA 40 C5 2A 9B B3 19 7E =990 49304 C3 A6 C2 F7 CØ 21 A1 B3 =1367 19312 36 00 06 08 21 BC C1 ED =719 49320 5B A1 B3 19 7E F5 CD 44 =1100 49328 B2 2A B4 C1 36 00 19 F1 =913 49336 2A B4 =977 CI 24 22 B4 C1 49344 21 A1 B3 34 10 DE 2A 9B =860 49352 83 CD 72 80 36 04 11 20 =781 49360 00 C3 2B C5 21 CA C1 =897 49368 Ci =1033 BB 21 14 22 B6 49376 21 5D C2 22 BA C1 3A 14 =811 49384 CØ 47 C5 2A B8 C1 5E 23 =1008 49392 C1 C3 4A CØ ZA. =1113 56 CD 7E 49400 B6 C1 23 CD 20 C5 2A BB =1070 494ØB C1 22 BB C1 C1 10 =883 49416 00 C3 0A C6 2A BA C1 =1049 E1 49424 C2 3E 03 CØ ED 5B =1146 49432 A3 B3 A7 ED 52 28 EE 18 49440 D6 E5 ED 58 73 B7 A7 ED =1130 ED = 147349448 E1 16 E5 ED 58 28 81 =1955 49456 B7 A7 ED =1190 52 E1 28 13 ED 28 49464 5B 83 B7 A7 ED 52 49472 18 18 21 68 87 36 00 C3 =620 49480 44 C5 21 7B B7 **#853** 49488 44 C5 21 7D B7 36 00

C3 =857 4B A7 48 B5 48 CA 48 EE =1076 4D 2A C1 C3 7E 2A 35 50 40 =432 **B9** C2 36 BA C3 C1 F7 =982 =1184 F7 6A 96 AE C5 BB C3 77 =884 DA =241 =980 C9 F7 CD C1 9D 3E 2A CØ CO BØ CØ F7 23 CD D1 00 =1427C1 CØ 2A B4 CI C9 ED =1247 CE D3 DA =1136 =1194 C9 21 03 14 14 23 CØ C3 F7 C2 3A 10 FB 47 36 0D 31 35 A5 =393 =571 =921 2A 19 B2 CØ CD =1464 B6 C1 C9 9B 73 A2 Ø1 C5 Ø8 Ø1 53 45 11 Ø2 Ø2 19 Ø1 C9 BA 36 19 72 CD ØE Ø6 CI =899 49552 6B 47 3A =637 =556 2E 92 C1 2A C1 C3 C1 69 Ø1 C5 48 Ø5 E5 C9 2A CO BA =937 5D 23 23 **B**7 =1059 =624 BA D1 E3 EE =1148 =842 49576 49584 CD BD BE B3 CD 50 C5 F9 C2 56 84 5A 50 40 87 D9 50 40 92 EE =522 C1 62 11 BF 14 Ø1 9D CD ØØ FB 76 C9 C1 7E 00 CD CD =874 CØ C3 =1490 AØ BE B3 50 18 30 CD 21 =1522 D9 CD =761 =591 DØ =1131 ØE Ø5 43 53 E4 FF ØØ 6A 3C 4A CD ØØ 4F C2 7E FF 8A =842 D9 ØD =507 40 =465 A7 F4 6F C9 3C 45 00 00 AE 40 50072 50080 5Ø BC 50 5C 4B 4Ø =746 =923 50536 1F 40 =611 BB BC 9A 37 E5 CE DA =981 C5 53 CD 00 ØE CD =562 =818 AE 52 48 5A D4 64 87 49632 49640 4A 4B 48 50 50 C9 ØE Ø1 43 D9 CD =742 BB A5 =771 D9 0D 3C 01 C5 30 D9 1A =582 1D 50 C9 48 6A 50 1A 50 14 50 56 50 F4 50 03 03 03 03 03 03 50568 B3 44 37 51 =996 50104 50112 11 28 =809 CD 45 99 C9 CD 18 =814 4F OD 3C AC B7 =857 =646 E3 45 B7 =519 9A =789 CD =652 30 30 ED 48 01 02 ØD C5 CD 49664 49672 50 50 92 50 50 FA 00 50 00 50128 50136 AD EB 35 40 CB 26 30 40 48 D4 29 86 4Ø 48 48 EC 30 =1080 =634 =682 50592 Ø1 ØC ØE =830 ØE =421 =805 CD D9 =1161 01 02 16 C0 0E CD 04 00 30 30 CD CA C5 CD A8 C5 CD 99 03 88 83 50152 50160 48 50 AD 24 B2 94 50 50 EC 6C 84 50 40 50616 50624 CD D9 CD =12 EB D3 ØD ED 01 C5 30 41 CD BF 4B ØD Ø1 38 66 4A =797 03 Ø3 83 49696 =24 =24 =23 BC 8D =695 =943 C9 =681 0D 3C 22 CD C5 86 82 82 82 82 C3 9B =938 CD BD =821 501:6 50184 50192 50200 99 99 8D 52 DB 50648 CD C5 E8 =748 03 03 =18 40 E6 ØC BE =1386 95 48 48 49728 49736 00 =Ø =Ø 48 5C =541 CD CD C6 =1417 A6 DC 35 89 ØØ CD =0 CE DØ DB =1138 CD BD BD CD B1 BD C9 C3 36 C6 C3 27 C6 E4 C9 FF Ø5 50680 E1 9D 95 CD 49752 00 00 99 88 88 88 50 50 FØ 4D B9 5Ø 6E ØØ 50 00 50 00 85 00 CO CD AD CD CD C9 C6 7E BD CD CD 22 BF C3 =0 =690 =0 50224 50232 =825 =345 =1253 50704 50712 D4 3A 00 18 BE FE 00 3C C5 C1 10 F7 80 36 03 C2 01 BD 21 87 C6 CD E6 00 C9 06 18 B3 CD =0 =0 CD C0 06 CD C0 07 CD 49784 88 =987 =529 =0 =8 06 F6 C9 C9 C6 C0 =0 =0 C2 1A 21 B3 =0 1F C9 =0 3A 5A 50736 C6 16 FE CD 50272 50280 =1053 =Ø =0 =0 =278 =1299 =1103 =1350 =700 99 99 99 99 00 FE 21 A7 88 18 =0 =1022 49824 BD =0 C3 C5 A7 C5 CA FE ED FE 17 B3 CA 21 ED C5 C1 9B =1073 5A 5B 17 CA 9B C3 4Ø 00 CA 4A 50776 50784 9B BE 21 C5 53 19 21 C6 =43 CD 7D =1323 50320 C6 22 B3 2A 9B =12 9F 22 82 C1 9B ØE =0 =796 AE BB E5 =861 =0 BØ CD =1218 98 B3 E9 C9 CD 5D B3 36 F5 C9 07 21 21 AB 02 00 D1 BF 4988Ø 48 1D 50 40 9A 37 94 50 4A 50 B3 50344 =Ø 50808 83 22 ØF =933 =934 =649 C9 23 AE BA =881 =0 4Ø 48 48 F1 91 C9 B4 EE 2C BC Ø7 2A B3 ØØ EA =0 9B C6 4B 4B 40 =855 50376 09 50840 28 06 3A AB C6 88 88 0.03 =0 AB =1223 FE C3 4B DØ =855 C6 36 EE 40 40 C6 21 C9 ØØ 6A BB =850 =858 F9 CB FC 3B =754 =844 49936 40 D3 40 37 48 96 FØ 25 9D 50400 BC 52 50 50 B2 D4 48 5Ø 1Ø 3A AC 50 50 6B 4A C5 6A 02 CD B5 CD F7 BF C9 =886 =1056 AB D1 BØ CD 50872 9D 00 =1224 =849 =698 B7 =857 **#ØSTO**

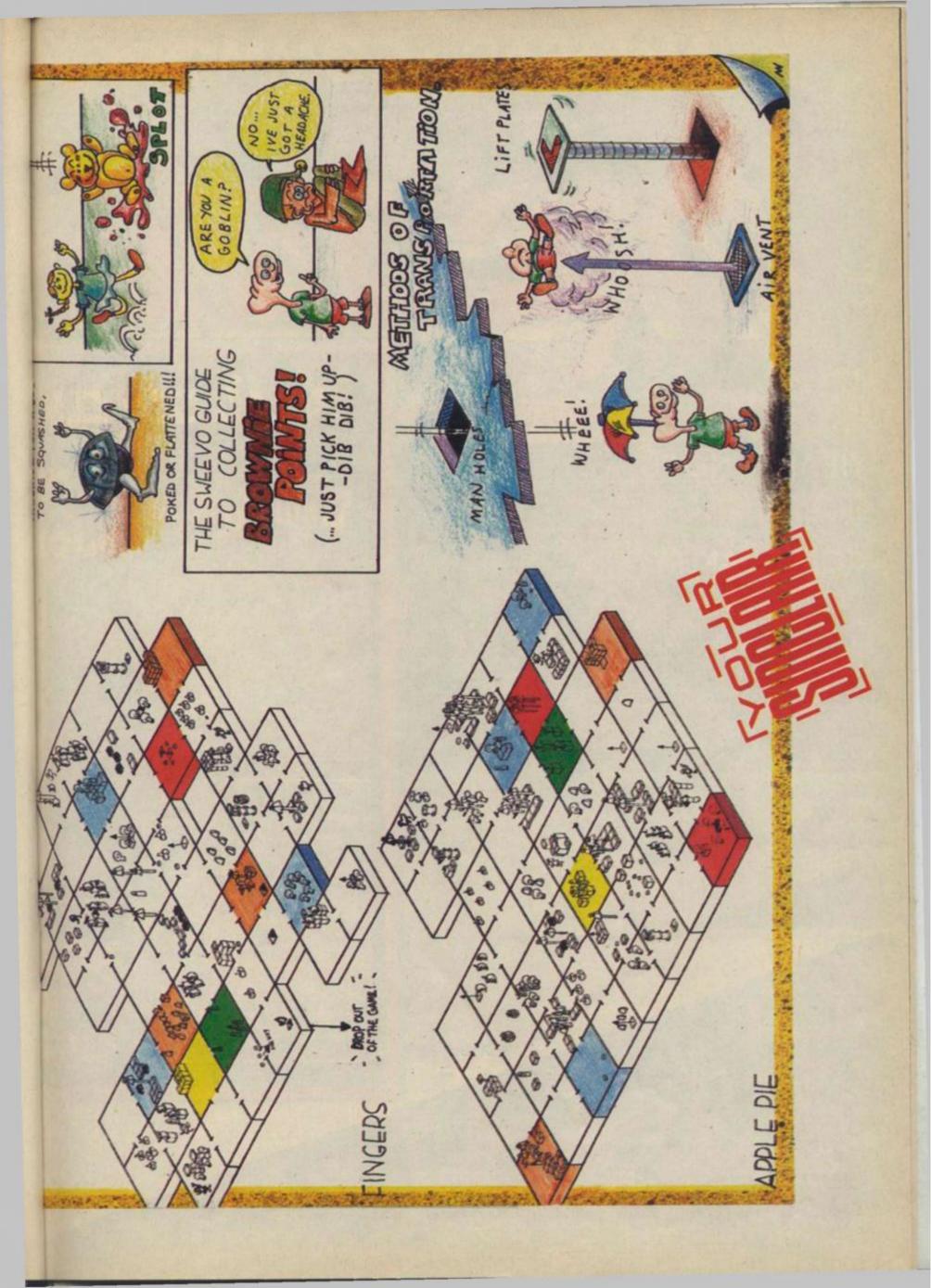




#

TO BE SQUASHED,

POWER I	Can we have a quick word in your shell-like, John? Yeah? Okay, d'ya fancy making a bit of dosh on the side and having bags of fun into the bargain? Sounds a bit dodgy to you, eh? What d'ya mean, would we offer you anything that wasn't strictly kosher? It's simple, see. All you've gotta do is write a nifty program and if it's printed you'll get a handful of readies. What's more John, you'll be famous. Fill in the form below and send it with your megaprogram on cassette to Gavin Monk, Your Sinclair, 14 Rathbone Place, London W1P 1DE.
	Name
2	Address
31	
	Postcode
O.	Telephone Number
OI	My megaprogram's called
	and it's completely original — and I don't tell porkies.
ZI	Signed





YIE AR KUNG FU

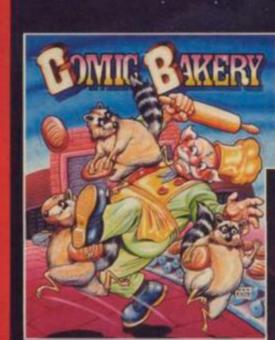
If you can master the ten moves, expect the unexpected and FIGHT for your LIFE against the formidable masters of the martial arts you may live to meet them again on the mountain or in the Temple.

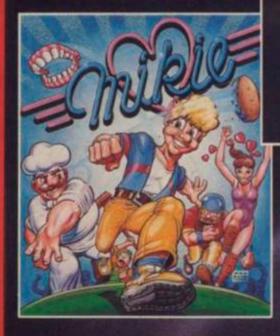
COMIC BAKERY

- *Panic in the bake-shop
- *Fast and furious arcade fun.
- *Help Joe the baker defend his loaves from the rascally raccoons.
- *Another red-hot Konami cookie!

MIKIE

Mikie plays a knockout frantic farce in the classroom, locker room and the high school cafeteria. Hip-zap, door attack, throw balls and pies. but can you make him hand his love letter to his girl-friend?









Imagine Software (1984), 6 Central Street Manchester M2 5NS. Tel: 061-834 3939. Telex: 669977





lint Eastwood? Who he? No, this is the fight simulator. Yes, I said fight simulator. No airports, no stoopid maps, just wall to wall action, flyboys. You're in the hotseat of a hi-tech airborne killing machine of the first order, protecting your base from legions of tanks and flocks of deadly iron birds similar to your own. Yep, they keep on coming. But you're ready for them. You're the best there is. Well, in truth, soldier, you're the only one there is. So get out there, use your

state of the art guidance systems and give 'em hell! Are you ready? Are you sharp? You bet! Do you want to give up now? The hell you

Does this sound like your kind of game? You bet it does. After keeping American kids blasting, and shooting to the tip top of the US charts like one of its own guided missiles, Skyfox is out now for the Speccy. And does it zoom blast pow zap the pants off every flight simulator/shoot 'em up you ever clapped eyes on - well yes it does! Skyfox is an arcade/strategy based on a cockpit view simulation of a powerful modern fighter

aircraft. Now, I'm not much of building model aircraft, I was so planes don't really turn me on. But this is not your average flight sim. You've got short and long range scanners, guided and heat seeking missiles (they don't like it up 'em saah!) to guide with the joystick or fire at their vapourtrails respectively, an on-board, heads-up display battle computer, solid state laser

cannon (rapid fire type), and

fifteen different scenarios to tax your tactical skills, an amazing seek and destroy auto pilot to zero in on enemy planes or tanks, and the standard photon deflector shields to divert the probing lasers of the enemy.

There are two training options, one for the tanks and one for the planes, and each option has three levels. And believe me, you're gonna need training for these guys are hard, and they never stop firing. Following these there's a final training mission where you face alternate waves of

FAXBOX

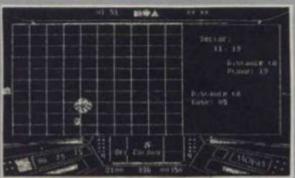
Game	SKYFOX
Publisher	Ariolasoft
Price	28.95
Joystick	Kempston or Sinclair
Keys	.I - nose up, m - nose down, j - left, L - right,
CAPS SHIFT - fire!,	C-computer, A-auto pilot, plus many many many many
more.	

This is your main scanner picture. It's sent by radio from the main computer at the base. On it you can judge the strength of the enemy's tactics, and choose a weak spot in its attack. Obviously the tanks or planes to take out first are the ones that are closest to the base. But you must also study your long range scanner to see how far away the next wave is — remember it'll take precious time to wipe out one lot of tanks and turn back to catch the others before they get your base. So judge this use of time carefully.

Another good stroke is to push through to take out the motherships. They're the enemy's bases and wiping them out will speed your victory. But once again, choose your targets with the utmost care — while you're out on a limb going for a mothership, some tanks or planes might be able to beat you back to your base! You can also use the scanner to get a bearing on your base when your shields are running down. Set the co-ords with the cursor and use the auto pilot to get back to base for a refit.

COMPUTER-CONTROLLED COMBAT





This is an enlarged section of the main scanner, as part of the zoom option on your computer. You can enlarge any one co-ordinate on the main scanner to see more detail, right down to the individual tanks. You can see yourself in relation to the enemy, and, using the pause option, study formation and tank/ plane movements. It'll also tell you where you are in relation to the selected square, which sector it is, and how far the pictured war machines are from your base.

This screen comes in particularly handy when plane and tank icons become fused on your usual low resolution display. You can zoom in and see what really is in that sector, and make your moves accordingly. On the main scanner, you're only told the number of planes or tanks in the sector, but it helps to have these figures translated into pictures. It's especially useful for at-a-glance reference, which you need if you're in that sector yourself. It may warn you to get back to your joystick smartish before you get blasted to tiny little shards.

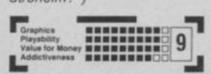
tanks and planes, to test your ability, high/low adaptibility-wise. And that brings the total to seven levels of training, after which you should be ready for anything. And boy, you'd better be.

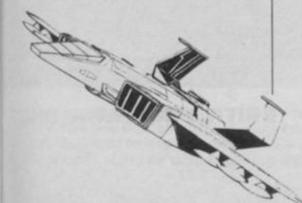
FIGHT TO THE FINISH

Now for the main event - the battle. You can choose from eight battle scenarios Combo, Small Invasion, Full Invasion, Massive Onslaught, Halo, Alamo, Advancing Wall, Chess, and the aptly-named Cornered. This is the bit that sets this game head and shoulders above many others of its type - the strategy. This isn't just an average shoot 'em up, no sirree! By careful analysis of the enemy's movements while you're back at base, you can guess its strategy. Now it's down to you to choose targets to attack that'll destroy the enemy's bases, and so demoralise and confuse it. If you're really on top of your tactics, you can wipe them out entirely! So you have to have a quick mind, as well as a fast trigger.

The graphics are smooth and the foes are gruesomely life-like, but just so I don't swamp you with unqualified praise, I would say that my only real criticism is of the lack of colour in everything but the scanners. This isn't a major gripe though - after playing for a while, you get so caught up in the mastery of the graphic detail, you forget about it being largely black and white. Until you've chased a Foxbat nose-tovapour-trail in some neck jerking turns in this baby, you've never played a flight/

combat game.
So that about wraps it up.
All that remains is for you to
take your seat in your Skyfox,
and zip off at Mach 1 into the
sunset. (Cue sunset . . . okay
Charlie, cue the victory roll
. . . whadda ya mean "do you
want butter on it, Mr
Stroheim?")





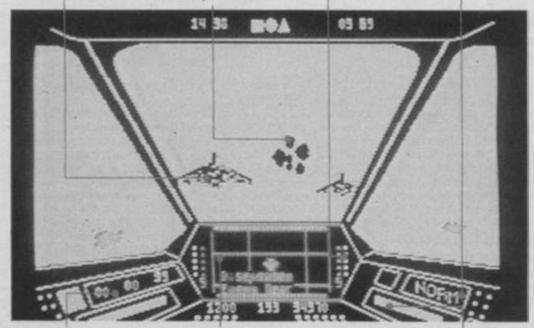
FOX HUNT

After your intensive bouts of training, you'll be just itchin' for some action. Well, I reckon you've come to the right place. Here's a little preview of some of the action you're gonna see. Tanks fodder memories, and planes to see. That's what you're looking down the business end of. I hope you've got the right stuff. Remember what I taught you; fly fast, watch your gauges and keep those metal birdies off your back.

Make sure you shoot these guys when they be got their backs to you. If they get a chance to turn around they'll pop you out of the sky like a clay pigeon! Shoot first and ask questions when you're safely back at base.

The cloud barrier lies between 1,000 and 10,000 feet. Above 10,000 somewhere between 30,000 and 40,000, you'll find the planes. You can save time and fuel by pressing U to go up to 30,000 and D to go back down to lower altitudes. Take the strain off your fuel tank.

Heat seeking missiles should be used sparingly, I know it's a temptation just to aim for their vapourtrail and let one of these fly, oh so easy. But there are more planes than missiles, so only pop them off when you really must. Use your auto pilot to home in on occupied sectors. When you've reached a battle zone, the auto pilot will automatically dis-engage, returning you to ...gulp ... manual. Then it's all down to you.



The clock ticks away elapsed time into the mission. Time is one thing you have nothing of, so don't look at this unless you want to break out into a sweat. Fly fast and shoot to kill. Nothing can be wasted on this trip, boy; Fuel, shields . . . but most of all time!

By contrast with the detail of the base's computer scanner, your on-board computer lacks any resolution at all. Everything, including your own base, is shown as a cross. Use the base computer to zero in on targets before you start 'em or you may find you've nuked your own base. Who's side are you on anyway?

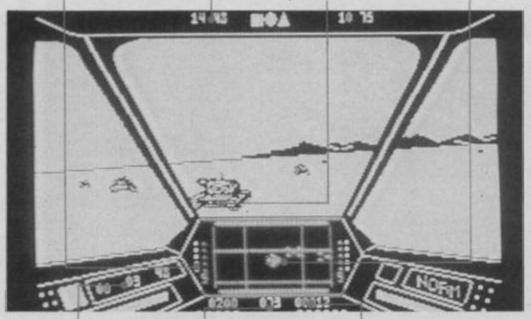
Shield strength is crucial to your survival, especially on latter scenarios. Keep an eye on this gauge, and when it drops close to zero hot-stick-it back to base for a re-charge. Ignore this at your peril, flyboy!

Watch your guided missile count. Don't go frittening them on tanks or planes — they're special long range little darin's. Save 'em for those big fat motherships, and guide 'em in with your joystick, slow an' easy. Ba-boom!

This reading, in combination with the bearing, should help you keep precise track of where you are, when you aren't accessing the base computer's scanners. You've probably got better things to do—like staying alive!

These are the babies! More armour than Sir Lancelot, more speed than Jackie Stewart and firepower to match. A good tactic is the simplest. Just lean on the fire button and hold it. Then fan your laser across the advancing line. Easy! Oh yeah?

You can toggle the on-board scanner from an overhead view to this forward scanner. This is mighty handy for bopping off those motherships with guided missiles. Just target them up with your forward scanner, and let fly!



Fuel gauge. Thrusts can certainly get you out of tight situations, but they're very fuel intensive. And so is climbing altitude to go for the planes. Start off high, kapow the planes then coast down for the tanks. That'll save a lotta fuel.

This is your bearing indicator. It's based on a rule of North O, East 90, South 180 and West 270, back round to North again. Keep your spare eye (how many have you got, hotshot?) on your altitude needle. Above 10,000 feet you'll be zapping planes, below that you'll be facing the wrath of the tank corps.Oh, yeah, and don't bottom your plane on the ground too much, as on the higher levels this can wear down your shields real fast!

SPECIAL

K

Last October, YS flew Max Phillips to Madrid to look at the new 128K Spectrum. Last week, we paid his tube fare to Bethnal Green (well, someone's got to live there!) to try out the new UK version.

t's here, it's official, it's a 128K Spectrum. Indeed some of you may already own one! It is different from its Spanish ancestor but not a lot. In case you've missed the stories while Sinclair took its time bringing the machine to us, the 128 is two computers in one — a 48K Spectrum+ and, in 128K mode, a greatly enhanced Spectrum with some new hardware and software that's vaguely compatible with the old machines.

SOUND AND FURY

People are already moping about the 128. It may not be as radical as the ZX80 was but it does have some worthwhile new features. Sound has come to Sinclair at last — using the sound chip through the TV is going to change games as we know them. You've got three voices, alterable waveforms and various special effects. It's pretty good from Basic but machine coders with interrupt-driven sound routines are going to blow your ears!

The monitor socket (both RGB and Composite video) is simply a sight for sore eyes. BRIGHT colours are no problem with RGB because there's an extra Intensity line — but you'll need the right sort of RGB monitor. The Midi musical instrument interface is gaining ground with promusicians everywhere — who'll be the first to use a Speccy on-stage? And the RS232 is

handy if Sinclair had taken the trouble to document it.

The extra 64K is used as a RAM disk for Basic and is an incredible time-saver. Machine code programs can, of course, use the whole of Ram giving around 104K to play with — space for some mind-blowing games and some really useful applications. The 'missing' 16K of RAM is apparently used to hold a copy of the ROM and is write-protected so that you can't POKE into it. However, if you can unprotect it from machine code, then you'll have 120K. You could even do tricks like making alterations to ZX Basic.

A BASIC BASIC?

The 128K mode software is, however, a bit of a dead fish. Pretty pop-up menus, tape volume testers and so on might be fun for a day or two. But remember, this is the first time Sinclair has had the chance to make all those improvements to ZX Basic we've been asking for in the last four years. All the 128K mode applications could be written in a week flat for the old Speccy.

flat for the old Speccy.
Fortunately, the situation with other software is much better. Sinclair's had software houses labouring away on 128K masterpieces for months and some of it looks to be really impressive... we're in for some fun! The package comes with two free new Ocean games (but no Horizons or Intro

tape) and a huge poster listing 128 add-ons and software. Shame we didn't get the Ocean games though... maybe one of them's Streethawk!

Scanning the poster for the 128K games is like reading the charts for the last six months — Winter Games, Three Weeks In Paradise, Robin Of The Wood, Rasputin, Rocky Horror Show, Return To Eden, Never Ending Story, Sweevo's Whirled (note the new title for the current Castle Rathbone fave rave!), Yie Ar Kung Fu, Fairlight 2: The Trail Of Darkness ... err, hang on a sec, we haven't seen a 48K version of that yet. Most of these are just bigger versions of existing games so we'll have to wait for 128 originals but I don't think it'll be too long.

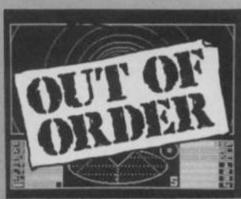
it'll be too long.

Hardware's less of a rosy picture — it all works in 48K mode but how many of your treasured add-ons (your Microdriver, ZX Printer, Kempston S and so on) are going to work in 128K mode? Then again, asking for miracles is always an easy thing to do...

And I could moan for days about the documentation. It's the old Spectrum+ User Guide and a 14-page booklet detailing most of the 128's new features. Oh well, no doubt someone will make a fortune by writing a manual for the machine.

So, who's gonna buy one? Well, if you don't own a Spectrum yet then get one of these. If you're already one of the family, then wait until your ol' 48K keels over and dies of old age. Then get one of these. The price is crucial... at around £120 it's a goer but if Sinclair does the dastardly and comes in at £160 then there will be fewer takers.

And now we can start dreaming about the next Speccy!



Elite — spectacular crashes in space on the 128.

It seemed too good to be true. A 128K Speccy that would run all existing software. Well, maybe it isn't quite true. It seems that there could just be some software that won't work on the 128 in 48K mode. And although our review 128 has EPROMS, it's doubtful if Sinclair has the space or time to fix the problem. But whatever you do, don't panic — it may affect only a handful of recent games.

recent games.

Certainly, the 128 goes a long way to being a Spectrum+ when it's in 48K mode. All the new features get switched off. And we were led to believe that the original Spectrum ROM is copied to

RAM and write-protected. Not so on our machine — the 48 Basic mode and 128 Basic mode have identical code where the ROM is and this is subtly altered from the original ROM. The 128's extra software features are accessed via new code in RAM (which explains why many old POKEs and add-ons won't work in 128 mode) and by bank-switching new bits of code, as necessary.

bits of code, as necessary.

So, in 48K mode, there's a whole new section of code in the previously unused locations 14446-15615 and five places in other ROM routines where calls are made to it (at 75, 2898, 4937, 7037 and 9798 decimal). The calls won't affect commercial tapes because no programmer worth his Wimpy relies on ROM routines — but they may affect some of your own code if you leap in and out of the ROM in unusual places.

ROM routines — but they may affect some of your own code if you leap in and out of the ROM, in unusual places. The big problem's the unused locations — they used to hold OFFh and are apparently useless. But some games programmers use a block of 257 of these bytes as a vector table for their interrupt routines, so saving the space needed to set one up in RAM. Games with this feature won't run on the 128! And to save you going boss-eyed with Lenslok — Firebird's Elite is one such. Let us know if you find others.



BRITISH BORN AND BREDTHE

alı

Here's where the changes have been rung. For starters, 128 Basic dispenses with keywords.

In return you get a screen editor for Basic. Just zip the cursor where you want and change your program at will. And the listing is automatically indented to make the line numbers stand out. This makes editing so much faster and more enjoyable. But all's not wonderful. A lot of editing functions such as Top-of-Program, End-of-Next-Line, Delete-Word and so on are only available if you buy the keypad. To move around quickly, you have to use LIST - the Speccy's old list command takes over and you often get a horrible mixture of what was on the screen before and after. And there are other bugs - try entering very long lines if you dare!

The extensions to Basic come in two forms — some new commands and a pop-up menu. SAVEI, LOAD!, CAT! and ERASE! let you use the 64K RAM disk for instant loading and saving. Files in the RAM disk survive NEW but not resetting or going into 48K mode and are, of course, lost when you switch off. But the RAM disk is still handy when you're working. You can use it to create Basic programs bigger than the normal 40K by doing them in sections and using SAVEI ...LINE and LOAD!. However, it's a bit naughty that you can't OPEN a channel to the RAM disk and write data files to it — you have to muck about with SAVE ... DATA.

The new sound chip is accessed with the incredibly powerful PLAY command. This is followed by up to three strings, one for each channel, containing sound instructions in a single letter language. For example, PLAY "C", "E", "G" produces a beautiful chord while PLAY "UX19W6C))" sounds like a nuclear reactor just before it blows. If you have a midi instrument attached, PLAY gives you full control.

Finally, the command SPECTRUM switches instantly to 48K mode, taking your current program with it. This allows you to write a program for a 48K machine using the added benefits of 128K mode. Saves you having to use SAVE and LOAD I suppose. And yes, there's apparently no way to set the RS232 baud rate.

128K — A TURNED ON SPECCY

This is a Sinclair? Sure is, pop-up menus and all. And you'd better get used to the new copyright message right now. There's even the Sinclair equivalent of the telly testcard — just push the reset and hold down the Break key. Very useful, as you have to tune the TV for both picture and sound (the testcard beeps at you) and the best visuals might not give you any sound at all!

Choose this and everything you see here disappears. You now have a Spectrum+ but Just how lazy can you get? Now any fool can get his 128 going — press this and it does a LOAD** for you! beware, there's no way back to 128K mode from 48K Basic. Bit silly this. It uses Basic's built-in calculator to let you enter and evaluate any old expression. You can even enter LET commands to use bles as calcu memories. But you can only call it up from the startup menu and it's hardly a radical improvement on a Basic PRINT command. Could be fun with This lets you set the volume control to the best level for loading. It's very simple and could prove useful for eginners but why devote

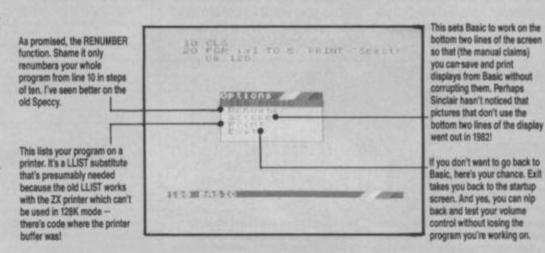
THE BASIC MENU

the optional keypad though.

Just press EDIT in 128 Basic and you're into this menu. The big snag is this — if you type in something you don't want on an old Speccy, you press EDIT and Return and it's gone. The same keys in 128K mode just put you back where you were. Because the screen editor has on-entry syntax-checking, you can't get off a line that isn't correct. And if you want to delete it, you've got to use Backspace lots of times. Or you could go right out and restart 128 Basic — just hit EDIT, 4 down arrows, ENTER, 1 down arrow, ENTER. Or buy a keypad...

precious ROM space to it?

ting them. Perhaps





The panic's over for all those of you who thought you might have to learn Spanish to use the Spectrum 128K – you'll find the British version very familiar. The first thing you'll notice is that the new machine looks almost identical to the Spectrum+. But the heatsink bolted onto the right hand side gives the game away. And in a radical break with tradition the Sinclair and 128K logos are in red!

ADREAM COME TRUE?

Hot on the heels of Rainbird's Art Studio and Softechnic's The Writer comes Generation 4's mouse and icon games designer - Arcade Dream. Esther Monday and Pete Shaw try it out...

What've we always said about games designers? That the Hurg and Games Designer are too limiting and systems like White Lightning are just too complicated? Little did we think that someone would sit down and write the perfect package. Generation 4 is not a software house many people have heard of (Including mel Ed.) but they've been turning out stuff for other labels for nearly two years and using a primitive version of Arcade Dream since last April. Now programmer Mat Schmidt has tarted it up and got G4 to put it on the open market.

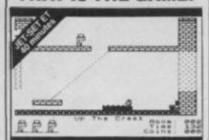
Arcade Dream really is a dream to use. By using the mouse (or joystick) you put your games together simply by picking items from its many menus. At any point, you can hit Play and try the game out. And the results can be stunning. The second tape in the package contains a set of pre-formatted routines that mimic the style of many current charttoppers, from Airwolf to Alien 8, DT's SuperTest to Dun Darach. You simply select the game-type nearest to the game you want to create and then use the menus to make the necessary alterations.

Good results can be achieved in a day — and they do look like the real thing. Arcade Dream could really cause quite a stir especially for the budget labels. At £14.95 it's not cheap but it will let lots of people get into their own games. But software houses have got some waking up to do. A dream come true for you could prove a nightmare for their sales figures.

FAX BOX

Title Arcade Dream
Publisher Generation 4
Price £14.95 cassette
Joystick Interface II or Kempston

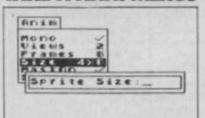
ET OR NOT ET? -THAT IS THE GAME!



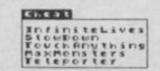


To put Arcade Dream through its paces, we got to work on a game of the film ET 2 (although Mr. S has yet to phone us up and ask for the rights!) Once we'd done the ground work, we used the GameType menu to try out three variations on the theme. The Gargoyle-type was a doddie to do but no-one's managed to solve it yet. Our Ultimate-clone was more work but give ET a sabre and you couldn't tell him from the real thing! But we had most fun with our own Jet-Set ET — who could resist him collecting coins for the phone?

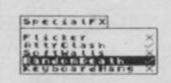
TAKE IT AWAY MENUS



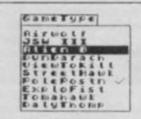
Here's where you set up the animation parameters for the objects in your game. Remember that some of the options will change depending on the game type you've selected — for example, if you're doing a JSW-type game, the maximum sprite size is 3×2. Arcade Dream actually uses different types of sprite code for its different game types...



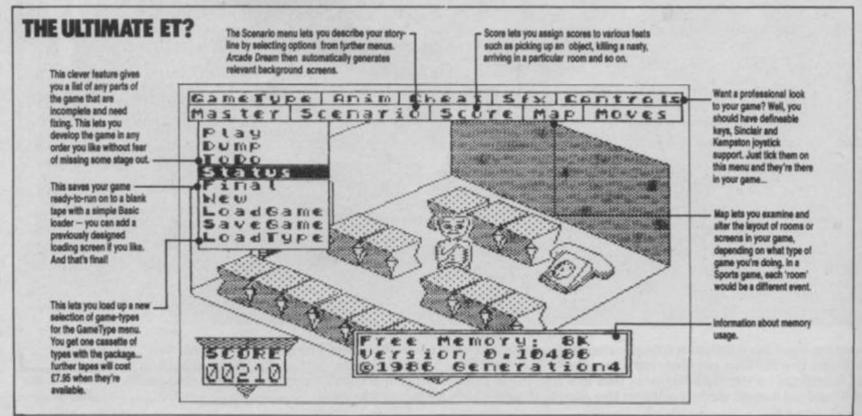
The Cheat menu could put Hacking Away out of business... selecting an option will display the relevant POKEs for whatever game is being worked on. Finished games run independently of the package but fortunately they aren't protected so you can put the POKEs in their Basic loaders. Imagine if you created a Fairlight-type game and then found out it was protected in the same way!



I thought someone was pulling my leg with this menu — but no, Mat Schmidt says it allows you to put some odd quirks into your games so that they look 'hand-programmed' rather than churned out with Arcade Dream. One odd quirk of the program is that the SoftWalls option only seems to work in ViewToKill-type games. A little joke perhaps Mat?



Here's the incredible bit... G4 has used some strange names for its game types but you quickly get to know them and can select the one that fits your idea best. For example, you could use the Airwolf-type game to do a Scuba Dive or whatever. But the best thing is that G4 will be bringing out further Game-Type tapes to give you a better choice and keep up with new games...



O'LEVELS

not just revision but also tuition for the Spectrum 48K

Mathematics

8 programs TOTAL 150K

Fractions, square roots, decimals, logarithms, areas, sets, accuracy, bases, interest, volumes, indices, standard form, modulo, number set, pie charts, histograms, simultaneous equations, bar charts, averages, probability, algebraic lews, quadratics, matrices, vectors, transformational geometry, trigometry, differentiation, integration, factors, angles.

7 programs TOTAL 140K

Biology

6 programs TOTAL 120K

Computer Studies

7 programs TOTAL 140K

Data collection, coding, storage, processing, presentation, validation, d.p. systems, privoy, security, hardware, I/O device software, low and high level languages, machine-codiassemblers, interpreters, compress, errors in programming, act to debugging, microcode, machine organisation.

Chemistry

8 programs TOTAL 150K

8 programs TOTAL 160K

Electronics

8 programs TOTAL 150K

Energy and its sources, power distribution, e.m.f. p.d., charge, turrent power, r.m.s. values, resistors, series and parallel, apacitions, time constants, inductors, transformers, resonance, incrophones, loudspeakers, heat and light sensitive devices, lodes transistors, logic circuits, multivibrators, meters, CRO, emplifiers, fausthors.

10 programs TOTAL 100K

Technical Drawing A set of animated tutorials showing isometric projections.

ALSO AVAILABLE

Maths Sprint

A fast exciting game for 1 or 2 players. Random questions obvering 18 topics. Advance with correct answers and beat your previous time. Suitable for O' level students.

Principles of Computing

Part I takes you through binary counting in easy stages with exercises showing the use of 5 bit byte, character formation and the display file. Part II deals with theory and the use of the higher 8 bit byte, the 16 bit word, number conversion and Z80 registers.

EACH SUBJECT ONLY £5.00 INC P&P

PASCAL & C

1 program Each 30K

each language only £5.00 inc. p/p

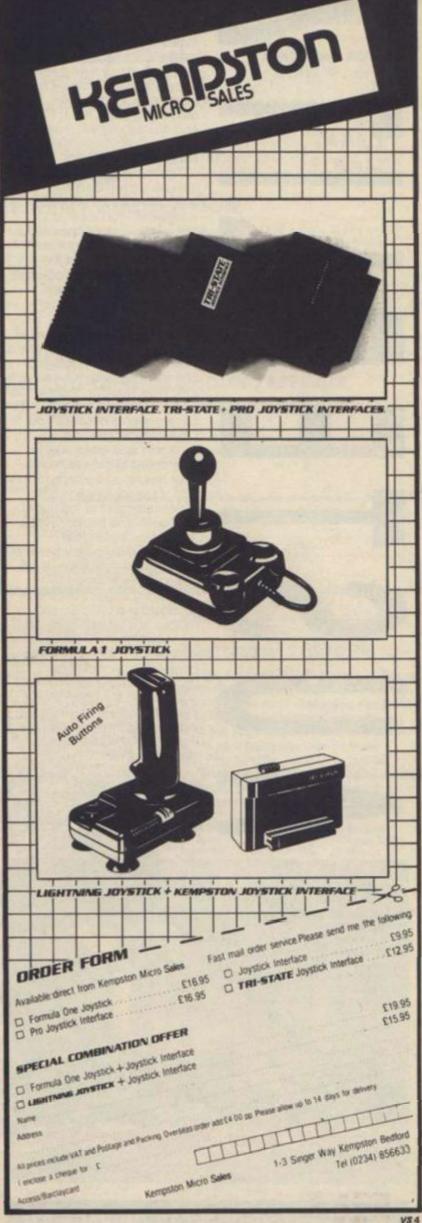
GCE TUTORING

quality educational software



HILLSIDE, KIRSTEAD, NORWICH, NORFOLK NA15 1EB Tel: (0508) 50624

Ny computer is a:	
enclose a cheque/PO for £	
Wy name and address is:	



Austerlitz Lothlorien/£9.95

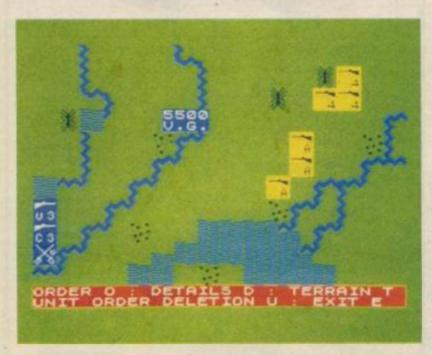
Max I thought Austerlitz was a station in Paris. It turns out it's named after Napoleon's cracking victory over the third allied attempt to stomp on him. Incidentally, on that cold, misty morning in 1805, it was Russia and Austria that suffered the away defeat; our mob didn't manage to turn up!

This is the scene for the latest in Lothlorien's very collectable series of trad wargames. You attempt to repeat Napoleon's formidable victory by pitching your well-trained troops against the slightly larger but less effective Austro-Russian army and killing as many of them as possible.

It's all done as well as usual; there's a scrolling board (only a little larger than the screen!) and square pieces marked with their type, number, morale and so on. The game's made much more playable because your Corp commanders are intelligent and will look after their chunk of the battle and offer reports and advice to you until you want to take over direct command of their units. Lothlorien also avoids 'eyes-inthe-sky' by making the Russian's disappear when they move. You'll only locate them when you meet them!

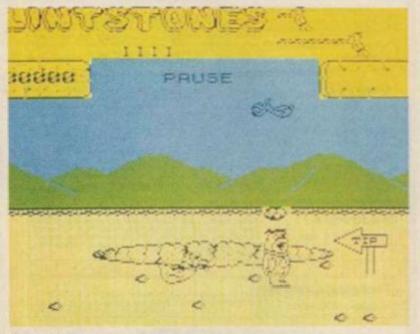
Entering orders from the keyboard is a bit fiddly and tedious but not so bad that it'll put wargamers off. What worries me is that it's all a bit in Boney's favour; you aren't fighting a losing battle. Still, I suppose it's the same when you play Welly in Waterloo. What I want to know is do the French think Waterloo is a station in London?

Graphics
Playability
Value for Money
Addictiveness



MORE SCREEN SHOTS ON PAGE 27

YABBA DABBA



Quicksilva/£7.95

Luke The trouble with games based on cartoons is that everyone already has a pretty good idea of what the graphics should be like. And, to be honest, the graphics in Yabba Dabba Doo! won't get Hanna Barbera hot under the collar — they're crude, they have attribute problems and as for the colour — dull or what?

But that aside, I liked the game. You have to guide Fred Flintstone around the prehistoric landscape that'll one day become the mighty metropolis of Bedrock. Fred has to pick up all the small rocks on the site of his house and dump them in the local tip. Once done, he has to investigate the surrounding area for large rocks, pick them up and use them to build his own house.

There's no shortage of large rocks . . . indeed, hang around too long and you'll find out where they come from — a pterodactyl will fly over and drop one right on Fred's head. Other creatures that hinder Fred's progress are ankle-biting turtles, prehistoric kangeroos and 'Dino' dogs. Something else to watch out for are the rolling rocks — easy to manoeuvre around in the early stages of the game, but tricky later on as Fred's neighbours start building their own homes.

Fred can walk up and down, left and right, and moving from street to street involves a combination of two controls. But, with luck, you'll come across the cave-car that allows Fred to zip about speedily in true arcade style.

The size of the game is deceptive — there are a lot more screens to investigate than are apparent from first attempts to get to grips with it. Fred can earn money at the local quarry to hire a dinosaur to build the roof and, when his energy is at an all time low, he can hang out at the drive-in movie or burger bar and get a hug or two from his true-love Wilma. The game ends when Fred manages to pursuade Wilma to follow him home . . .

Much to my surprise, Yabba Dabba Dool is a very addictive game once you get the idea of what you're supposed to do. The game is a lot less manic than I would have liked but, apart from the graphics, it has all the qualities needed to reduce your mind to

rubble. If you're a Flintstone freak, it's an essential purchase . . . if not, then check out the TV re-runs and then buy it!



QUAL-SOFT

THOUGHTWARE

Sports simulations

"A real challenge 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

TAPE 2 FINALS

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 World Cup qualifying trail. You have been given the most important job of restoring English pride in their football. You have 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 (Qualifiers)

- ★ Current squad of 16 players + 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 tactical/strategy challenge of the highest order.

PACKAGE: Tape 1 plus Tape 2 plus 20 Page Manual in "Video Cassette" style pack. Only £9.95 (90K RAM usage. Some would call this a MEGAGAME. YES IT WILL RUN ON YOUR 48k SPECTRUM QUALSOFT GUARANTEE: Sent by 1ST CLASS POST on day of the order with P.O., Cheque, Access payment is received. Telephone Access orders accepted.

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

Tel: 0438 QUAL-SOFT. Dept. YS 721936 18 Hazelmere Rd., Stevenage, Herts SG2 8RX.

Calculator mode

WORTH OVER £10

Please supply: MEXICO '86

SPECTRUM [

Name:
Address:
Access No. (if applicable)



Spectrum 16k/48k or +

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

1. Muncher	18. Ski Run	26 Beared
The state of the s		36. Draggold
2. Ski Jump	19. Tanks	37. Space Sear
3. Basketball	20. Solar Ship	38. Inferno
4. Frogger	21. Ten Pins	39. Nim
5. Breakout	22. Cars	40. Voyager
6. Crusher	23. Stomper	41. Sketch Pad
7. Startrek	24. Pinball	42. Blitz
8. Mertian	25. Cavern	43. Fishing Mis
Knockout	26. Laser	44. Mystical
9. Boggles	27. Alien	Diamonds
10. Alien Attack	28. Cargo	45. Galaxy Det
11. Lunar Landing	29. The Race	45. Cypher
12. Maze Ester	30. The Skull	47. Jetmobile
13. Microtrap	31. Orbit	48. Barrel Jum
14. Motorway	32. Munch	49. Attacker
15. Labyrinth	33. Bowls	50. Space Miss
DEL ESTREMENT	The second second	ze. opece mis

nce

Names and gam Postage FREE in U. Free watch and tap	K. Add £1	.00 for overs	eas orders. thin 28 days.
I enclose a cheque/ postal order for		- "	nade payable to ade Games Ltd
or through any Post Off For even faster ordering	ice by TRANS	SCASH (Giro No.	655 6655) erclaycard and
or through any Post Off	when chargi	ing to Access, Br	arclaycard and
or through any Post Off For even faster ordering Trustcerd Vise use our 2	when chargi	ing to Access, Br	arclaycard and



SPECTRUM TAPE and DRIVE TRANSFER UTILITIES

ALL SPECTRUM owners need TC7 — our specialist tape utility. Send SAE for FULL DETAILS of this amazing and widely used program

integral header reader

includes BAUD RATE (speed) measurer

can save high speed/jerky parts in "normal" form for DRIVE transfer

you down.
COST only £8.80 (or £9.89 on cartridge with MT6 a special M/drive program — £7.50 with MT6 on tape)
Yes SPECTRUM owners now have a LOW COST way of transferring many of even the LATEST high speed/jerky programs to their drives. You will be amazed! Other methods are expensive or very limited.

Electromy will need our MD1b (for M/drive) or WD1b (for

Firstly you will need our MD1b (for M/drive) or WD1b (for Wefs or disc drive). They give you the tools to convert programs so that they will run on your drive. Includes ability to cope with v.long programs, and split/chop bytes in one go, "VAL" creator, REMixIII, make visible etc., etc. FULL manual (highly rated by CRASH) with example transfers. MD1b or WD1b cost \$5.99. "Meneges more programs"—Your Spectrum. (TC7 also needed for letest programs).

LERM INFORMATION SHEETS

Each sheet gives you the DETAILED instructions required to transfer 8 of the more POPULAR programs to drive using our software. They cost £1 EACH plus SAE. Up to sheet 5

TRANSFER PACK — TC7 plus MT6 plus MD1b on cartridge with information sheets 1-3 all for £15.50 (other drive owners get programs on tape and sheets for same price with WD1b replacing MD1b)

UPDATE SERVICE: for latest version on your LERM product send old tape plus large SAE to get a £2 REDUCTION. OVERSEAS: add £1 Europe, £2 others for each product. SAE for enquiries.

ALL PROGRAMS CARRY A MONEY BACK GUARANTEE (not

LERM, DEPT CR. 10 BRUNSWICK GDNS, CORBY, NORTHANTS NN18 9ER

INCREDIBLE!

TRANSFER ANY PROGRAM TO MICRODRIVE CARTRIDGE THE FULL POTENTIAL OF YOUR MICRODRIVE CAN BE REALISED WITH THE

MIRAGE MICRODRIVER

NOW WITH EVEN MORE EXCITING FEATURES AND STILL

ONLY £39.95 inc P&P

- 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.
 Freeze any game at any point, save it, and restore it later.
 Compacts program for efficient use of cartridge.
 Through connector for other peripherals.
 "Poke" facility for infinite lives, etc.
 Also saves to cassette.

"If you have a microdrive the Microdriver is the most important piece of hardware you could buy." John Lambert — Sinclair User "Using the Mirage is a dream ... this device is a must for the serious microdriver." Crash Magazine — August

"I much preferred the Microdriver for speed and ease of use." Iolo Davidson — Your Spectrum

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

microdrive cartridges for speed and ease of access. Programs saved using the Mirage Microdriver are unreadable unless the Microdriver is present.

Now available from your local computer store or in case of difficulty order directly from us:

MIRAGE Microcomputers Limited

24 Bank Street Braintree Essex CM7 7UL Tel: (0376) 48321

Trade and overseas enquiries welcome.





PREDICTOR

PLUS

ANALYSER

14,000 MATCH DATABASE

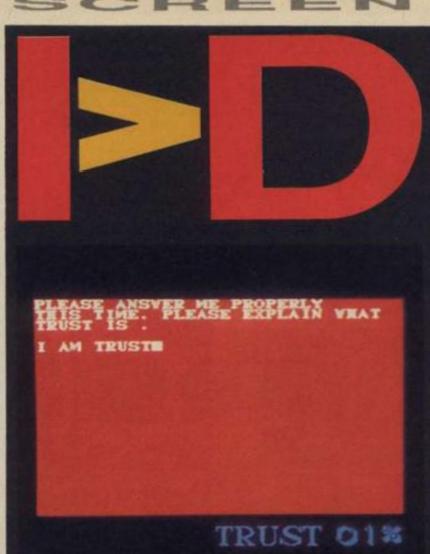
After three successful seasons, we know a thing or two about successful pools prediction on home computers. Things like seven powerful methods of analysing form. Like a masive database and easy data entry. Not forgetting tuning facilities to let you improve your forecasts as the season progresses. We've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

BOTH PROGRAMS FOR ONLY

£8.99

MAYDAY SOFTWARE

181 Portland Crescent Stanmore, Middx. HA7 1LR



CRL/£7.95

Rick Fans of The Jung Ones should love this. Or will they? Who cares? as ID himself (but is he a "he"?) would say — and frequently does, if you're as good at this game as me! This is one for those people who like to engage in long surreal correspondence with the gas board as to why they plumbed your cooker into the bathroom. Hours of mirthless endeavour will come to no fruitful end — and you'll still end up making omelettes in your shower cap.

In its own immortal words the game plan is to piece together ID's shattered memory to discover "who I am, who I was, who will I be". The poor thing is an intelligence left on earth before time began and needs your help to remember his and our history. To do this you can use a line of text to ask pertinent questions. Warning: ID's idea of pertinent won't be yours.

The screen will go different colours according to ID's response — black for depressed, red for angry — and the amount of trust you win is shown as a percentage. Abuse or nonsensical questions lose trust. ID will want to know those closest to you (or the weirdest or fiercest) and will "think" about your answers and bring them up at the most unexpected times. It's sophisticated 20 questions, though "give us a clue" might be your plea.

The blurb hints that ID's persona is more sinister than it first seems — and some pains (in the neck, most of them) are taken to endow him with human qualities. He gets scared, crazy, confused — even dribbly and scrungy. And he often gets annoyed, nay incensed, and demands that you speak to him. Aeons of amnesia have done nothing for his manners. ID even dreams and babbles with arcane clues secreted therein. But forget the pseudopsychology — it's nearer Fraud than Freud. It provides a veneer of sophistication and a lot of red herrings. ID is a straightforward lateral thinking game. And like so many it ultimately fails because it takes itself too seriously. It

fundamentally, charm. Charm? Yup. Spock is logical and lovable. ID is just a smartass! Graphics
Playability
Value for Money
Addictiveness

System 3/£7.95

Rick Ah! What's in a name!
T'zer peepers (and aren't we all, eh?) will of course know that Twister is the third incarnation of System 3's long awaited Mother of Harlots. This title seemed a little raunchy for the shelves of Smiths so Mother of Charlotte was born. Safer, true, but boring, smacking of an undiscovered Bronte novel. And, lo, it came to pass that Twister was the climax of all this name calling and the marketing men saw that it was good.

that it was good.

Dads will remember Twister as a garden game usually won by double jointed yoga gurus able to put their right ankle behind their left ear. This might be a useful skill for Mother of Harlots but we like it plain and simple here at Castle

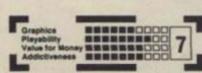
Rathbone. This Twister is a six level arcade shoot 'em up. Level one is essentially a platform. Monoliths like those from 2010 whizz at you. Some carry goodies that increase your fire power, others speed your leaps. Your task is to play cosmic stepping stones, jumping from one to another without falling into galactic oblivion. Meanwhile, the wicked offspring of Twister sputniks, harpies and variously mutilated heads will attempt to put up your life insurance. None appears able to exterminate you at a stroke but all contact is detrimental. Your tactics will thus vary between high speed head hunting - but losing your fire power - or wily evasion making sure each shot counts while you pick up your space goodies.

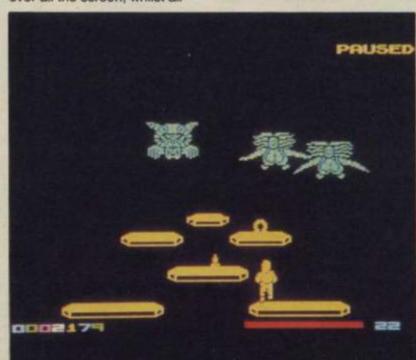
This principle holds good throughout the next five levels. The next sequence is the first of Twister's corridors of power. Here you only have lateral movement but, à la Nightmare on Elm Street, you can walk about on the ceiling. Fine if you don't wear a wig. More ghoulies enter here ranging from Ghostbuster evacuees to fat men with whips.

Level three is (another) corridor, but the next is whizzo, fab and brill. Moving through a hyper-space type transition brings your rocket back-pack to life. Now you can manoeuvre for the first time over all the screen, whilst all

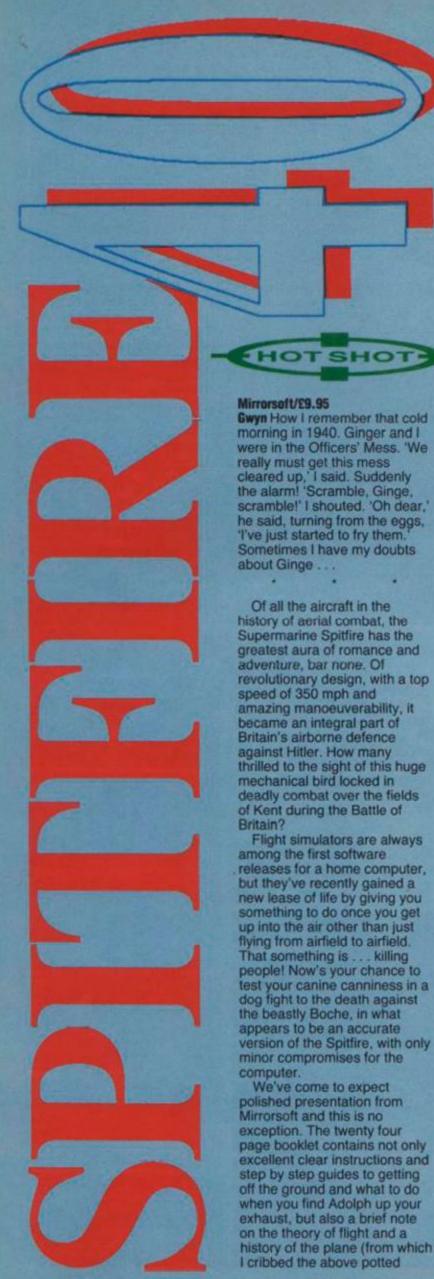
around a galactic electric storm crackles and sparks. Goodies and baddies materialize at random and you have to plot a course between one to get to the other. Savvy?

Success here takes you to the final frontier. The Ultimate Confrontation with Twister who sadly looks like a deflated football. By any other name Twister is a thoroughgoing if derivative whizz bang shoot 'em up. This is one for the Jung at heart who feel like shooting hell out of the cosmic mother.









No stopping to top up when you're fighting Jerry, so keep an eye on the fuel gauge. With only 45 minutes flying time you'd be a fuel not to.

The Artificial Horizon, and watch it rock 'n' roll as you put your Spitfire throug few acrobatics. It also flashes if you're being shot at. If you have problems understanding it an Altitude indicator has been Revving up the engine is all important in flying. You'll need it way up at 3,400 rpm to take off then down to 1,900 for cruising so you're all prepared for the odd burst of speed when you see the enemy.



rour attimeter has two hands, for 100's and 1,000's of feet. It's wise to try and take the enemy from above, but you can also play games of chicken, going into ground scraping rolls.

SHOT

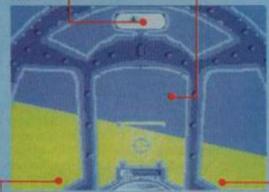
Of all the aircraft in the

When you set out you'll be given a bearing for the enemy, but take time to work out the way back, using the compass here, unless you want to ditch in a field.

you out of harm's way is to slide sideways. The top needle here indicates how

Like all those Road Safety ads say, usu your rear view mirror. If you find you've got a plane on your tail, prepare to take evasive action!

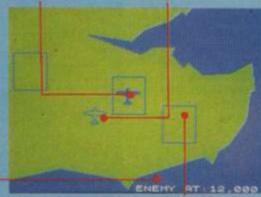
Band-it's at five o'clock. So I'd better get this Fokker in my sights if I'm going to be home in time for Gien Miller.



Though it's not easy to see with the Spectrum's resolution, there's a pixel thick line here to indicate your speed. After all, when

you're locked in comb ou don't want the istractions of flicking to indicator here provid de to the rudo

A little poetic license in the map, to show where you are. At this stage you're still in the vicinity of your base. The Map screen also provides a useful freeze



A useful bit of info from the johnnies at HQ. After all, you'd hate to miss the rendezvous because Jerry flew over you, wouldn't

areas, and successive presses on 'N' magnify the map to help align yourself with the runway. It's advisable to get to know

those green fields a bit before you fly too far from

The Hun over the Home Counties! You can use this as a rough guide but when you reach the open It's a question of twisting

facts . . .). There's also a four page insert containing the important controls and details, such as how to regain control if you foul up.

This attention to detail continues in the program, with separate options for Spectrum and Spectrum + keyboard controls! And the atmosphere is there too. Although you start with no flying hours, once you've made a successful landing you can save your log which provides continuity of character. Be warned though, as you rack up the hours you'll find the program becomes less forgiving of your errors, increasing your chances of pranging the crate — a nice way of handling difficulty levels.

There are two practice modes, for flying and combat, but the real test comes when you leap into the cramped cockpit, throw out a cramped cock or two, and rev up the engine - which sadly sounds more like a gnat in your helmet thanks to the legendary Speccy sound! Space toggles between the instrument panel and the cockpit view. So, taking note of where you can expect to encounter the Hun (in feet and compass bearing), it's up, up and away probably instrument flying until you're in the danger zone.
Actually the cockpit view is
fairly bare, though Mirrorsoft claims you may eventually be able to use landmarks for navigation.

It's probably easier to use the map screen, again accessed by a single key stroke. Then it's war in the air and machine guns blazing as you try to out-manoeuvre the enemy. Here it's the screen view almost all the way and I found it as exciting as any arcade game, suddenly looping over to put a plane that was tailing me directly into my sights. You have to learn to pre-judge targets though and their tactics are cleverly programmed too.

Mission accomplished (and it's not that easy), it's back to base to swop stories of the Heinkel that nearly got away, with a few more flying hours to your credit. Spitfire 40 is a friendly program, not nearly so difficult to get into as some earlier simulators, and it's very engaging with its role playing element.

I snapped on the 'For Hire' light and prepared to taxi up the runway. 'Chocks away, Ginge!' I yelled. 'Aww — and I've only got the coffee cream and that's my favourite,' he said. Quite seriously, I have my doubts about him.

GERRYTHEGERM

Firebird/£7.95

Rachael Gerry the Germ comes in a square box. Gerry the Germ has its instructions in the form of a cartoon poster. Gerry the Germ is obviously supposed to be a fun game. Well let me tell you, fun it ain't.

Well let me tell you, fun it ain't. At the heart of this biological misadventure is a good idea. Somebody's brain was working when they came up with the idea of showing your effective infectiveness by undoing all the good of a body's antibodies. But somewhere between hand and mouth something went wrong.



The problem is that the interlinked arcade games just aren't fun. What they are is infuriating. This must be the first time a germ has come close to causing a purely mental state — a breakdown. I battled for ages to try and capture oxygen in the lungs or stop that leaky bladder but in the end the main lesson I learnt wasn't biological. Bad taste jokes and funny sprites do not a good game make. Somebody forgot to ensure that it was playable.

But the worst thing is this—because it's a 'fun' game,
Gerry doesn't die. Indeed it
seemed set to go on forever
until I rembered that
advertisement. I reached for
my Domestos. Well, it is
guaranteed to kill 90% of all
known germs. From now on I'm
leading a clean life.

odding a clour me.





Datalink/£12.95

Phil Squelch! You ever wondered what happened to all the slime that got deposited on Bill Murray in Ghostbusters? Weeeeell, he had a shower, see. And the slime went through the New York plumbing system. Now it is a little known fact that in the New York plumbing system there is a freak wormhole in the space/time continuum, and animated antimatter runs amok in the sewer system.

In order to stay alive, the little slime blob (G'nite John-Boy, G'nite Slime-Blob) must munch its way through little piles of antimatter, whilst avoiding the mutant fourth dimensional bowling balls which roam the endless subterranean terraces.

3D Slime is a Datalink program and is a very addictive little game. Actually it's not a little game, being a sort of 3D Pacperson meets Gyroscope. I couldn't leave it alone, and more interesting still is that like most real arcade machines, the QL drops your score onto the MD cartridge for posterity. This will stay there no matter how many times you have to backup the game too, as it copies all the files.

A lovely looking, simple to play, but hard to master, game. Oh yeah, there's even a phoney spreadsheet screen on F5, in case the Boss comes in while you're playing it. Ber-rilliant!



Centre Soft presents

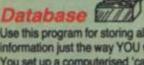
With over four years experience of providing practical software solutions for business and home applications, Gemini have put together their entire range of famous titles for the Spectrum and Spectrum Plus in ONE special pack, at a VERY SPECIAL price. Whether you're a cassette or microdrive user, this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

- 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.



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

Mailist 3



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



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

Cash Book



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

Final Accounts



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

Home Accounts



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

Easiledger



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

Graph Plot



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

Mail Order to



Limited.

Cheques/POs enclosed or please debit my

Access/American Express No.

Name: .. Address: _

Signature: _



Sole distributors to the trade: Centre Soft Ltd. Tel. 021-359-3020

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

PA:T THE BALL competition

Have you got beautiful ball control? Dribbling at the thought of a copy of Activision's Ballblazer? Well, we've got 50 up for grabs and all you've gotta do to win one is spot-the-ball!



Here they come onto the pitch! We're about to witness an amazing game of football and what makes it different is that it's a game of two teams. First we've got Andrew, his official height is 5'4" and he doesn't look much taller than that. Then there's Philip a real pro — most of the people who remember when he was a good footballer are dead.

Well, what sort of game will this turn out to be — that's a

question mark everyone's asking. And we're off ... oh, what a wonderful header by Philip and perfectly controlled by his foot — it would have gone into the goal if the goalie hadn't stopped it. Real possession football this ... and Andrew has lost it ... but T'zer is up there again, what a ball ... kicked wide of the goal with such precision.

It really is anybody's game and with eight minutes to go

the match could be won or lost in the next five or ten minutes ... oh and look what's happened here they've lost the ball — one minute it was on the pitch and the next it wasn't ... what a turn-up for the books. We certainly wouldn't have expected that unless we'd been expecting it ...

Can you help Andrew, Philip and T'zer find their ball? All you've gotta do is study the photo and, as in all good Spot-the-ball compos, mark a big cross where you think they'll find it. And here's a hint...looking at the position of the players'll give you no clues at all! Now clip out the coupon or a photocopy and send it to Spot-The-Balls-Up Compo, Your Sinclair, 14 Rathbone Place, London W1P 1DE.

Name	
Address	
Postcode	

(Sweet) F.A. Rules

Entries should reach us no later than April 30th with no allowance for injury time.

Employees of Activision and Sportscene Specialist Press will be shown the Red Card if they attempt to enter.

The referee's decision is final - even if he is as blind as a bat.

SPOT THE WALLY



This programmer uses ZX Basic.

CLUET



This programmer uses YS MegaBasic with...

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 ZX Basic! **PLUS FREE Sprite Designer**

YS MEGABASIC

YS MegaBasic is only available direct from the Your Sinclair Mail
Order department. It comes on cassette complete with 30 page
manual and is fully microdrive compatible. To order, complete this
coupon and mail it with a cheque or postal order for £7.95, payable
to Sportscene Specialist Press, to YS MEGABASIC OFFER, PO
BOX 320, LONDON N21 2NB
(BLOCK CAPITALS PLEASE)
Name

Address

Postcode

Phone

Please allow up to 28 days for delivery.

Have you got a burning desire to be on the telly? Well, you're going the right way about it — unless you use this program. Andy Pennell's AutoFade provides the perfect protection policy for your TV.

Have you ever wondered what happens to your telly if you decide to go walkabout while you're in the middle of a spot of programming. Sod's law says that something always crops up right in the middle of what you're doing nature calls, the cat dies, the telegram arrives to tell you that your premium bond's just come up. Well, if you've just won a hundred grand you're not going to worry too much about your TV but for the rest of us it's worth knowing what happens if the Speccy's left on too long untouched. Well, if you leave any image on the screen for a long time you may affect the phosphor in the TV tube and that can result in a faint image being burnt permanently into your screen.

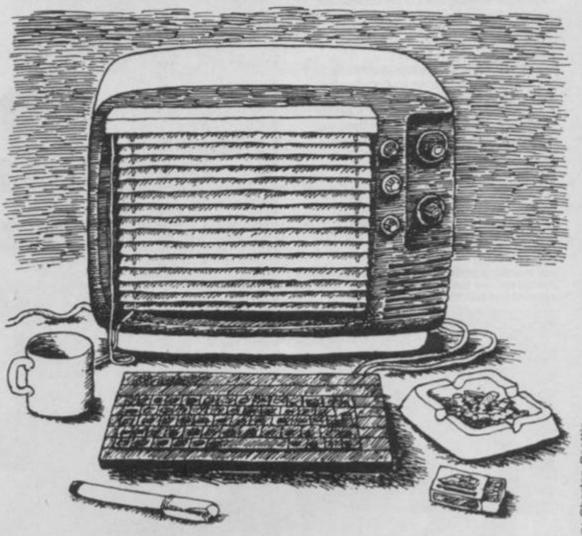
So, how do you avoid it happening? Well, what you need is a program that turns the screen off if you don't do anything for a while. And that's exactly what this program, AutoFade does. If you don't touch a key for a certain period - you can choose any time lapse up to twenty minutes - the screen will go completely black. Well, all except for a single flashing white square that lets you know what's happened. The next time you press a key the screen will be restored to its previous state. The idea for the program was suggested to me by a YS reader who'd seen a similar routine for the Beeb the ancient historians amongst you may remember the machine! As usual my filing system fell over and I lost the original letter, but thanks anyway whoever you may be.

INTERRUPT US!

You've probably guessed already that the program uses interrupts to do its stuff. And I use my interrupts so that they work regardless of what adds-ons are connected, including Interface 1. That's what makes the program not only genuinely useful but also a good illustration of how to handle Interrupt Mode 2 neatly.

The usual problems with IM2 type routines is that they don't work with non-Sinclair peripherals. That's because the byte that's read when the Z80 tries to get the vector address is not FF as normal but it can be any value. To take into account all the values from 0 to FF you have to construct a jump table that allows for all possibilities. And in spite of what you'll read in many Z80 manuals, bit 0 isn't zeroed when the vector is to be found. So, the interrupt routine has to lie at an address that has two bytes the same - I've used # FDFD. The I vector points to \$FE00, which is a table of 257 bytes of \$FD, allowing for all possibilities. Take a look at the Source Code and you'll see what I'm on about.

FADE AWAY



Data Loader

Get going on this short machine code loader program that allows you to set the delay before your screen blanks out. To disable it, do a RAND USR 64994 and renable it with RAND USR 64967. It uses under 1200 bytes and they're located so that the user defined graphics remain untouched.

S RESTORE
18 CLEAR 64198
1800 FOR 1=64967 TO 65023
1010 READ A: POKE I.A
1020 NEXT I
1030 FOR I=65281 TO 65365
1040 READ A: POKE I.A
1050 NEXT I
1060 NEXT I
1060 NEXT I
1060 NEXT I
1060 POKE 65287, T: POKE 65286, S-256*T
1090 RANDOMIZE USR 64967
1100 PRINT "USR 64994 to switch off"
2000 DATA 33,0,254,6,0,243
2010 DATA 253,52,254,6,0,243
2010 DATA 253,62,254,237,71,237
2030 DATA 253,62,254,237,71,237
2030 DATA 253,52,254,237,71,237
2030 DATA 255,34,251,253,205,1
2050 DATA 255,34,251,253,205,1
2070 DATA 255,34,251,253,205,1
2070 DATA 255,34,251,253,209,193
2080 DATA 255,35,29,253,203,1,110
2130 DATA 235,35,253,203,1,110
2130 DATA 235,35,253,203,1,110
2130 DATA 245,211,254,62,184,50
2160 DATA 255,90,33,0,0,201
2190 DATA 255,90,33,0,0,201
2190 DATA 255,253,203,1,110,200
2200 DATA 33,199,250,17,0,88
2210 DATA 1,8,3,237,176,58
2220 DATA 72,92,230,56,15,15
2230 DATA 72,92,230,56,15,15
2230 DATA 72,92,230,56,15,15

The Source

The easiest way of blanking the screen while saving its previous contents is not to save all 6K of screen data but just the attribute file of 768 bytes. You can then make the display file black by zeroing the attributes, leaving the display bit map well alone. The attributes are stored in the area SCRBUF.

The **INIT** routine sets up the vector table and the interrupt mode. It also sets TIMER to 1 — this normally increases by 1 every 50th of a second until it reaches its maximum value, when the screen is blanked, then it's set to 0 until a key is pressed. The DISFAD routine turns off the fader by going back to the usual interrupt mode 1.

INTROU is my version of the interrupt routine which normally just scans the keyboard. It starts by calling the ROM interrupt routine in either the Basic ROM or Interface 1, then saves the registers before calling the extra routine MYINT. It then restores the registers and returns in a similar way to the ROM routine. The JP INTROU must always lie at #FDFD and it must immediately be followed by the 257 byte vector table at #FE00. All these requirements do mean that relocating the program to another memory address isn't just a simple matter of changing the ORG directive. It's a job that should only be attempted by the brave - or foolhardy!

MYINT is the special interrupt routine that controls the screen. It starts by testing for a TIMER value of 0, which means that the screen's been blanked. Now assuming that it hasn't, it sees if

FADE AWAY

the count has reached the magic number — altering the LD DE instruction changes the period of the delay in 50th seconds. If it's not timed out, the timer is incremented unless a key's been pressed, when it's reset to 1.

BLANK handles the job of clearing the screen which it does by copying the attributes to the buffer then setting them all to 0 (black). The border's set to black as well and you'll find the flashing cursor at the bottom right position on the screen. It returns with a zero value on HL for TIMER.

TISBLA works when the screen's already blank and tests to see if you've pressed a key. If you have, the old screen attributes are restored, the

correct border colour is set and the TIMER is set to 1.

For machine code megabrains only, here's the reference listing of the source code as assembled on HiSoft's assembler.

Pass	1 error	S1 (30)	
0001 FAC7		;Auto Fade r ;(c) A.Fenne FLAGS EQU ORG	11 1985
FAC7		SCRBUF DEFS	
	2100FE 0600 F3	Initialise INIT LD LD DI	HL, WFERR
FDCD		INITLP LD INC	(HL), MFD

FDDØ	10FB		DJNZ	INITLE
FDD2	36FD		LD	(HL), MFD
FDD4			LD	A. HFE
FDDA			LD	I.A
FDDB			IM	2
FDDA				5000 500
	210100		E1	10.4
FDDE	22FBFD		LD	HL , I
	C6 55-6-D		LD	(TIMER) HL
ENET.	FA		RET	
-	and the same of	(disab)		
FDE2		DISFAD		1
FDE4	C9.		RET	
				upt handler
FDES	FF		RST	#38 scall
FDE6		rom		
			DI	
FDE7			PUSH	
FDE8			PUSH	
FDE9			PUSH	
FDEA			PUSH	
	ED5BFBFD		LD	DE, (TIMER)
	CDØ1FF			MYINT
FDF2	22FBFD		LD	(TIMER),HL
FDF5	D1		POP	DE
	CI		POP	BC
FDF7	EL		POP	HL
FDFB			POP	AF
FDF9	FB		ET	
FDFA	69		RET	
	0100	TIMER	DEFW	1
2200				ne at #FDFD
EDED	CSESFD		10	INTROU
10000		sand to		#FERR
FERR		LFEOD		
LEGG		LPEOD	DEFE	23/
		ispecia	al int	terrupt
		routine		
FF81	7A	MYINT	LD	A.D
FF02	B3		OR	E
2000				
FF83	2832		JR	
100000	-	if alre		
FFRD	21E803		LD	HL,20*50 :
www.		I like		
FFØB			AND	
FF89			SBC	Company of the Compan
FFØB	2888		JR	Z,BLANK 11f
	-	timed c	ust	
	ER		EX	DE, HL
			100	Artic St. Mr.
FFRE			INC	HL

FF13	CO:		RET	Z sif no ken
		ta hev		pressed so
		clear		
FF14	210100			HL.1
FF17			RET	
	750			
		tits to	and a	tut
FF1B	210058		LD	HL,#5888
	11C7FA		LD	DE, SCRBUF
FFIE	010003		LD	BC.768
FF21	7E	SVLP	LD	A. (HL)
FF22			LD	(DE),A:
		copy to		
FF23	3600	aces, c	L.D	(HL),0 :
		clear	to bl	
FF25	23		INC	HL
FF26	13		TNC	DE
Ft 27			DEC	00
FF28			LD	A.B
FF29	B1		OR	C
FF2A	20F5		JR	NZ, SVLP
FF2C	DIFE		DUT	(MFE),A 1
		black t	porder	
FF2E	3E88		LD	A,210111000
FF3Ø	32FFSA		LD	(#5AFF) .A 1
		cursor		
FF33	210000		LD	HL, Ø
FF36	C9		RET	
		gim b1.	ank s	o see if key
FF37	EB	TISBLA		
	FDCB016E			5, (TY+FLABS
FF3C	CB		RET	Z sif no ke
		iresto		
	2107FA			HL, SCRBUF
FFAB	110058			DE,#5800
	010002		LD	BC,768
FF46	The second secon		LDIR	
FF4B				A, (23624)
FF4B				#38
FE4D			RRCA	
FF4E			RRCA	
	201		RRCA	
	DIFF			(BFE),A
	210100		LD	HL, 1
FF55	C-6		RET	
Pens	2 prepris	12 (30)		
1200		2 32		
	e used:	TATE OF THE		manager as



PREDITOR - PREDITOR - PREDITOR - PREDITOR

PREDITOR

PREDITOR - PREDITOR - PREDITOR - PREDITOR - PREDITOR - PREDITOR - PREDITOR -

PREDITOR · PREDITOR ·

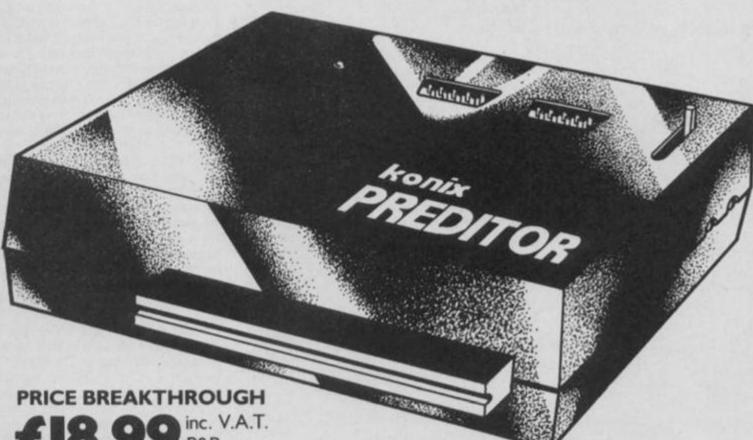
Preditor. The joystick Full Filtered Sound through your television. Video Monitor Port (composite colour). Interface with For UNDER £20 The Preditor has all Joystick Protocols more bite.

Now, the kind of quality you've been looking for in a Joystick Interface, with two big plus's.

- Full Filtered Sound through your

The Preditor has all Joystick Protocols ie: Kempston, Protek and Sinclair left and right.

So any game can be played with this interface. The Preditor is manufactured in the U.K. and built to last.



£18.99

konix

Trade or expert enquiries contact either Keith or Wayne on (049525) 5913

Konix Computer Products is a trading name of Creative Devices Research Limited

For the Sinclair Spectrum 48K and Spectrum Plus.

Please send me_		Preditors at £18.99 each
Computer make		
enclose Cheque	Postal order for	4
Made payable to I	KONIX.	
Please charge my	Access/Visa	
Cardholders can	Access/Visa call on (049525) 591	3 to order
Signature		Total Silve Art Little
Signature Name		
Address		

PREDITOR · PREDITOR

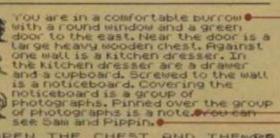
Many moons ago in a far away land, a small band of fellows embarked on a task that no-one but them believed possible. How, the doubters said, could they turn Lord Of The Rings into an adventure game? Night and day they toiled together and at last they triumphed. Now the Grim Reaper considers whether their game really does run rings round other adventures.

SETTING OUT

'You ought to go quietly, and you ought to go soon,' said Gandalf.

验

You are Frodo. .



POPEN THE CHEST AND THE MOPE ALLER AND THE CUPBOARD.

You open the large heavy wooden chest.
In the large heavy wooden chest are a length of strong rope, 3 carvas backpacks.
Pippin waits.
Sam waits.

You open the drawer.

In the drawer are a map, a deerskin pouch, an old wooden pipe, a
new pipe, a long elaborately carved
pipe and a matchbox. In the deerskin pouch is some pipeweed.
Pippin waits.
Sam waits.

You open the cupboard.
In the cupboard are some food and a bottle. In the bottle is some wine. Pippin waits.
Sam waits.

WEAR BACKPACK, TAKE FOOD.

You put on the canvas backpack. Pippin waits. Sam waits.

You take the food.



Frodo is the keeper of the ring and the main character in the game. He and his friends must prevent the ring from falling into the hands of the evil Lord Sauron otherwise the Kingdom of Middle Earth will be lost to the forces of Darkness forever.

"All Hobbits had originally lived in holes in the ground, or so they believed and in such dwellings they still felt most at home."

The note's from Gandalf the Wizard letting you know that he'll see you in Rivendell — so now you know the direction you're heading in.

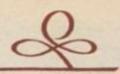
Sam, Pippin and Merry are all faithful companions of Frodo. If you want you can be any one of these characters or all of them but be warned, it'll slow the game down considerably.

If you're one of the little people even the smallest hills can be a cumbersome climb—tell Sam to take the rope as it'll come in useful later.

Government Health Warning — smoking pipeweed can be Hobbit forming.

Go East Young
Hobbit. The map in
the book tells you the
direction that
Rivendell lies. Bear in
mind though, that the
most direct route is not
always the quickest.

Pretty hip these hobbits. Their idea of a comfortable burrow is obviously italian influenced and ultra modern. What's that? You think it could just be that the graphics are a bit on the blocky side and nowhere near as atmospheric as the text. Well, p'raps you're right...



Prepare to go on a quest. You will be away a long time and you will face many dangers. You will travel the length and breadth of the land in pursuit of your final goal and many times you will lose both your way and your will to continue. You will meet many tall, dark, not at all handsome strangers and they will kill you. Your quest is as perilous as the one that Frodo the Hobbit embarked on when he travelled with his companions to Mount Doom to destroy the Evil Lord Sauron's ring. It is that quest...

Even if you haven't read Lord Of The Rings you'll know what an enormous book it is. Maybe that's one of the reasons you haven't got round to it yet. And when you consider the limitations of the Speccy's memory you can appreciate what a formidable task Melbourne House

has taken on with its new adventure and

what an amazing job it's made of it.

Lord Of The Rings, the game, follows the plot of the first book in Tolkien's trilogy, The Fellowship Of The Rings, pretty accurately. Not only that but it also manages to capture the rich atmosphere of the book — not that there can be a real substitute for sitting down and reading it.

Luckily, the book comes as part of the package 'cos if you haven't read it you're in for a pretty tough time trying to crack the adventure. Your best bet is to make a start on the beginner's game on side two of the cassette. There you'll find that the map is slightly different from the main

game as it's only meant as an introduction.

Talking of maps, this one's a real
Ordnance Survey job but it's well worth
taking care over if you want to find your
way around. Oh, and don't forget to save
the game at strategic positions — you'll
find you get killed fairly frequently at the
beginning. The main game is split into
two parts so you'll have to save the game
when you complete the first part if you
want to take some of the objects you've
collected with you.

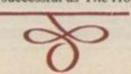
Lord Of The Rings is a true adventure

— the graphics are only included to jazz it
up a bit — the ones in The Hobbit are
probably better. No, the big attraction
with Lord Of The Rings is it's like the TV
Times (or YS? Ed) — there's just so
much in it.

You can choose to play the part of any one of the four main characters in the game, Frodo, Sam, Pippin or Merry. You can even be all four if you like though this tends to slow things down somewhat. The command interpreter is one of the most sophisticated I've ever seen on the

Speccy. You can almost talk to it in English — Inglish anyway. My only real criticism of the game is that you have to reload the game each time you're killed but then again you can't have everything with a game this size.

All in all, the sophistication of the program and the subject matter combine to make Lord Of The Rings one of the all time great adventures and it deserves to be as successful as The Hobbit.



FROM MAGGOT'S FARM TO THE BRANDYWINE To give you some idea of the richness of Lord of the Rings, here's an excerpt from the early stages of the game. The events here take place in just five locations so you can imagine how much more there is to explore. Welcome to the world of The Shire Not all hobbits live in you are Frodo. burrows. "The Maggots, and Puddifoots of Stock, and most of the inhabitants of n, sheds and stables, Just off to north is a heat farmhouse ounded by a garden, can go west, north, south and the Marsh, were house-You're never very far from dwellers; and his farm was stoutly built of brick and had Tolkien's book when you're playing Lord Of The Rings. Even the screen mimics the east.
Pippin enters.
Sam enters.
Sam enters.
Samotvish-looking dogs enteredating ferociotaly.
You wait.
Pippin waits.
Sam waits.
Farmer Haggot enters.
Farmer Haggot says "Hello and who might you be?". a high wall all round it. page layout of a book. You "Suddenly as they drew nearer a terrific baying and can only read one page at a time but you can see which barking broke out, and a characters are in the vicinity as their heads appear on the loud voice was heard shouting: 'Grip! Fang! Wolf! Come on, lads!" previous 'page' Oh yawn - this is the boring SAY FARMER MAGGOT "FRODO. bit. Your companions are always just one step behind You talk to Farmer Maggot.
Pippin Waits.
Sam waits.
Farmer Maggot replies "That sounds like a good hobbit name. Come up to the house.".
The dogs slink off to the barn.
Farmer Maggot goes north. Grr, here's a situation that's gonna hound you. One false move and you're going to so you have to hang around waiting for them to catch up end up as the dogs' dinner. after each move. Hang about, hang about,-hang about. That's right, FOLLOW FARMER MAGGOT. wait three times and Maggot will make his move and call You follow Farmer Haggot.
You are in a farmer's kitchen, with a wide fireplace, and plenty of seating. You can see Farmer Maggot, his Maggot and a wooden table.
You see a wooden table hewn from solid logs.
Pippin waits.
Sam waits.
'You look as though a meal would do you good. 'Says firs Maggot as she puts a meal on a wooden table.
Farmer Maggot waits.

SAY MRS MAGGOT "THANK YOU You lake to Mrs Maggot. The great thing about the game is that it doesn't dump the atmosphere for the sake of the action. The interior of the Maggots' farmhouse captures perfectly the homeliness of the hobbits' Hobbits have a habit of sticking together so don't be coy — identify yourself and you'll find a friend in Farmer Maggot. dwellings and the rural setting of the Shire. We are in a world as rich as Take a look at the table at -this point and Mrs Maggot Tolkien's original. may take the hint. No hobbit's going to turn down the chance of a decent meal! You talk to Mrs Maggot. Pippin waits. Sam waits. Mrs Maggot replies" Your welcome. And they won't say no to a drink or smoke either Shame the game wasn't proof read but then who are Farmer Haggot maits. we to go on about others' spilling Yum, tuck in. All this You eat some of the meat. Pippin eats some of the meat. Sam says "Looks very nice that does". One of the game's most repetition's makes some bits of the game sound like a 'We Learn To Read' book but frustrating responses is Don't Be Silly — frustrating because some of the things does ...
Sam eats some of the meat.
Mrs haggot eats some of the meat.
Parmer Haggot eats some of the
meat.
The meat is now finished.
Farmer Haggot says "Been a few
queer rellows about recently. All in
black and asking after Baggins.
They went up the east road when I
said there weren't no Baggins here. you'll soon get used to it. you'll want to do just don't seem silly at all. And now for the bad news. It seems the Black Riders Good advice from Maggot
— you'd do well to heed it. are on to you. Maggot will have put them off the scent The Black Riders roam the east-west road in search of Farmer Maggot waits.
Farmer Maggot says "Go east and south. Take the ferry and keep off the east road. It's too dangerous. for only a short while the Ring. You should be okay provided you don't stay "Sam was the only member on this road for too long. of the party who had not been over the river before. SE. He had a strange feeling as you go south.

You are at a wooden tanding-stage on the east bank of the Brandwine river. Roads tead to the north and south. In the tanding-stage is a large from winch is an if on handte. You can see the rerry, on the ferry is a targe if on winch, on the large from winch is at if on handte.

You can so north, Other possible exits a eleast through the gettow door. Your destiny - and part two of Lord Of The Rings - lies the slow gurgling stream slipped by: his old life lay behind in the mists, dark across the Brandywine adventure lay in front. Merry went to the door: **OBITUARY** 'What about supper and beer in the throat?" It is with great sadness that we announce the death of one of YS's most respected contributors. A
valued member of the skeleton staff
at Castle Rathbone, he unstintingly Escaping from the clutches of the Black Riders is the hardest part of the game. worked his fingers to the bone BAIT. worked his fingers to the bone writing the adventure pages each month. But now he's passed away. Kicked the bucket. Popped his clogs. He'll scythe no more. The Grim Reaper has died the Death. Grim or what? Once you've got them you go east.
You are in a comfortably furnished cottage with round windows. You can see Herry and a table. On the table is a welcome weat.
Possible exits are west through the yellow door and east through. the yellow door.
Herry waits.
Pippin enters.
Samenters. breathing down your neck, you're almost always a gonner. If you choose to be more than one character at the beginning of the game, what?

Well no, it's not actually 'cos from next month the new-look adventure section will be hosted by none other than Mike Gerrard. Book author, adventure programmer (with his brother Pete), newspaper and magazine columnist, dragonslayer, husband and father of forty-two children, Mike Gerrard, "This is your you at least have a chance of saving someone's skin. SEL. You go north.
You are at the eastern bank. You can see 3 Black Riders mounted on tall black horses.
You can go east, west, south and north.
Merry enters.
Pippin enters.
Sam enters. children, Mike Gerrard, "This is your ..." Not now Eamonn. So, if you have a problem or a clue you want to share, start scribbling to Mike now. Death was last heard of spinning in

SPEND 1986 IN THE 25th CENTURY AND TAKE A TRIP TO PARADISE HE WORM IN PARADISE

Level 9 have spent 12 months enhancing their adventure system with world-beating features for the coming years and THE WORM IN PARADISE is the first game to use this new system.

"The Austin 4 haven't just produced, in THE WORM IN PARADISE, a new title—they've created a whole new ball game in adventure technology ... The latest title offers a 1000-word vocabulary, the most sophisticated parser ever incorporated in a cassette-based adventure, and the refinement of multitasking ... You'd have to spend an evening with a Roget's Thesaurus to come up with enough superlatives to do to come up with enough superlatives to do justice to THE WORM IN PARADISE; it not only offers stunning (albeit at times disturbing) originality in the overworked realm of science fiction but also embodies state-of-the-art programming techniques which will allow you effortlessly to give reign to your powers of creative deduction"

— Commodore User

"An excellent adventure, atmospheric, devious and full of the ingredients that have established Level 9 as probably the best English adventure writing house to-date."

— Computer Trade Weekly

My Name is



"I will describe this game in 3 words: Sheer unadulterated brilliance. Rarely have I played such a wonderful, enthralling adventure... The puzzles are entertaining, tough and logical. The storyline is immaculate, in its originality, concept, and application. This game incorporates Level 9's new parser which has to be used to be believed. Complex, and multiple input commands are understood, and the game is extremely user-friendly. In short, mortgage your computer, and get a copy. mortgage your computer, and get a copy.

Immediately!"

— The Adventurers Club Dossier

An AMTIX ACCOLADE. "The game is very good in terms of interaction ... fascinvery good in terms of interaction ... fascin-atingly original and clever. OVERALL 91%

"probably the company's best adventure
- Microscope

"YOUR SINCLAIR MEGAGAME 9/10"

Your Sinclair

"The final big difference over previous games is the size of the vocabulary. You can LOOK, of course, but you can also LISTEN and even SMELL... Level 9 claim that the program will understand over 1000 words ... about five times as much as most other present-day cassette adventures. ... out of this world" AA Rating 87%

— Amstrad Action

THE WORM IN PARADISE is available on 6 micros. All versions with the exception of the BBC have more than 200 pictures.

(Our list of games for other micros — ENTERPRISE, LYNX, MEMOTECH, NASCOM, ORIC1 is available on request please send SAE.)

	Please send me a FREE FULL COLOUR POSTER with more details of Level 9 adventures on the back. I enclose a stamped, sel
and.	addressed envelope about 9" by 6".*
my	

Please send me THE WORM IN PARADISE on cassette for the

AMSTRAD 464/664/6128

I enclose a cheque or postal order for £9.95.*

ATARI 64K

COMMODORE 64

MSX 64K

SPECTRUM 128K

My Address is

Adventurers outside the UK should send a Eurocheque or bankers draft for £10.95 for the game, or an international reply coupon for the poster

VRJ4/B6

RIGHTS RESERVED

776

SIMPSON.

WILLIAM

MAMO-MASON,

WAY WILL GIV GIV AV WAY WAY WAY WAY Level 9 Computing, P.O. Box 39, Weston-super-Mare, Avon BS24 9UR Barrarinarian Canara Carolara

vpacU assembler

debugger

editor

£39.95 now with free Motorola programming guide,

the fastest macro assembler.

integral full-screen editor.

MON QL debugger available in ROM

ERFORMS

speed, price, facilities proven experience and friendly service

180 High Street North, Dunstable, Beds, LU6 1AT Tel: (0582) 696421

SuperBasic

£29.95

70 powerful procedures and functions giving random access filing; mac-style window and much more

To order: use cheques, Access or Visa. All goods sent first class. Call for further details of our Spectrum compilers and utilities.





RST COMPLITER REPR



including PARTS · INSURANCE and P& P

NO HIDDEN We don't give you a between price and let you guess the bill, we give you a 100% fixed price NO extras. We don't need to boast about our service, we have 1000's of customers from all over the world highly delighted with our service and help. Only 20 minutes from Manchester Centre. Commodore 16s, Commodore 64, Vic 20, also repaired call us for details. Please note we never charge between prices.

Don't walt weeks for your repair, we turn around all computers in 24 hrs. All repairs carry a full 3 month guarantee, plus on every Spectrum we repair, we send you 4 free games worth £25.80 for your enjoyment and pleasure.

- While you wait service by Professional Computer Engineers. 5 month written guarantee on all repairs. International Repair Company. We repair computers from all over the world. All computers sent by Mail Order turned around in 24 hrs.

- Most Spectrums repaired within 45 minutes. All Micros insured for return Journey. Keyboard faults only 68.95 School repairs undertaken discount availat Free software with each Spectrum repaired. Over 6 years experience working with computers. All computers fully tested.

HOW TO SEND YOUR COMPUTER

Just parcel your computer in suitable wrapping enclosing £19.95 for Spectrum repairs, please do not send power supplies. Commodore computers, just send £1.75 (U.K. Eire, I.O.M. C.I.) or £6.50 (Europe/Scandinavia) with your address or phone number and we will contact you same day by phone or letter with quote, if you prefer, please call us and we will give you a quote over the phone, we aim to please. That's what made us the most reliable and No. 1 Service Centre in the U.K. TRADE

(SPARES AVAILABLE THROUGH OUR D.I.Y. SECTION.)

COMMODORES

NOW REPAIRED

Commodore 64, C16's, Vic 20 1541 Disk Drives. Same Day Service. Call us for details or purchase the I.C's from our D.I.Y. section

VIDEOVAULTS 80K UPGRADE KIT. WATCH THIS SPACE FOR DETAILS AVAILABLE JANUARY 1986 NEW

LOGICAL CHOICE

THERE'S NOBODY QUICKER IN THE BUSINESS AT PRICES THAT CANNOT BE BEATEN

KEYBOARD UPGRADE



upgrade your Spectrum into a new keyboard, we can upgrade your old Spectrum into a new D.K. Tronics keyboard

for only £31.50 Attings - return P &P and VAT

Normal retail price £49.95 without fitting

ORDER NOW!

YOU CAN'T REFUSE

16K to 48K Upgrade Upgrade your 16K Spectrum to 48K Spectrum

for only £19.95 fitted including V.A.T. and P.&.P. (Issue 2 - 3 only) (Retained by Public demand.) To order the Upgrade Kit, (only £17.95.)

MANCHESTER BRANCH opening FEBRUARY in the City Centre. Sorry for delay to all our Manchester customers

ideo Vault

CORNER

We regret we cannot show all the components available. Just give us a cail and we can quote you over the phone, delivery by 1st class post VIDEOVAULT HEALTH WARNING!!!
Sending your computer to any other Repair Centre can seriously Damage its Health

Spectrum Parts

Z808 CPU 4116 Rams 1.00 ZTX 650 Transistor ZTX 213 Transistor ZTX 313 0.60 0.60 0.50 Power Supply Units Feet (Each) 0.25 16K to 48K Upgrade 17.95 14-50p 3.50 Sockets 16-40 Pin Cassete Leads T.V. Lead 4.00

Commodore 64 Chips

23.00 23.00 23.00 901227-03 25.00 25.00 25.00 901226-01 901225-01 23.00 4164 Rams Power Supply Units 29.00

All prices + P.& P. £1.50 But include V.A.T.

TRADE **ORDERS** WELCOME

OPEN

DAYS A WEEK SERVICE

ENGINEERS REQUIRED ONLY 1st CLASS

ENGINERERS NEED APPLY FOR OUR MANCHESTER BRANCH OPENING SHORTLY

Telephone: Glossop (STD 04574) 66555/67761 140 High St. West, Glossop, Derbyshire, England

Copyright Videovault Ltd. No. 151085

THE No.1 HIT





ENEMY PLANES ATTACK SUDDENLY WITH DEADLY FORCE

◀ OUT OF YOUR COCKPIT WINDOW
AS YOU SWOOP DOWN TO TAKE
OUT SOME TANKS



'SKYFOX' is the most realistic awe-inspiring combat simulation you've ever seen on your computer. 'SKYFOX' special features include -

- **AIR TO AIR & AIR TO GROUND COMBAT**
- 3D SCROLLING FLIGHT SIMULATION
 15 SCENARIOS (from training mission to massive invasion)
- 5 SKILL LEVELS (from cadet to ace of the base)
- **AUTO PILOT FEATURE FOR LAUNCH & ENEMY SEARCHES**
- ON BOARD & BASE TACTICAL-COMBAT COMPUTERS
- **CONTINUOUS LASER CANNONS**
- JOYSTICK & KEYBOARD CONTROLS

SKYFOX NOW•

Available from all good software retailers - if its not there, please order it - or in case of difficulty send your crossed cheque P.O. made out to **Ariolasoft U.K. Ltd.,** including your own name and address, to Ariolasoft U.K. Ltd., Suite 105/106, Asphalte House, Palace Street, London SW1E 5HS.

HIGH PERFORMANCE PROGRAMS

I recently bought a Spectrum and Timex printer but I can't figure out how to LIST my programs or PRINT to the printer channel. Can you help? Tariq Khan, Bradford, West Yorkshire

All you've gotta do to list to the printer is use LLIST instead of LIST. To print to the printer use PRINT#3; "This is what you print" in exactly the same way as you would PRINT statements.

Where can I get a Spectrum case to put over my ageing 48K Spectrum. My friend got one for £20 but he can't remember where from. Do you know? **Terry Powell, Hove, Sussex**

Lucky ol' friend eh? The offer was actually made by Sinclair. It costs £20 for a Spectrum+ kit that'll turn your Spectrum into a Spectrum+. You'd be best to write to Sinclair at Milton Hall, Cambridge.

I bought two Spectrums that I upgraded to 48K but horror of horrors, they both broke after a couple of days and I had to send them to England to be repaired. This whole escapade has cost me £40 and a lot of bother. Can I trust Sinclair Research and its branches around Europe for future purchases of equipment? Rolf Agren, Sweden

Well, to be honest Rolf I'm afraid once you've opened your Spectrum to upgrade it any guarantee becomes null and void so you can't expect Sinclair to pay for it. Take note all you others before upgrading your machines yourselves.

I've got a Wafadrive (stop laughing) and I'd like some facility to switch a port out making the Wafadrives effectively disconnected without having to keep pulling the plug in and out. Do I need something like a Currah MicroSlot? **Dave Marriott, Nottingham**

No you don't need a Currah MicroSlot. A simple POKE should disable the Wafadrive - POKE 23734,167 enables it and POKE 23734,0 disables it.

My EP44 printer works fine with LPRINT and LLIST through Interface 1 but COPY does not work. Do you know why and also how do I get rid of the double line feed problem? R Shepherd, Australia

As far as I know there is no graphics facility on your particular printer, so no COPY command can be used. You can probably put the double line feed problem down to two reasons. One, the line feed switch at the top right hand side is set to 1 not 1 or two, the CR+LF mode has been selected where the program only needs it set to

Ummm...er do you mind awfully if I ask just a couple of questions. Well, five to be precise! 1. How do you load machine code without destroying the screen with the LOAD message? 2. Is there a POKE to control the flashing speed of a character? 3. Can you stop the cursor flashing? 4. Is there a decoder for morse available? and 5. Is there also a published list of the Spectrum's system variables and how can I put them to use? Frank Reeders, Netherlands

: Let's start with the easy ones first. You can't change the flashing of a character as it is controlled by the ULA. You can stop the cursor flashing by POKEing 23624, PEEK 23624=128 but this'll make the bottom lines flash instead. As for the morse decoder, Delving Deeper With Your ZX Spectrum by Dilwyn Jones, published by Interface Publications should be able to help you out. Otherwise try contacting the Sinclair Radio Amateurs Group at 3 Red House Lane, Leiston, Suffolk At last the final answer - and the longest. You can load machine code by using the small machine code routine below

10 DATA 62,255,55,221, 33,00,64,17,60,27,201,205,00,91,205,198,04,251,201 205,00,91,205,86,05,251, REM RANDOMIZE USR 2

3307 for BAVE 30 REM RANDOMIZE USR 2 3315 for LOAD 40 REM length is 27 by

tes 50 FDR x=23296 TD 2329 6+26: READ A: PDKE X,A: N EXT X

It'll save or load screen memory including the colour bytes to tape without waiting or displaying the cassette messages. Neat eh?

Heh, I'm not even going to ask a question! Having read your reply to B Mutton about the HR5 pound sign, I feel an easier solution would be to change the English character set by setting SW1-7 and SW1-8 to

Are you being

harrassed by your hardware? In need of advice? Steve Adams is your hardware handyman.

off. This'll give a pound sign instead of a hash. Then you can use the hash sign instead of the pound sign in Tasword - it saves using the character definition. How's that? **Tony Dury, Portsmouth**

Thanks a lot Tony that's great. I'd also like to thank our next reader who came up with the same suggestion.

I need your advice. The symbol/shift, M,N and B keys don't work on my Spectrum. Can I fix it myself and how? Alexander Morrison, Isle

Of Lewis

What you need is a new membrane to fit under the keyboard as it sounds like some of your ink wires are broken. It'll be cheaper if you get it done by a local repair outfit. Try TV Services of Cambridge, Chesterton Mill, Cambridge CB4 3NP if you're

My HR5 Centronics printer skips about four or five blank lines about every half page - can you suggest a POKE to cure this?

Steven Brown, Belfast

No problem. You're getting this 'cos of the perforation skip function on the printer. All you've got to do is turn off by setting SW1-3 to OFF. It's designed to skip over the perforation in fan folded

Being a bit of a DIY freak I decided to build the Interface 1 joystick interface (Your Spectrum, issue 5) for my son. It works fine except when the joystick is connected I cannot use the symbol/shift and CAPS shift

John Holloway, Mid-Glamorgan

Sounds to me that you're overloading the data lines DO and D1 of the keyboard port. Try inserting 1K resistors in the data lines to the interface to reduce the load.

I'd like to be able to use the full 42 columns with my GP50S printer but the software only gives 32 columns. How do I print the extra? David, Leeds

The channel used by all printers is number 3 and PRINT#3; "this is here" will print to the printer. It's possible that by looking at the channel data for the routine locations you may learn some more. This'll be 15 bytes above the location indicated by the number in the CHANS system variable. It's a two byte number and gives the output routine for the printer.

Help, I'm desperate! I've a Shinwa CPA80 printer operating through the Kempston E Interface but I'm at a complete loss as to how I set up the printer for Tasword Two. RP Brotherton, Evesham, Worcestershire

You really shouldn't need to set up the interface as the E interface is set up on power up and the Tasword Two program only needs to print through channel 3 - the print channel. You won't need interface codes for normal text but have a shifty at your interface handbook to suss out how to send control codes. If it requires codes to be sent before and after the control characters then enter these into the interface 1 and 2 positions on the printer setup part of the program.

Art's not just for galleries. It's all around us, in shops, in advertisements, in our homes and yes, it's in YS too! That's why our very own Art Ed, Martin Dixon has joined forces with Neil Stradwick (who created the pictures in Art Studio's manual) to show you how easy it's done. All you need is a copy of Rainbird's Art Studio ...

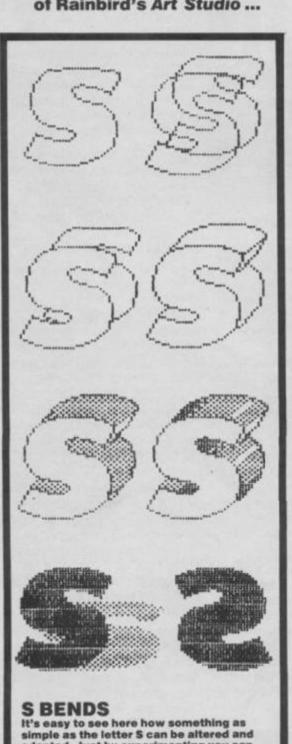
RTFUL DODGES

rt packages used to be for artists. If you didn't have talent then there was no point touching them. Now Art Studio's changed all that.

You can create artistic masterpieces if you're that way inclined but it's just as easy to turn out party invitations, letterheads, bits'n'pieces for a fanzine and a lot more besides. And it's all so much fun. You'll find that you can spend as many hours just 'playing' with the package as you will with any game. Take a letter, resize it, stretch it, stick a drop shadow behind it, try it in 3D — the possibilities are endless. Plus, it's all so easy. The program makes full use of windows and drop-down menus so you don't have to keep referring to the manual. Just click the options you

want, try them out and if they don't work, undo them.

Take a look at the full review of the *Art Studio* in *Your Sinclair* issue 2 for a run-down of all the options on offer in the program. For all those of you who were convinced by the review or last month's special offer, here's a whole host of hints'n'tips — simple ideas that you might not have thought of but which you can easily try out and adapt to your own ends.



It's easy to see here how something as simple as the letter S can be altered and adapted. Just by experimenting you can achieve some remarkable effects. It's very easy to make the letter look solid by shifting one image on top of another and using the textured fill for a really 3D effect. And don't just stick with straight drop shadows behind your letters but squash them to achieve different effects. You could, for example, change the shadow behind the S into the picture of a snake.

To create your own typeface, copy a complete alphabet from a book onto a piece of clear acetate and then stick it to the screen and trace round the letters with the cursor. It's much better to make your letters large and then reduce them later—if you do it the other way round you may lose some of the resolution. It's also a good idea to define your letters as an outline rather than solld. It's must easier to fill than unfill later on.

Tip To create the illusion of depth in your pictures, try squashing an image or using a black background.

To change the width of a word, 'Your' for example, just define a window round the original letters and clear and rescale. If you need to tidy up after the operation, magnify and wipe out the offending pixels. You'll find that the more solld an image, the easier it is to rescale.

Tip If you want to reduce an image proportional to the original, set the grid to on and then count the number of squares that each should occupy in proportion to the other. The grid's also a must if you're working in colour. You can adjust the colour of your picture by using the window function to move the image slightly so its position shifts into the correct character

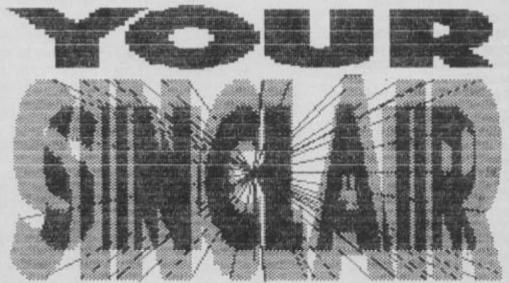
To create the effect on the word 'Sinclair' below, define a window round the original word in black, Clear and Rescale, then draw a big box over the image. Set Merge and Over both to on, and now go to Wash Texture, choose the one you want and click it. Bingo.

Tip Build up your images by drawing the black first, then the half-tones and finally

MAKING HEADLINES

To give you some idea of Art Studio's versatility when it comes to adapting typefaces and letters, we've taken the Your Sinclair logo and had a play around with it. Doesn't look bad, does it?

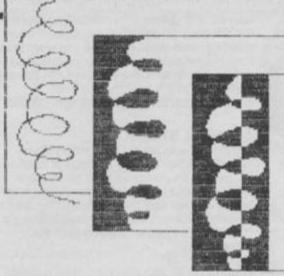




To add perspective to the picture the Ray option was used here. A point was plopped in the middle of the image then each of the letter edges was joined to that point.

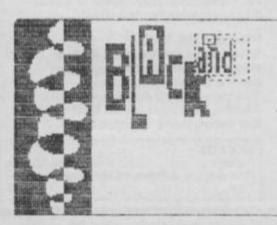
ARTY PARTY

If only the Art Studio had been around in the Sixties. You don't have to be a friend of Mary Quant to know just what a trendy party this would've been! But there's also a very obvious reason for designing in black and white if you intend to print out the finished product. With a bit of imagination this shouldn't restrict you at all—you never know, the monochrome look may be ready for a revival.



I drew the shape of the invitation with the Rectangle option. Then using the smallest brush, I added the squiggle. Be careful when you're using the small brushes to go slowly or you can miss out pixels by travelling at top whack. If that happens the solid fill will run wild over the whole screen. The mirror image effect was achieved by defining a window around the shape and then inverting it.

Tip Remember the Undo option which clears any cock-ups since you last clicked.





B L C k and OHi t 3

Write out any words you want outside the working area. Here I used triple height and normal width and made sure that I left plenty of space around each letter. Then I could easily define windows round the individual letters. To make fine adjustments to the position of a letter, define a window round it, then choose the Cut, Clear and Paste option. That'll give you

round it, then choose the Cut, Clear and Paste option. That'll give you another window the same size as the original that you can overlay onto it and shift by just one or two pixels.

Tip The Last Window option is a great time saver if you make a mistake or you're working on the same subject over and over again.



see where the line's going. I drew the circle at the bottom last, solid filled it, defined a window round it, Cut and Pasted it into position with the Over option on and it automatically reversed out. Neat eh?





Now it's starting to look more like an invitation. The glass was reversed out completely by choosing the Invert window and rescaling it in the right area. The problem with rescaling is distortion. Sometimes you can use it to your advantage but if you're not keen, use one of the Magnify options and tidy up the area pixel by pixel — that's how the bubbles were added.

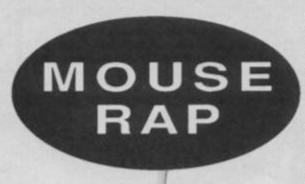
Tip Leave plenty of space around the area you're working on so that you can try out ideas before moving them into position. The alternative is to create separate ideas files but this is more time consuming.

I didn't rate all that black space beneath the glass so I bunged in the textured fill—remember to draw a line around the area you want filled first. Art Studio really scores on time saving. I only drew one dotted line in the border and then moved that same line into position using the Cut and Paste option as opposed to Cut, Clear and Paste. And now we're ready to print out — Art Studio lets you do dumps up to five times the original size. But be warned, it may take you a while to set up your printer unless it's just a ZX printer. We found this the hardest and least user-friendly aspects of the whole package.

Tip Make sure you send invitations to your parties to Everyone at Your Sinclair, 14

Rathbone Place....





At last, people have stopped taking the mickey out of mice! Peter Shaw tells the tale of the mouse that AMS built.

Two years ago, had anyone asked you what a mouse was, you'd have immediately thought of a cute white hairy thing that answers to the name of Fred. Now, of course, with software trends having moved in the direction of icons and pull-down menus, a mouse is an essential tool if you want these icon-driven systems to work properly. And now that programs like this have just started appearing on the Spectrum, it's not surprising that the mouse was right behind.

SQUEAK SPEAK

So, what is a mouse? Quite simply it's an inverted trackerball with a button or buttons on the top. It's designed to sit on the desk alongside your computer and movement of the mouse will alter the position of the cursor on-screen. Once you've got used to using a mouse you'll wonder how you ever did without one.

MOUSING AROUND

The AMX mouse comes with a copy of AMX Art, a useful graphics package, a comprehensive instruction manual and a Spectrum mouse interface — you need this so it can talk to your Speccy. The speed of the mouse is dependent on the package it's working with. I had no problems with any of the programs currently available — the mouse kept up with whatever I threw at it. But remember, you do need a WIMP to get he most from a mouse — that's right, a Window Icon Mouse Program. And although there aren't that many at the moment, you can reckon on a whole flood following up the success of the pioneers like OCP, AMS and SofTechnics.

When it comes down to accuracy the AMX mouse is superb. It can cope with high-speed drawing and pixel-point accuracy. The

real power of the mouse is control. Unlike a joystick which uses a simple switch system that tells it to go left or right, the mouse can finely control how far you want the cursor to go left or right. Not much good for Space Invaders maybe but with art packages like Art Studio this sort of control makes all the difference between producing a scribble and a Van Gogh masterpiece.

TAKE ART

AMX Art is a good enough package in itself but it is really only a demonstration of what the mouse can do. It sports various tools ncluding Eraser, Pencil, Paintbrush, Spray Dan, Palette, Box and Circle Mode and has a number of pull-down menus that make using it simple. But if you really want to see how the AMX mouse can shine, a copy of the Art Studio from Rainbird is a must. (If you have microdrives then it's definitely worth splashing out the extra on the Extended version.) And if you already have a copy of the Art Studio an AMX mouse is a must—they were made for each other!

FROM THE TOP

When in use with AMX Art the three buttons on the top each have a different function — Execute, Move and Cancel. In Art Studio, however, each button does the same thing — Select.

FAX BOX Package AMX Mouse Publisher Advanced Memory Systems Price C79.95

COMPETITION

By now you should be bursting with ideas and raring to try them out on Art Studio. The hints'n'tips that Martin and Neil have come up with are just a fraction of what you can do with the program. They could both go away and write a book each on how to get the best out of the package - and still the subject wouldn't be exhausted. No, the Art Studio is one of those rare programs that has you hooked from the moment you start using it. And the more you use it, the more ideas you get for things to do with it. And the more ideas you have the more you want to swop them with other addicts.

HIP HINTS

So, that's why we're asking something slightly different from you for this competition. What we want you to do is send in your hints'n'tips for Art Studio. We're not looking for masterpieces that've taken months to perfect - though we'd love to see them, of course. No, we're after that interesting little trick that you picked up while playing around with the package. It might be a great idea for the logo of your school magazine, or a business letterhead, or a birthday card. It may just be a neat way of distorting an image that you reckon no-one else has thought of yet. But whatever it is, the judges, Martin and Neil won't just be looking for the polish of your entry so don't be put off if you're not one of the arty-farty lot. The winners will be those of you with the best ideas — the type of idea that makes everyone say, "I wish I'd thought of that!" - even if your execution isn't up to scratch.

There's no limit on the number of ideas you submit. And you can send them in in a number of ways. If you have a printer, dump out your Screen\$ and tell us how you went about creating them in a few words by the side of each one. Or send in your letterhead or logo or birthday card. (Mine's in April so you're just in time! Ed) If you haven't got a printer, a cassette or microdrive will do and add a few notes and perhaps a sketch or two so that we can tell what you've done. The only stipulation is that all entries must have been created using Rainbird's Art Studio.

FROM THE ART

And now for the prizes. If you're using Art Studio, you'll soon want to set up a system that'll help you get the best from it. And that means a colour monitor to start with. So, why settle for anything less than the best — a Microvitec Cub monitor that's completely compatible with your Spectrum. Rainbird's offering two of them

Now's your chance to win the best equipped Art Studio in the country. Rainbird is offering two Microvitec colour monitors and eight AMX mice — all you need is a copy of Art Studio.

to the first prize winners. Then you'll want the flexibility, accuracy and speed that a mouse has to offer — an AMX mouse. There are eight of them up for grabs — two for the first prize winners to go with their monitors and six for the runners-up. That's way over a £1000's worth of prizes in all

But really the best bit about a competition like this is that everyone wins. If you've got a copy of Art Studio you'll end up richer whether you're a prize winner or not. We'll be printing the prize winners' entries in full so that everyone can share in the wealth of fresh ideas.

ART RULES

Even though he couldn't paint a ceiling, let alone a canvas the Editor's decision is still final.
Closing date for all entries is April 30th 1986.
Employees of Sportscene Specialist Press,
Rainbird, AMS and Microvitec are ineligible for this competition.

ART FORM They don't call me Quick Draw McGraw for nuttin'. Here are my hints'n't making the most of Rainbird's Art Studio.	lips for
Name (other than QD McGraw)	
Address	
Postcode	
If you send a microdrive or cassette, please include an sae if you want i Now clip the coupon (or a photocopy) and send it with your entry to Art	t returned. Studio

Compo, Your Sinclair, 14 Rathbone Place, London W1P 1DE.

THETFORD MICROS

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 Microdrive repairs Interface 1 repairs ZX Printer repairs Commodore repairs £15.00 + £2.25 VAT + P&P £29.00 + £4.35 VAT + P&P

(Quotes can be given on other micro and peripheral repairs)

Post and package: U.K. £2.00, airmail £5.50. Australian airmail £13.50. Next day delivery (Securicor) £4.60.

We also carry out:

Spectrum and keyboard upgrades 48K Upgrade Kits Composite Video Conversion

£30.00 + P&P £22.00 + P&P £11.50 + P&P BBC data recorders

Commodore compatible recorders

£14.95 + P&P £14.95 + P&P £12.00 + P&P

e Video Conversion £11.50+P&P Tape recorders for Spectrum £12.00+ Commodore power supplies, on/off switch — fully repairable £29.00 inc. P&P

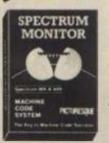
Payment may be made by cheque, postal order, Barclaycard, Access or American Express.

Why wait weeks for the return of your sick computer, send it to the finest Spectrum hospital today — or phone Pete on (0842) 65897 and I will help all I can.

THE MACHINE CODE SYSTEM



only £7



 "... one of the all too few Jewels of Spectrum programming... deserves a place in every serious programmer's library" (Simon Springett—Popular Computing Weekly—June 1984)

 "... the whole package is very friendly and easy to use... can be highly recommended for those who are just about to start programming in Machine Code."
 (Phil Holliday—Your Computer —May 1983)

Fully compatible with MICRODRIVES/NETWORK/RS232 (with Interface 1) and most popular Centronics interfaces for 80 col. printout.

*NEW LOWER
PRICES FOR'86

Only £6

Send S.A.E. for fully detailed leaflet Available from many computer shops, or by FAST mail order by sending a cheque/P.O. to:—

PICTURESQUE PICTURESQUE PICTURESQUE

Dept YS, Picturesque, 6 Corkscrew Hill, West Wickham, Kent BR4 9BB

PIPEQ SYSTEMS

M/DRIVE DOCTOR 2.1 48K 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:-'PIPEQ SYSTEMS' 151 MILLBRIDGE, DOLLIS VALLEY WAY, BARNET, HERTS. EN5 2UH.

Here's your chance to order the terrific trio of Your Sinclair back issues.



Our bumper first issue included:

Games: Commando ● Saboteur ● Rasputin ● 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 includes:

Games: • V • Movie • Zoids • Features: • Switcha • Art Studio

Old Your Spectrums never die — they get snapped up sharpish by new readers. Quick - use the coupon below to bag your own back issues at £1.10 a throw. Or visit our shop, open Monday to Friday 9.30 am to 5.30 pm at 14 Rathbone Place, London W1P 1DE.

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

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

Issue 12

Ghostbusters, Music packages Ghoulies

III Issue 13

JSW, Hunchback 2, Kong Strikes Back

■ Issue 14

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

III Issue 15

Starion, Painting by Numbers, Hot Heads

III Issue 17

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

Issue 18

Dambusters, Ghostwriter, JSW 2 - POKEd apart

Issue 19

Exploding Fist, Frankle, Movin'n'Groovin'

Issue 20

The Rats, Fairlight, Shrink Wrapped

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



ORDER YOUR BACK ISSUES NOW!

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 Sinclair ☐ Issue 1 ☐ Issue 14 ☐ Issue 18 ☐ Issue 1

☐ Issue 5 ☐ Issue 15 ☐ Issue 19 ☐ Issue 2 ☐ Issue 12 ☐ Issue 16 ☐ Issue 20 ☐ Issue 3

☐ Issue 13 ☐ Issue 17 ☐ Issue 21

the dotted line for your YS snip.

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

ick issues

How about a tres chic genu Norgahide Your Spectrum nder? Keep your head toge by keeping your cop

BARGAIN SOFTWARE: FREEPOST

Dept. vs., Unit 1; 1 Esmond Road; London W.4. 1BR

RING 01-995 2763

PRICE PROMISE

If you wish to purchase any product from our list and find that you can buy the same product cheaper from another mail order company, simply enclose the lower amount, stating the name of the other company and where you saw the advert. (It must be a current issue). Price Promise does not apply to other companies "Special Offers".

ORDERS OVER
E30
DEDUCT 10%

SUPERBOWL	REC. PRICE 9.95	OUR PRICE 7.40	COMPILATIONS	REC. PRICE.	OUR PRICE	WORM IN PARADISE	REC. PRICE 9.95	OUR PRICE 7.45
SKYFOX BOUNCERS SUPERMAN	8.95 9.95 9.95 7.95	6.70 7.40 7.40 5.90	THEY SOLD A MILLION SABRE WULF JET SET WILLY			CRITICAL MASS PANZAOROME SURF CHAMP FORBIDDEN PLANET	8.95	6 70 5 90 8 25 5 95
STREETHAWK KNIGHT RIDER GERRY THE GEM	7.95 7.95 7.95	5.90 5.90 5.90	BEACH HEAD DALEYS DECATHLON	9 95	7.45	2112 AD FIGHTING WARIOR TERRORMOLINOS	11.95 7.95 7.95 7.95 7.95	5 90 5 90 5 90
PING PONG SHOWJUMPING ENIGMA FORCE SIR FRED	7.95 9.95 9.95 9.95	5.90 7.40 7.40 7.40	ARCADE HALL OF FAME RAID!! BLUE MAX			WAY OF THE EXPLODING FIST WINTER SPORTS SWORD & SURCERY NEVER ENDING STORY	8 95 9 95 9 95 9 95	6 70 7 45 7 45 7 45 7 45
BATTLE OF THE PLANETS COMMANDO BARRY MCGUIGAN'S BOXING LORD OF THE RINGS	9.95 7.95 7.99 15.95	7.40 5.90 5.95 11.90	ROCCO FLAK HUNCHBACK II	9.95	7 45	ASTRO CLONE THEIR FINEST HOUR WORLD SERIES BASKETBALL SPY VS SPY	7 95 9 95 7 95 9 95	5 90 7 45 5 90 7 45
THINK THREE WEEKS IN PARADISE TURBO SPORT	7.95 9.95 8.95	5.90 7.45 6.70	SPORTS PACK SNOOKER			F. BRUNO'S BOXING DAMBUSTERS SOUTHERN BELLE	6.95 9.95 7.95	5 20 7 45 5 90 7 45
YIE AR KUNG FU ROLLER COASTER SWEEVO'S WORLD SABOTEUR	7.95 6.95 7.95 8.95	5.90 5.20 5.90 6.70	ON THE OCHE WORLD CUP FOOTBALL OLYMPICS (14 events)	36.00	5.99	MONOPOLY CLUEDO SCALETRIX FAIRLIGHT	9 95 9 95 9 95 9 95	7.45 7.45 7.45
COSMIC WARTOAD GUNFRIGHT TOMAHAWK MOVIE	7.95 9.95 9.95 7.95	5.90 7.45 7.45	GOLF DERBY DAY			SPECIAL OFFERS	10.99	3.99
ROCK 'N' WRESTLE TRANSFORMERS INTERNATIONAL KARATE WINTER GAMES GLADIATOR	8.95 7.95 6.50 7.95 7.95	5.90 6.70 5.90 4.90 5.90 5.90	SELECT HUNCHBACK SPACE INTRUDERS MR. WIMPY			GREMLINS CODE NAME MAT II ALIEN GREAT SPACE RACE VALHALLA	9.95 8.95 9.95 14.95 14.95	3 99 3 99 3 99 3 49 3 99
TWISTER FRIDAY 13th MILKIE ELITE BACK TO THE FUTURE	7.50 8.95 7.95 14.95	5.90 5.95 5.45 6.70 5.90 11.20 7.45	KONG TRANSVERSION MISSILE DEFENCE POOL DENIS THROUGH THE	12 99	4.99	EUREKA DEATH STAR QUICKSHOT II	14.95 7.95	3.99 3.49 5.95
WEST BANK N O M A D. RAMBO TAU CETI BACK TO SKOOL ROBIN OF THE WOOD	9 95 7 95 7 95 7 95 9 95 6 95 9 95	5.90 5.90 5.90 7.45 5.20 7.45	DRINKING GLASS MOON BUGGY SPECTRES METEOR STORM TIME GATE			ROCKFORDS RIOT ABU SIMBEL (PROFANATION) SHADOW OF THE UNICORN MARSPORT FRANKIE GOES TO HOLLYWOOD RASPUTIN	9.95 7.95 14.95 9.95 9.95 7.95	7.45 5.90 11.20 7.45 7.45 5.90 5.90
LEGEND OF THE AMAZON WOMEN CYBERUN ZOIDS BALL BLAZER BLADE RUNNER ZORRO	7 95 9 95 7 45 7 99 8 95 7 95 7 95	5.90 7.45 5.90 5.90 6.70 5.90	VALUE PACK COSMIC CRUISER B C BILL PEDRO ZZOOM	9.99	4.99	MONTY ON THE RUN G GOOCHS TEST CRICKET SPEC DRUM THE ART STUDIO THE YOUNG ONES SHADOWFIRE	7 95 9 95 29 95 14 95 7 95 9 95	7.45 26.95 11.20 5.95 7.45
THE GOONIES STARSTRIKE II HUNCHBACK THE ADVENTURE ARC OF YESOD RUNESTONE WAY OF THE TIGER	7.95 7.95 7.95 9.95 7.95 9.95	5.90 5.90 5.90 7.45 5.90 7.45	ZIP ZAP ALCHEMIST			HYPER SPORTS INTERNATIONAL BASKETBALL NOW GAMES 16 top titles) MEGA HITS (10 top titles) COMPUTER HITS 10 (10 top titles) MACADAM BUMPER	7 95 6 95 8 95 9 95 7 95	5 95 4 90 6 70 7 45 7 45
BEACH HEAD II GYROSCOPE GEOFF CAPES STRONGMAN IMPOSSIBLE MISSION BOUNTY BOB STRIKES BACK	7.95 7.95 7.95 7.95 7.95 7.95	5.95 5.90 5.90 5.90 5.90	CHUCKIE EGG 2 AIRWOLF TIR NA NOG WORLD CUP CAULDRON	8.95	6.70	ENDURANCE STARQUAKE KNIGHTLORE TIR NA NOG LASER BASIC	7 95 7 95 9 95 9 95 14 95	5.90 5.90 5.90 7.45 6.50 11.20

BARGAIN SOFTWARE	ORDER	FORM	(No stamp	necessary	inside	British	Isles)
------------------	-------	-------------	-----------	-----------	--------	---------	--------

Please send me the following titles. BLOCK capitals please!

Type of computer ______ Amount

Total Enclosed £

Address

.....

Tel. No.

Please make cheques or postal orders payable to BARGAIN SOFTWARE.

Prices include P&P within the U.K: Europe please add £0.75 per tape:

Elsewhere please add £1.00 extra per tape

GENERAL ENQUIRIES TELEPHONE 0924-402337

THOUGHTS & CROSSE 37 MARKET STREET, HECKMONDWIKE, WEST YORKS.

Shop Hours 9 am - 5 pm Mon - Sat



VISA

CREDIT CARD

ORDERS TEL:

(0924) 409753



	_	_		_	_											_
Title	Consuly	Price	COR	Company	Price	Title	Company	Price	Title 6	Company	Price	Title	Congway	Prior		
Barry McGuigan	Activision	7.15	Harrier Attack	Durnst	2.95	Desert Rats	US	8.85	Finance Manager Plus	100P	17.95	Stat Max	US Gold	7.15	Taspriet Tasman	17.95
Ghost Susters Wind Stratow	Activision -	8.10 7.20	Frank Brune Boxing Commando	199	7.15	Confrontation Confrontation Scent	Lothionen	7.15 5.35	Stock Manager Plus	ore	17.96	Brace Lee Raid over Moscow	US Gold US Gold	7.15	Decision Maker Tryptych	25.95
Nacker	Activision	7.29	Grand National	10th	4.25	Confrontation Scen 2		5.35	80		11.00	Spy Hunter	US Gost	7.95	Entrepreneur Tryphych Praect Planner Tryphych	25.95
Football Marager	Addictive	8.05	Booty	finbed	2.50	Parsent Attack	Lothibries	1.35 1.35 1.90	V.A.T. Manager	DCP	8.85	Zaoxon	US Gold	7.15	OL Fictionary Whoopee	11.95
Rober of Sherwood Son of Blagger	Adventure Altigata	1.53	Gyron Ekte	Feebvet	13.50	The Bulge Dreadnoughts	Lethionen	5.35	Standard V.A.T. Manager Plus	ore	17.86	Seach Head II	US Gold	7.15	HARDWARE	11072
Archon	Annianatt.	1.90	Cyron	Firstind :	6.95	Overtords	Lathionen	8.25	Machine Code Test	OCP	0.95	Dambusiers	US Gold	1.95	SPECTRUM PLUS (CSO from	
Chess II	Artic	5.00	Baltooring	Fire Ways	6.95	Time Sanctuary	Cothlonen Corthlonen	7.95	Robin of the Wood	Ode	8.95	Pole Poston	US Gold	7.15	Software)	£129
Chess Tutor Eye of Bain	Artic Artic	3.50	Punctuation Pyte Raffy Driver	Five Ways	1.95	Waterloo	Macmillan	1.35	Nodes of Yesod Editor & Assembler	Odni Picturesque	7.65	Winter Games Highway Encounter	US Gold Vortes	7.15	SINCLAIR QL CANON PWIDBOA PRINTER	£188
Galarians	Artic	3.00	Run for Gold	Five Ways	7.15	Blockbusters	Macsen	7.15	Spectrum Monitor	Picturesque	6.75	Captle of Dreams	Wigt.	7.15	MANNESMAN TALLY MITSO PLUS	1295
Golden Apple Invaders	Artic Artic	3.50 2.50	Specal Agent Yacht Race	Five Ways	8.95	Brian Jacks Superstars	Martech	7.15	Plant Plus	Print is Protes	8.95	Adventure Playgroun Howast		7.15	PRINTER (Centronics)	C195
On the Other	Artic	3.86	Dun Düragh	Gargoyie	1.95	G.C. Strongman	Martech	7.15	Screen Mactions	Prot 's'	7.40	Lebetta	Wyvern	4.95	SHINWA CPARO PRINTER NLO	C210
Snooker	Artic	3.00	Marsport	Gargoyle	8.95	Zods	Martech	7.15		Poter		DI 100	FTWARE		MICROVITEC MZ1431 (SPECTRU	
World Dip Soccer Graham-Sooch	Artic Audiogenic	1.25	Sweevers World The Husballor	Gargoyre	7.15	Austertz	McLathlona-	8.55	Sword & Sorcery Glass	P55	8.85 7.15	Cush Trader	Accounting	\$2.95	MORITOR	1245
Seta Basic 3.0.	Betasot	13.50	The Quill	Gisset	13.50	Photos	Megadode Mebourne	4.85	Frans Express (cass.)	Ronunte	8.95	Meteor Storm	Artskir	11.85	MICROVITEC DG1451 (QL) MONITOR	8275
Doondarks Revenge		5.95	The Patch Monty Mole	Graph	1.35	Hurg When of European En		13.50	Trans Espress (DG)	Romante	13.50	QL Home Fenance Steve Davis Snooker	Butt2 CDS	22.50 13.50	PHILIPS GREENSCREEN MONITO	
Lords of Midnight Proton	Beyond Beyond	7.15	Monty on Run	Gramin Gramin	5.35 7.15	Way of Exploding Fo Fighting Warrior	Melbourne	7.15	Trans Express (M/C)	Robert Romantic	13.50	Bridge Player	CP Software		3 CHANNEL SOUND	128
Shadowlet-	Beyont	8.95	Super Stuth	Gramin	7.55	Terrermolinos	Melbourne	7.15		Robot	2534	Home Accounts Manager	Charles	17.95	CURRAH MICROSPEECH DK TRONICS DUAL PORT INTERS	E20 ACE E12
Startuale	Beyont Bubbleous	7.15	Rocco Worshpell	Grentin	5.25	Mugary	Melbourne House	6.25	Castle Spellerous Catel IG Test	Sinctor Sinctor	3.90	Transact	During	31.50	DATAL ELECTRONICS INTERFACE	13
Manic Miner	Bughyte	2.95	Diagontone of Avaion		7.15	Sir Lanoret	Melbourne	5.35	Chequered Flag	Sindar	4.00	Sprite Designer	Digital	17.95	PRO 5000 (FORMULA 1 JOYSTIC) SURE SHOT JOYSTICK	
Masterlie	Campbell	13.50	Heathrow	Mewson.	7.15		House		Chess	Sincter	4.00	Super Backgamon Astronom	Digital Digital	11.65 22.50	SPECTRUM PVC COVER	£15 17
Mastertile & MF Print Anthers	COS	18.00	Southern Balle	Hewson	7.15	Wham Music Bux	Melbourne	ER.86.	Chess Tutor Collectors Pack	Sinctor Sinctor	3.50	Super Monstor Diss	Digital	17.00	SPECTRUM PLUS PVC COVER	. (1)
Stove Davis	CDS	7.15	30 Lunar Attack	Hewson.	4.00	Gode Name Mat it	Micromega	6.25	Learn to Read 3	Sindar	5.00	Sortia Generator	Orgital	27.58 54.00	SAGA EMPEROR PVC COVER CURRAN MICROSLOT	E4.50
Autonomer	CF Software CF Software	1.95	Regretive 0 C Convoler	Hewson.	3.95 22.50	Back to Skool - Orrescale 2	Microsphere	13.50	Learn to Read 4	Snoar	5.00	Super Charge Super Astrologer	Digital Digital	72.50	EXTENSION TO KEYWAY (Ribbon	112
Backgammon Bridge Player 2	CP Software	8.95	Dev Pac 3	Hisoft	12.50	Skori Dare	Microsphere	9.35	Learn in Read 5 Scrabble	Sincle? Sincle?	5.00	Montos/	Deptal	17.85	MICRODRIVE EXTENSION LEAD	£3
Bridge Tutor	CP Software	5.35	Pascal	History	22.50	Shadow of Unicom	Milco-Gen	14.95	Small Business	Sinclair	8.50	Dissassembler Archiver	Edwart	17.00	SLOMO (Game speed controller) ON/OFF SWITCH	E4.50
Advanced Snidge Yutor Segione	CE Subsect	5.30	Coff Coff	Hisoft	11.85	American Feotbalt Nick Faldo Golf	Mind Games Mind Games	1.30	Accounts Vu Calc	Sinclar	4.50	ice .	Eidersoft	44.95	WAFADRIVE to CENTRONICS PRO	NTIR
Draughes	CP Software	1.25	They Sold a Million	Hittyrile	8.95	First Steps with the	Mirrorsoft	8.05	W/30	Sincter		Hyper Drive	English	13.50	DESCOMENT 1	912 9872
Pobalt Wases	CP Software	5.35	Alchemist	Imagine	2.75	Mr Men			ZX Forth	Sinclar	1.50	Assembler Touch and Go	Harcourt .	35.95 17.95	ZX EXPANSION SYSTEM (Include	
Superchess 3.5 Supercode III	CP Software	11.95	Hypersports Michie	Imagine	7.15	Casick Thirtiering Cassar the Carl	Mirrorseft	3.58 4.50	Biorythms Dub Record Control	Sinclair Sinclair	2.95	QL Mon	Histoft	17.95	Microdrive Interface 1/7 aswerd	
ZX Reversi	CP Software	1.35	World Series Baseba	it Integine	6.20	Machine Code Tutor		13.50	Reversi	Sirelair	2.95	Gt, Cavern	JMF	11.85	Two Masterflie Ant Attack Games Designer	195
Figating Point Forth Probal Woard	CP Software CP Software	8.95	Zzoom	imagine	2.75	Lightmagic	New Gen	13.58	Timy Touch & Go. The Artist	Sinclair Softek	4.50	BCPL QLC	Metacomes Metacomes	\$3.95 \$9.95	ZX INTERFACE 1	645
Super Chess 3.5	CP Software	5.35	World Series B Bull Yie Ar Kung Fu	Imagine	7.15	Machine Lightning Galey Thompson s	Oasis Ocean	6.29	Jet Set Willy	Software:	11.65	QL Assentiar	Metacomico	35.95	PARROT, CONTROL DAT	145
Formula One	CRL	7.15	Pedro	Imagine	4.50	Decathion				Projects	11753	Lisp Pascal	Metacomico Metacomico	\$33.95 80.95	S/5 D/D 40T 10 for	C14
Juggerraut Dungeon Moster	DRL Dystai	7.15	Final Mission Midiotare	Incentive.	2.75	Daley Thompson's Supertest	Ocean	4.25	Jet Set Willy II	Software Projects	8.25	Assembler	Metacomos	20.00	D/S D/D 40T 10 for	£18
Halls of Trangs	Crystal	3.50	Mountains of Ket	Incentive	3.00	Frankie Goes to	Ocean	8.95	Int. Karste	System 3	5.85	Lisp	Metacomico	\$3.95	OrS DrO 10 for Parrot diskettes include free plast	D4
Mexi Office Flad Acrows	Defatiene Detatiene	5.39	Temple of Vran	Incentive		Hollywood	- Contract	***	Tasospy	Tasman	1.50	Pascal Chess	Metacornes Psion	88.95 17.95	KEMPSTON INTERFACE-E (Rom)	
2112AD	DD	7.15	Purchase Ledger Sales Ledger	Kamp. Kamp	3.95	Match Day Royal Birkstain	Ocean	7.15 5.30	Tasmerge Tesprint	Tasman Tasman	1.00	Malch PT	Psion.	13.50	Spectrum-Centronics Printer)	CAD
Forbidden Planet	00	7.35	Valtata	Lagend	9.95	Rambo	Ocean	7.95	Tapwide	Tasman	4.85	Toolkit Oli, Bounder	George Sinctair	22.50 8.95	KEMPSTON INTERFACE-5 (Casse Based Interface as above)	120
Fighter Plot Tomphank	Digital	7.15	Monopoly Adventure Quest	Level 9	8.95 8.90	Roland Rat Transformers	Ocean Dosen	8.20 7.15	Tasword Two Fairlight	Tasman The Edge	12.50	Integrated Account	Stage Soft	79.95	TASMAN INTERFACE (Causetin Bu	assed
Night Gurrer	Digital	7.15	Goldssal Adventure	Love 9	8.50	Address Manager	OOP	8.05	Alien 8	Literate	8.95	Graphi OL	Talent	31.50	Interface as above) OK KEYSGARD	125 129
Popeye	DK Trones	6.25	Dungeon Adverture	Lavel 9	8.90	Standard	000	47.00	Gun Fight	Utimute	8.95	West Zhuli	Takent	17.95	SAGA EMPEROR KEYBOARD	125
Minder View to a KDE	OK Tronics Comark	1.95	Emerald rate Lands of Time	Level 9	8.25	Address Marager Plus 80	00P	17.95	Knight Lore Nightshade	Ultimate Ultimate	1.95	Cosmos	Talent.	13.95	DK LIGHT PEN	E18
Conduct Lynx	Durrett	8.05	Fled Moon	Levs:9	6.25	Casine Royal	OCP .	5.35	Underwurte	Ultimode	8.95	Cartridge Doc Ct. Paint	Talent Talent	13.58 22.58	LIGHT WRITER MICRODRIVE CARTRIDGE	813
Cirtical Mass Sabstor	Duneli Duneli	1.05	Return to Eden Snowball	Level 9 Level 9	1.50	Finance Manager Standard	OCP	8.85	Trans AM Beach Head	Utimate US-Gold	4.95 7.15	Tascopy	Tasman	11.65	PACK OF 4 CARTRIDGES	17.50
10-13			-	-	0.00				-	00 000	2.10					

All prices include postage, packing and VAT. Please order stating, 1) Program Required, 2) Amount Enclosed, 3) Name and Address. 4) Type of computer. Credit card order please state exp. date.

THE ULTIMATE POOLS PREDICTION PROGRAM

- MASSIVE DATABASE Poolswinner is a sophisticated Pools prediction aid. It comes complete with the largest database available 22000 matches over 10 years. The database updates lly as results o
- PREDICTS Not just SCOREDRAWS, but AWAYS, HOMES and NO SCORES.
- SUCCESSFUL SELEC quarantee that Poolswinner performs lly better than chance
- ADAPTABLE Probabilities are given on every fixture—
 choose as many selections as you need for your bet. The
 precise prediction formula can be set by the user—you can
 develop and test your own unique method.
- SIMPLE DATA ENTRY All team names are in the program. Simply type in the reference numbers from the screen. Or use FIXGEN to produce fixture list automatically (see below).

 DISC/MICRODRIVE COMPATIBLE Tapes supplied with conversion instructions.

 PRINTER SUPPORT Full hard copy printout of data if you have a printer.

 AVAILABLE FOR Spectrum (48K), Commodore 64, VIC 20 (+16K), AMSTRAD.

 BSC B, Atari (46K), ZX81 (16K), Dragon, Apple II, ELECTRON

 OL

PRICE £15.00 (all inclusive)



FIXGEN 85/6 AT LAST: No more struggling for hours to get the fixture list into the computer. FIXGEN has been programmed with all English and Scottish fixtures for 1965/6. Simply type in the date, and the full fixture list is generated in seconds. Fully compatible with Poolswinner.

POOLSWINNER with FIXGEN £16.50 (all inclusive)



COURSEWINNER V3
THE PUNTERS COMPUTER PROGRAM
V3 can be used by experts and occasional punters alike.
You can develop and test your own unique winning system by adjusting the analysis formula, or use the program in simple mode. Coursewinner V3 uses statistical analysis of major factors including past form, speed ratings, course statistics, prise money, weight, going, trainer and jockey form etc, etc. It outputs most likely winners, good long odds bets, forecasts, tricasts etc. The database includes vital course statistics for all British courses. You can update the database – never goes out of date.

AVAILABLE FOR Spectrum (481) Commodors \$4, BBC(\$1, AMSTRAD, Am

AVAILABLE FOR Spectrum (ME), Commodore 94, MBC (B), AMSTRAD, Asari (ME), Apple II QL PRICE £15.00 (all inclusive) includes Flat AND National Bunt versions.

Send Cheques/POs for return of post service to . .







37 COUNCILLOR LANE, CHEADLE, CHESHIRE. 22 061-428 7425

SHEKHANA COMPUTER SERVICES

	RRP	DOM	SPECTRUM	RRP PRICE
SPECTRUM	7.06	PRICE 5.90	SPECTRUM Any Mastertronic Title Hobbit Arnheim Monopoly Winter Games Beach Head II	1.99 1.99
Bombjack [lite	1.30	11.95	Any manifestration rate	14.95 11.25
EMR CONTRACTOR OF THE PARTY OF	14.90	5.95	HODDI	9.95 7.95
Star Quake Sowrderons (Elindor) Lord of the Rings	7.95	3.93	Armem	9.95 7.50
Sownderons (Dindor)	9.95	7.58	Monopoly	9.90 7.00
Lord of the Rings	15.95	12.95	Winter Games	7.95 5.95
Core of the Hungs Facilities Dun Garach Shadowline-Tuner Spy Hunter Robin of the Woods Superman	9.95	7.50	Beach Head II	7.95 5.95
Dun Darsch	9.95	7.50	The Rafs Daiey Toms Supertest	7.95 5.95
Shadowfire-Tuner		3.99	Dainy Toms Supertest	6.95 5.50
Say Hunter	7.95	5.98	Fighting Warrior	7.95 5.95
Robin of the Woods	9.95	7.58	Fighting Warrior Rocky Hornor Show Ternormolinos Barry McGoligans Yie Ar Kung Fu	8.95 6.75
Superman	9.95	7.50	Terrormolinos	7.95 5.95
Kniebbshudes (Hitterate)	9.95	7.58	Rarry MirGuisans	9.95 7.95
Discu Of Advisor Mole	9.95	7.50	Vie Ar Kung Fu	7.95 5.95
Complia Coase To Molkowand	9.95	7.50	Spitfire 40 Mini Office	9.95 7.95
Trance Goes 10 Honywood	8.95	4.76	Mini Diffice	5.05 A 98
Star Strike	5.90	5.75	Garagia.	7.95 6.95
Normated bong Power	9.90	3.73	Codesans Mail II	8.95 6.75
Knight Lore	9.90	7.59	Rasputin Codename Matt II Artist	12.05 10.50
Superman Conghishades (Ultimate) Diary Of Adrian Mole Frankis Goes To Hoflywood Bar Strike Animated Strip Poker Knight Lore Way of the Exploding Fist Big Daddy Rock & Wrestle Hacker	5.80	9.75	Activity	9.95 7.50
Big Daddy Rock & Wrestle	8.90	6.75	Alien 6	7.95 5.95
Hacker	7.95	5.95	Bruce Lee	7.90 3.90
Hacker Pole Position	7.99	5.95	Bruce Lee Critical Mass Shadowfire 2 (Enigma Force) Impossible Mission Rune Stone Eurska Macadams Bumper Geoff Capes String Man Now Games Zoids The Young Ones	8.95 6.75
Gyroscope	7.95	5.95	Shadowfire 2 (Enigma Force)	9.95 7.50
F firungs Boxing	6.95	5.25	Impossible Mission	7.95 5.95
Gyroscope F Brunos Bisking Astro-Cone Southern Belle Wham The Juke Box	7.95	5.95	Rune Stone	7.95 8.95
Southern Seile	7.95	5.95	Eureka	14.95 4.99
Wham The Juke Box	9.95	7.50	Macadams Bumper	7.95 5.95
Eighter Plint	7.95	5.90	Geoff Capes Strong Man	7.95 5.95
Fighter Pliot . World Series Basketball .	6.95	5.50	Now Games	8.95 6.75
			Znids	7.95 5.95
Street, National	7.05	5.00	Znos The Young Ones Terrormolinos Highway Encounter Saboteur *Transformers	7.95 5.95
beachead	7.95	0.75	Tarrocenolinos	7.95 5.95
Hypersports	7.90	5.04	Mahana Espander	7.95 5.95
Monty on the Hun		0.90	Leidund Eurobest	8.95 8.75
Inter Karutii Beachead Hyperaports Monty on the Run Shadow of the Unicorn Whom in Paradise They sold a Million Marsport Spy v Soy Commando (Elite) System 15000 Jet Set Willy II	14.90	11.95	Sacreti	7.55 5.95
Worm in Paradise	9.90	7.34	Transformers Rambo Newer Ending Story Ram Turbo Interface Quick Shot II Joystick Back to Skoot Friday the 13th Tau Cett Roller Coaster Minter Scoots	7 05 5 85
They sold a Million	9.95	7.50	Hamoo	7.90 9.99
Marsport	9.95	7.58	Never Ending Story	9.95 7.50
Say v Say	9.95	7.56	Ram Turbo Interface	22.95 18.00
Commando (Este)	.7.95	5.95	Quick Shot II Joystick	8.99
System 15000	9.95	4.99	Back to Skool	6.95 5.58
Jet Set Willy II Arcade Half of Fame Mind Shadows	6.95	5.25	Friday the 13th	8.95 6.75
Arcade Half of Fame	9.95	7.58	Tau Ceti Roller Coaster Winter Sports Sir Fred	9.95 7.50
Mind Chadows	9.95	7.50	Roller Coaster	6.95 5.25
Tomsheek	9.95	7.58	Winter Sports	7.95 5.95
Constant World	7.95	5.95	Sir Fract	9.95 7.58
Sweeves worth	0.95	7.55	Suid Chame	12.95 18.99
Three weeks in Paracise	9.90	7.50	Duttelle and Enmany	9.95 7.58
Cyberun (Uminuss)	9.90	7.36	Swords and Sorcery	7.95 5.95
I, of The Mask	9.90	7.50	Military of the Times	9.95 7.50
Robots Messiah	7.99	0.90	"The Way of the Tiger	9.90 7.30
Block Busters Gold Run	9.95	7.50	THE POICE	9.90 7.50
Jet Set Willy II Arcade Half of Fame Mind Shadows Tomaheek Sweaves World Three Weeks in Paradise Cyterun (Ultimate) L of The Masik Robots Messish Block Busters Gold Run Styr Fox Supertowel Artist II Goonies Turbe Espirit	9.95	7.50	Winter sports Sir Fred Surf Champ Swords and Sorcery Mikie *The Way of the Tiger The Force Legend of the Amazon	
Superbowl	9.95	7.58	Women	7.95 5.85
Artist II	14.95	12.95	Women Strike Force Harrier Movie Desert Rats	9.95 7.50
Passeller	7.95	5.95	Movie	7.95 5.95
				8.95 7.58

All prices include P&P in UK. Europe add £1 per tape. Elsewhere at cost.
Cheque/PO payable to: S.C.S (SIUS) PO Box 394 London N15 6JL.
Telephone 01-800 3156. SAE for list. "Please ring for availability.
Come and see our latest games on video; we subscribe to Bulletin 1000.
If you would like to pick up your discount software from our shop please bring your



"Computentive, Unit 5, 221 Tottenham Court Boad, London W1.

(Near Goodge Street Station),
Open 6 days a week 10.00-18.00.
Barclaycard and Access hotine ring 01-631 4627 only.
Credit Card orders dispatched same day (subject to availability). (subject to availability).

SOFTWARE

16/48 Magazine Oct '85 to swop for Horace And The Spiders, Jetpac, Pssst, Cookie, Kokotoni, Wilf, Classic Adventure, Eureka, Penetrator, Birds And Bees, Atic Atec or VU 3D. J. Barrett, 34 Napler Road, Wembley, Middlesex HA0 4UA.

Will swop Hunchback, Scuba Dive and Football Manager for Way Of The Exploding Fist or Yie Ar Kung Fu. Write to Colin O'Herlihy, Kilnagleary, Carrigaline, Co. Cork, Eire.

. Will swop both Broad Street and Booty for one of Highway Encounter, Daley Thompson's Decathlon or Supertest Phone (0942) 602730 and ask for Robert.

(0942) 602730 and ask for Robert.

* Spectrum software for sale or swop. All originals. Phone Guy on (0298) 71904 after 7pm. All latest titles which include Street Hawk, Gyroscope, Commando etc.

* Swop games such as Yie Ar Kung Fu, Roland Rat Race, Rocky Horror Show etc. for Nodes Of Yesod, Glass. Send your list of games for mine. Tet: Bishop Auckland

607657.

Will swop Molar Maul, Fall Guy, BMX
Racers and Death Chase for any two of JSW
II, Monty On The Run, Blockbusters,
Dynamite Dan, Test Match or Bounty Bob.
Tel: East Grinstead 24540 and ask for Paul.

Swop White Lightning for Picturesque E/A
or Monitor. Also Shadowfire or Valhalla for
Alien 8. Write to L.F. Potter, 209 Ladysmith
Road, Mount Gould, Plymouth, Devon PL4

7NR.

Look!! I have loads of games to swop, including recent chartbusters! Reply now and send your list to Gerard Cahill, 22 Church Drive, Clarecastie, Ireland.

Swop Rocky Horror Show for Gremlins, View To A Kill for Frankie Tapper or Fighting Warrior, plus others. Ring (0532) 651173 and ask for Daniel.

Swop World Cup, Football Manager, Horace And The Spiders, Olympimania.

Horace And The Spiders, Olympimania, Manic Miner, Terror Daktil. All six for two out of these three: Sheriock Holmes, Exploding Fist and Test Cricket. Colin Maunder, Higher Rillaton, Rilla Mill, Callington, Cornwall, PL17

Tve got Illustrator and want Dun Darach. • Eve got Illustrator and want Dun Darach. Also got Fairlight, Critical Mass, Southern Belle, Broed Street, The Patch and want Confuzion, Psytron, Combat Lynx, Cyclone and Wheelie. Swop one for one. Clive Parsons, 32 Calshot Close, St Columb Minor, Newquay, Cornwall.
• Swop any one of five games: The Valley, Software Star, Planet Of Death, Viking Raiders or Mugsy for the Fall Of Rome by ASP Software. David Raywood, 11 Rutland Road, Goole, N. Humberside DN14 6LU.
• I have games to swop including Yie Ar

* I have games to swop including Yie Ar Kung Fu, Knightlore, N.O.M.A.D.,
Gyroscope, Commando, Automania, Mugsy,
Sports Hero, Technician Ted and Atic Atac.
Phone me on (0934) 813497 and ask for D.J.
* Will swop Yie Ar Kung Fu for Fairlight.
Phone 061-707 1818 and ask for Neil.
* Will swop Gumos Gumos Super Stouth

Will swop Grumpy Gumphrey Super Sleuth for Saboteur. Write to 34 Hereford Road, Harpur Hill, Buxton, Derbyshire. Also offer Zaxxon and Pool for Back To Skool. Must be

Zaxxon and Pool for Back To Skool. Must be originals.

* Will swop Nightshade for Boulderdash II (Rockfords Revenge). Also will swop Skool Daze, Squash, Grand National, Automata 10 Pack and Pogo for Elite or Commando and Hypersports. Tel: Paul on Coventry 445920.

* Swop White Lightning and various books all as new condition for Masterfile or Art Studio originals. Tel: (0664) 61571 after 6pm and ask for Gary.

Swop 25 games incl. Frankie Goes To Hollywood, Fairlight, Way Of The Exploding Fist, Dun Darach, Back To Skool, Raid Over Moscow, Underwurfde etc. for one of Spy Vs. Spy, Yie Ar Kung Fu, Saboteur, Red Moon or Dynamite Dan. Tel: East Kilbride 44358 for Info.

44356 for Info.

Games to swop on Spectrum Include
Commando, Fall Guy, Starstrike, Ometron,
Now Games 1 and more. Write to Jonathan
Holt, 30 Brookside Avenue, Grotton,
Oldham, Lancs OL4 4LJ if Interested.

1 will swop any of these games for Spy
Hunter: Alic Atac, Monty Mole, Hunchback
1 or Action Biker. Tel: (0604) 44042 and ask
for Robbie.

Swop Avalon. Match Day, Rambo.

* Swop Avalon, Match Day, Rambo, Codename Mat II. Open to offers. David Wood, 13 Ratho Close, High Ridge Estate, Felling, Tyne and Wear NE 10 9AY.

Felling, Tyne and Wear NE 10 9AY.

Sweevo's World, Forbidden Planet,
Saboteur etc. Over 500 hit games to swop.
Write to me now — your list for mine. Richy,
90 New Templegate, Halton, Leeds,
Yorkshire LS15 0JE.

Swop Spiderman for any of the following:
Deus Ex Machina, Rocky Horror Show,
Gyron, The Quill, Hampstead, Gift From The
Gods. Must be original. David Newbold, 225
Stapleford Road, Trowell, Nottingham NG9
30E.

Swop Make-A-Chip, Scrabble, Survival, Chequered Flag and Chess for ZX81 and power pack or any Speccy software/hardware. Apply to Stephen Page, 70 Tynemount Road, Ormiston, East Lothian, Scotland EH35 SJP.

 Swop my score of Legend (arthroptical by Symposium).

Swop my copy of Legend (adventure) by
 Century for your copy of Elite by Firebird. All offers considered. Must be good condition.
 Apply: Stephen Page, 70 Tynemount Road, Ormiston, East Lothian, Scotland, EH35

Swop Eskimo Eddie, Kong II, Oracle's Cave, HOTT, for Elite or Dun Darach and Jetrnan. Project Future, Fantastic Voyage, Trashman for Rockford's Riot. Phone (0533) 677250 and ask for Simon.

677250 and ask for Simon.

Commando, Gyroscope, Yie Ar Kung Fu, Hyper Sports, Sterquake, Back To Skool and many more new titles to swop. Phone (0223) 833986 between 4pm and 9pm and ask for Michael. Also Robin Of The Wood.

Many new games to swop. Includes Yie Ar Kung Fu, Panzadrome, Fist, Glass, Starquake, Starion, Fairlight, Nightshade, Shadowfire, D. Dan, Send your list for mine. Write to Paul Hunjan, 8 Pangeter Street, Walsall, West Midlands WS2 BRP.

Lots of 48K and 16K programs including

Walsall, West Midlands WS2 BRP.

Lots of 48K and 16K programs including Commando and Back To Skool. Will reply to any letters for lists etc. Tel: (0203) 315846, or write to Alan Smith, 9 Kirkstone Road, Bedworth, Nuneaton CV12 BSA for lists etc.

Wanted. Elite. Swop for Gyron and/or Tasmerge. S.F. Clark, 4 Farley Park, Oxted, Surrey RHB 9HY.

Swop 40 games, Currah, interface and programmable joystick for interface 1 and microdrive and Multiface 1. My material is all in good shapel Write to Francisco Cabral, R. Navagantes 54 S/L Esq. Lisboa, Portugal.

Any hints for Lord Of The Rings? Piease hurry, my sanity rests on your answer.

Any hints for Lord Of The Rings? Please hurry, my sanity rests on your answer. Robert Lilley, 18 Rosebery Gardens, Belfast, Co. Down. N. Ireland.
I have over 700 titles to swop for other software. No. 1, Fairlight, Popeye, Nightshade etc. Juan Espineira Alvarez, Travesia de Vigo, 179 5oD, Vigo-7, Spain.
Swop Jungle Adventure, Diamond Quest, Psyston, VU-File, Ant Attack, Neverending Story for Mad Martha, Mountains Of Ket, Valkyrie 17, Forest Of Doom. Tower Of



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!

espair, Smuggiers Cove, Kentilla. Write to Ludwig, Gyllenstierneg. 10, 11526

S. Ludwig, Gyllenstiernsg. 10, 11526
Stockholm, Sweden.

* Swop Glass for any of Knightfore, Alien 8, Nightshade, Sabrewulf, Nodes Of Yesod. Must be good condition originals. Contact Jonathan Wilson, High Carlingill, Tebay, Penrith, Cumbria CA10 3XX.

* Will swop games. I have over 100. Please send list. Strategy games if possible. Gary Rowe, 42 Wellbeck Street, off Princes Avenue, Hull, N. Humberside.

* Almost 250 programs to swop including S, Shadow, Robin Of The Wood. Send list to Peter van Hal, St Isidoruspiein, 6G23 BD.

Sharow, Hobin Of The Wood, Send list to Peter van Hal, St Isidorusplein, 6G23 BD, Groessen, Holland. * Will swop any of Dun Darach, Nightshade, Monty On The Run, Gramlins, Hero. Monty On The Run, Gramlins, Hero, Nonterraquous, Quest For The Holy Grail for any of Back To Skool, Seas Of Blood, Commando, Yie Ar Kung Fu or Robin Of Sherwood or Robin Of The Wood. Must be originals. John Vaughan, 58 Stonehey Road, Southdene, Kirkby, Liverpool.

* Speccy games to swop. Many top littles. Interested? Write to Craig Ritchie, 55 Cumberland Gate, Copy Lane, Netherton, Merseyside L30 TPX.

* All new titles including Gladiator, Rambo

Merseyside L30 7PX.

• All new titles including Gladiator, Rambo etc. Swop your list for mine. Send your list to Scott Miller, 6 Countess Gardens, Crieff, Perthshire, Scottand PH7 3DP.

• For sale: Technician Ted, Strip Pontoon, Mindbender, White Lightning, Death Star Interceptor, Gissa Kiss, War Of The Worlds.

Offers to Carl on Basinostoke 781107.

Offers to Carl on Basingstoke 781107.
• Swop Rocco, Flak, Raid!, Hunchback II, Blue Max, with/or Skool Daze, WS Baseball

Blue Max, with/or Salpoi Daze, WS Baseball and Sports Hero for any four/two of Supertest, Spellbound, Now Games II. Saboteur, Hyper Sports and Shadowfire. Phone George on 031-331-2381.

Swop Crypt, Chess, Golf, Detective, Slicker Puzzle, Scrabble, VU 3D and Super Spy for Back To Skool, FGTH, Monopoly, Yie Ar Kung Fu, Dun Darach. Ring Sammy after 5pm on (0205) 870036.

Spm on (0205) 870036.

Plenty of games to swop and also utilitie Please send list with SAE. All letters answered. Write to M. Doughty, 78 Gildas Ave., Kings Norton, Birmingham B38 9HT.

Wanted: Dambusters, Back To Skool, Gledletor, Elite, Critical Mass. I will swop

Nodes Of Yesod, Gift From The Gods, Cyclone and other lesser games (lesser games three for one). Tel: (0977) 43367.

HARDWARE

Sinclair 48K Spectrum with WH Smith tape recorder and the introductory tape with all manuals. Bargain at £45 ono. Tel: (0908) 568765 after 4 pm.
Spectrum +, joys'ick and RAM Turbo interface, Currah Speech, Timex printer, cassette recorder, £250 of software, magazines. Sell for £200+ ono. Ring Simon on (0322) 521717 after 6pm.
Currah Speech unit with manual and demo

Currah Speech unit with manual and demotape, for £17 inc. postage. Tet: (0553)
765206 and ask for Graham.
 Swop Quickshot joystick and Jet Set Willy III for DK Tronics light pen, also large number of software to swop. Phone Southfleet 3493, ask for Gary.
 Security Interferent to proceed the security of the

Southfleet 3493, ask for Gary.

* Spectrum, Interface 1, two microdrives, several cartridges and box, light pen, programmable joystick, tape recorder. Lots of software, books and mags. All like new. Worth over £500. Sell for only £200. Tel: (0436) 3703 and ask for Angus.

* Computer tapes C-60's for only 30p each or C-90's for 35p each. Write or send money to: Wayne Griffin, 27 Melling Road, Aintree, Liverpool, L9 OLE. Tel: 051-523 2562.

* Spectrum and Kempston joystick and mags, Crash and lots of games including Neverending Story, Kung Fu, Sorderons Shadow, Commando. £140 ono. Tel: Bransgore 72336.

* Interface 1, boxed, unused — £30 or past-exchange for Multiface 1 etc. Tel: 061-790 7838.

* 48K Spectrum, Bud joystick interface,

 48K Spectrum, Bud joystick interface, boxed — just £55. Also 32 games incl. Elite Tau Ceti, Yie Ar Kung Fu worth over £250 + 35 magazines, blank tapes all for £80. Tel: 01-656 5236.

 Colour printer/plotter, Oric/Atr computer, word processor and other programs, books etc. £70 the lot. Call at 93 Kennedy Road, Harwell, London, W7 1JW, or ring 01-578 8776

 Timex 2040 printer, same as Alg also three rolls of paper cost £49.95. Give away at £25 onc. Tel: Weston-super-Mare 415389 and ask for Nik after 4pm.

415:389 and ask for Nik after 4pm.

Sinclair ZX printer with roll of paper (with power supply for ZX81). Sell for £20. Tel: 01-642 6444 and ask for Paul.

Kempston Centronics "5" printer Interface 20. Customise Tasword, switch on and go. Ferguson RGB Interface, through connect and switch for green screen £20. Tel: 041-357 0262.

AMERICANICS Sold paper for sale excellent.

 DK Tronics light pen for sale, excellent condition £12. Tel: (0742) 452637 and ask for Adam

for Adam.

Genuine antique. Original ZX80, Almost new. Treat yourself. Offers? J.L. Harper, 18 Damask Close, Weston, Hitchin, Herts.

48K Spectrum, tape recorder and £30 software including Knightlore. Underwurlde. Hardly used, want quick sale. Only £45. Tel: (05645) 5489 after Spm and ask for Joseph.

Programmable joystick interface, joystick, DK Tronics light pen and a couple of games of your choice. Phone (0902) 892098 and ask for Matt.

ask for Matt.

* ZX printer for sale c/w four rolls paper vgc.
SFCC for £15 or swop for software and/or hardware (originals only). Tet: (0704) 76580 after 5pm and ask for Michael.

* DKTronics light pen sell for £13 or swop for Skool Daze and Full Throttle. Please write to Mr R. Oades, 53 Camden Street, Boulevard, Hull HU3 3JB.

* Swop VTX 5000 Modern for green monitor or microdrive plus cartridges. Phone: (04215) 63618 and ask for Tony. ask for Matt.

BOOK YOUR FREE AD HERE

If you'd like to advertise in Input/Output, please write in BLOCK CAPITALS below and send the coupon to Input/Output Your Sinclair, 14 Rathbone Place, London W1P 1DE — oh, and don't forget your address and phone number. We can't accept any software sales, and this service is only available to private advertisers.

Please enter	my a	dvert under Software	the	following Wanted	cla	assification: Messages & Events		Pen Pals
Name								
Address	******							
Samuel						Postcode		
							_	

MAGAZINE HEALTH WARNING:

Think before you snip — most people use a photocopy instead.

YS4



R SINCLAIR DOES NOT DONE SOFTWARE PIRACY

CLASSIFIED

IED INFORMATION CLASSIFIED INFORMATION CLASSI



YOUR SINCLAIR DOES NOT INDONE SOFTWARE PIRACY

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 * 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.
- 6. CONVERT ANY PROGRAM INTO A TWO MINUTE RELIABLE FAST LOADER.
- 7. ANY PROGRAM CAN BE MADE CHALLENGE SPRINT COMPATIBLE.

N.B. TRANSFER TO OPUS IS IN TWO SIMPLE STAGES (extra software required charged at £2. Please contact us for details)

A.T. & Y. COMPUTING LTD 35 VILLA ROAD, LONDON SW9 7NY

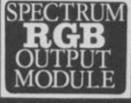
Information: Tel: 01-733 6175 or send s.a.e. , Fully inc. price: £35.95 (Opus £37.95) Overseas: Europe+£2 Others+£4)

the full feature art and design system, available direct for £5.95

- on screen instructions airbrush (with everal densities) colour wash (with features and combinations bright and flash) o plot trace colour fill with restore and break resident user graphics or load your own favourite UDGs text insert at pixel lines stipple effects ● text insert at pixel lines ● stipple effects for colour mixing ● screen memories ● screen merging ● erase modes (instant) ● boxes, lines, circles, discs ● variable skip modes ● grid overlay ● variable cursors and speeds ● tape and m/drive screen load/save ...and countless combinations of your choice.
 - Microdrive compatible Tape version £5.95 plus Cartridge £7.95 40p P+P ONLY AVAILABLE DIRECTLY FROM:

Black Mountain Software, P.O.Box 207, Mumbles, Swansea SA3 4DW.

At last an Art System at a realistic price!



adapt electronics

Connect a monitor Super sharp text to your Spectrum Superb colour graphics

- True TTL/Analogue outputs + comp syncs

 Monitor quality pictures no dot crawl.

 Sults RGB monitors & monitor/ TVs

 Slimply plugs into expansion port.

 No separate power supply required.

 New through port version Allows connection of modems, joy-stick interfaces etc.

 Price £34.95 or £38.95(through port) + £1 P&P many addons parts & software SAE for details 20 STARLING CLOSE, BUCKHURST HILL, ESSEX. IG9 5TN. Tel. 01-504-2840



TO ADVERTISE IN YOUR SINCLAIR RING NEIL ON 01-580 0504



The essential Microdrive utility.

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

Find, load, repair and rewrite bad sectors, and hence load damaged files • Full status reports pinpoint faults quickly Monitor-type sector editing
 Full printer support
 "Filter data" option for Tasword Two files
 Separate program makes corrupted BASIC programs editable Only £6.95

All Spectrums except 16k. Available from good computer shops and Micronet 800. Also via fast mail order (UK postfree, Europe add £1, overseas add £2 airmail) with seven-day "refund if not entirely satisfied" guarantee (statutory rights not affected). C-Doc upgrade £2.50 (please return cassette only). Trade enquiries welcome: phone R&R Distribution on 0977 795544.

SEVEN STARS

Seven Stars Publishing, Dept S, 34 Squirrel Rise, Marlow, Bucks SL7 3PN. Tel: 06284 3445

CHEZRON SOFTWARE

(Dept. 204), 605 LOUGHBOROUGH ROAD

BIRSTALL, LEICESTER LE4 4NJ PRO-MAT for easier control of your printer, EPSON, BROTHER, HR5, WM60 via INTER-

FACE 1, KEMPSTON or TASMAN. State

PROGS-FILE for program records, easy use, can read m'drives. Hard copy1/Face 1 or

SKETCH draw, paint, etc. £2.50 CATLOADER one key, self-maintaining

Plus SAVE ITI AUTODRAW AND TIME

GOLDEN COBRA a real-time

d interface when ordering...£3.50

£2.50

£2.50

£2.50

PREMIER LEAGUE and **EUROPEAN TROPHY**

FOOTBALL MANAGEMENT STRATEGY GAMES FROM E & J SOFTWARE

PREMIER LEAGUE

OUR POPULAR LEAGUE GAME - FEATURES INCLUDE: Training, Team Selection, Substitutes, Half-Time Scores, Full Squad Details, Named Goal Scorers, Team Styles, Save Game, Financial Problems, Five-skill Levels, PLUS MANY, MANY MORE. AND NOW!

EUROPEAN TROPHY
A SUPERB EUROPEAN COMPETITION STYLE GAME WITH
THESE GENUINE FEATURES: Home & Away Legs, Away Goals
Count Double, Two Substitutes Allowed, Extra Time, Penalty
Shoot-Outs (with sudden death), Five-skill Levels, Injury Time,
Match Penalties, PLUS MANY, MANY MORE!

Transfer your PREMIER LEAGUE winning side into EUROPEAN TROPHY

48K SPECTRUM

Both these quality games use the Full Memory of your Spectrum and can be played separately or as companies games — STOP SPECTATING - START MANAGING.

Both games are available by MAIL ORDER ONLY at the UNBEATABLE VALUE of £5.25 each or send SAE for full details. SPECIAL TWIN PRESENTATION PACK OF BOTH GAMES AVAILABLE AT ONLY £9.95

Price includes postage & packing (add £1.00 outside UK).

E & J SOFTWARE (Room 2) 34 Lordship Road, Cheshunt, Herts EN7 5DP

SPECTRUM ADVENTURE OFFER

Three 48K Spectrum Adventures for only £9.95 plus FREE strategy game

ave a limited supply of: PARADOX - difficult but not (quite) impossible. SPOOF — hilariously funny spoof on adventures. ROBY HODE — massive adventure in two parts. +SPECTREALM - the best rule-a-country

All adventures as yet unsolved.

All four programs received good press reviews. SAME OFFER ON MICRODRIVE FOR £12.95

Delivery within 10 days - and that's a promise. Cheques/POs to:

A.C.D. COMPUTER SERVICES

COUNT all on one tape ... Adventure Offer 'No Quibble' refund if dissatisfied. SAE brings program details 32 HAREWOOD AVENURE HIGHBURY VALE NOTTINGHAM NG6 SEF TEL 10602: 763579

CHEZRON SOFTWARE



CLASSIFIE

YOUR SINCLAIR DOES NOT IED INFORMATION CLASSIFIED INFORMATION CLASSI



YOUR SINCLAIR DOES NOT CONDONE SOFTWARE PIRACY

48K SPECTRUM UTILITIES

CODE SLICER is an advanced cassette handling utility which will read ANY section of a NORMAL, DOUBLE or TREBLE speed hape into ANY store address. This single utility now allows you to sold a large program into several sections for Microdrive, Wafadrive, Disc drive transfers, tape copies, general hacking, stc. There is NO limit to the size of file this program can handle. It works with Basic or Machine Code files and is an fiexible as your

* * *

KWKLOAD allows cassette software to be loaded THREE TIMES the normal speed on a standard cassette recorder. The professionally written menual explains how to convert encor commercial programs including Basic, Machine Code and mony which are protected.

KNIGHTLORE loads in 115 secs JET SET WILLY loads in 95 secs FOOTBALL MANAGER loads in 90 secs

Tim very satisfied *- N. Mellet - Fran

Thank you for the delivery of your excellent Kwikload
A Cupit - Switzerland

本 本 本

VARILOAD is a new product written at the request of our customers. Severs KWIKLOAD users asked whether loading speeds in excess of 4500 baud could be achieved. As a result VARILOAD was written to allow KWIKLOAD to operate at any of 8 different speeds between 2000-8000 baud Depending on the reliability of your caseatte recorder you can now failer KWIKLOAD to your exact requirements.

NOTE - VARILOAD works in conjunction with KWIKLOAD. Only £3.50.

KWIKLOAD AND VARILOAD only £7.50

Overseas custom add 55p postage Send SAE for details of all our products.

SPECTRUM REPAIRS A Better Deal from Micro-World

REPLACEMENT OF MIC, EAR & POWER SOCKET	7.95
POWER SUPPLIES (Spectrum/Plus/ZX81)	10.95
KEYBOARD - REPLACEMENT	
(Mat, Membrane & Plate)	12.95
ALL OTHER FAULTS	17.95
KEYBOARD AND REPAIR	25.95
SAGA EMPEROR ONE inc. fitting	39.95
SAGA EMPEROR ONE AND REPAIR	55.00
16-48K UPGRADE (12 months Warranty)	25.95
ZX81 - REPAIRS	17.95
ZX - INTERFACE I - REPAIR	17.95
ZX - PRINTER - REPAIR	17.95
ZX - MICRODRIVE - REPAIR	17.95

- Prices fully inclusive of VAT & Return P&P
- 48hr turn round on most machines
- · 3 months warranty on repairs
- Send SPECTRUM ONLY suitably packed clearly stating fault, your name & address, cheque or postal order to:

Micro-World Computers (YS)

25 Hill Top Road. Slaithwaite. Huddersfield HD7 5ES Telephone: (Day) 0484-846117 (Evening) 0484-845587

Showroom: 1006/1010 Manchester Road. Linthwaite. Huddersfield HD7 5QQ Open 9 to 5.30. 6 days

INTERFACE 007

The Back-Up unit sold worldwide on recommendation alone MICRODRIVE. Now you CAN transfer two full 48K programs onto a cartridge. (Previous purchasers send for 007 NEWS leaflet).

WAFADRIVE. Interface 007 is the ONLY unit which can transfer even a genuine 48K program to a Wafa. Others lose one Bytel (Please order Wafadrive version as Interface 007WD).

POKE or MESSAGES can be easily added in. (Read 007 NEWS).

Does NOT require any additional software, but if you purchase a Disc system later, a Modifier tape can be supplied FREE.

DISC-DRIVE. Transfers slightly differently. Send for details.

Can also convert tapes to load at one of five selected speeds Very user friendly. Comprehensive instructions included. Note that it does not simply dump out complete memory, only the program Bytes are Saved out.

£29.95 post free Overseas postage; Europe +£2, elsewhere +£4

G. A. Bobker ZX-GUARANTEED (Dept. YS)
29 Chadderton Drive, Unsworth, Bury, Lancs, BL9 8NL Tel: 061-766 5712 (do not phone when Startrek is on)

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£1.00

Spectrum Games

Review Handbook£0.75

Adventurers Handbook £1.00

Send cheque or P.O. to:

H&D SERVICES (YS) 1338 Ashton Old Road Higher Openshaw

MANCHESTER M11 1JG TEL: 061-370 5666

COMPUTER REPAIRS IN SOUTHEND

Spectrum/plus Spectrum K/B faults £12.95 Interface 1 & 2 from £12.95 C64/Vic 20 Brand new Spectrum €9.95 power supply units

Above prices include parts. post & packing. All repairs are guaranteed 3 months. Call in or phone for more details.

MINNIE MICRO ELECTRONICS 12 EASTERN ESPLANADE, SOUTHEND, ESSEX. TEL: (0702) 62033/615809 OPEN 7 DAYS A WEEK

POOLS PREDICTION

Outputs best draws, homes and aways.
Features analytical draw finder.
Prints team form comparison graphs.
Analyses and graphs results every week.
Takes full account of mid-week games and "cup" matches between main league teams.
Promotion/relegation option. (Can be used from season to season) season to season.)

Easy to use, even for beginners. Gives paper printout of predictions if required. Full back-up service. 53 wins (334 dividends) received by author so

"This is the best and most sci-

"In a the best and most scientific of any program I have seen"— Mr R.A.P. (secretary, Orpington Computer club).
"Once again, thank you for one of the best investments I have made"— Mr D.L.B.

(Fetham):
"I would like to congratulate you on your excellent service — It is a rare thing these days"
— Mr.L.G.P. (Shrewsbury).
"I found your program very professional and user friendly — I am very satisfied with it" — Mr.B.D.

RACING PREDICTION

An easy to use predictor, by the same author, the Flat Racing season. No knowledge of racing required. Input information from any daily newspaper. Holds data on draw advantage and ground conditions for 37 British courses.

Self-teaching program is never out-of-date. Customers report wins of up to 33/1.

BRITISH POOLS AUSTRALIAN POOLS @ £11.95 @ £11.95 @ £11.95 FLAT RACING

Allow 7 days for delivery. Cheques, POs payable to ROMBEST, or quote Access/Eurocard/Mastercard number. Overseas customers please add £1 for p&p.

ROMBEST, Dept. YS 2 Welland Croft, Bicester Oxon OX6 8GD

Available for 48 Spectrum. British Pools also available for Commodore 64.

SPECTRUM REPAIRS

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

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

> R.A. ELECTRONICS 133 London Road South Lowestoft, Suffolk Tel: (0502) 66289



DKTronics light pen, hardly used, for £12. Phone: 061-483 4584 and ask for David.
 Swop my original Spectrum software (or my 48K Spectrum) for your N-Gauge railway or that redundant Commodore disc drive. Write to L.J. Allen, 11 Eldon Terrace. Windmill Hill, Bristol BS3 4NZ.

Windmill Hill, Bristol BS3 4NZ.

* Spectrum +. Interface 1, two cassette recorders (one faulty but useable), Doubler Mk. 2, games, magazines. All in superb condition with all leads etc. £150 ono. Tel: 031-336 3568 and ask for David.

* For Sale: 48K Spectrum with tape recorder and over 50 tapes worth £250, asking price £200. All in good condition. Tel: Keynsham 5626 and ask for Nick or Jon.

* Swop ZX printer for Quill or sell for £12. Will also accept two good games — Skool Daze and Monty Mole if possible. Tel: (0273) 721167 and ask for Andrew.

* ZX LPrint III Centronics/RS232 printer

ZX LPrint III Centronics/RS232 printer interface (with RS232 lead) £30. VS issues 4.7.9.10.11 £5 each. Tel: 041-959 6125 and

ask for Gregor.

Rotronics Watadrive + 20 waters +
Centronics Cable+ Technical manual +
transfer utilities £70. Tel: (0483) 65757 and ask for Robert

ask for Hobert.
48K Spectrum, professional keyboard, Rotronics 2x128K Wafadrive with Centronics and RS232 interfaces. Datec Sound Sampler. Over £300 software and books.
Excellent condition £185 ono. Tel: 061-748

4274.

Dataspectrum Modem interface and software package. Supports Prestel.

Micronet, Bulletin Boards, Telesoftware on 75/1200, 300/300, 1200/75. It's suitable for most Modems. Unwanted gift hence £25. Phone Paul on (0502) 641176.

For sale. Currah MicroSpeech and DKTronics light pen and DKTronics sound synthesiser. All boxed with instructions and tapes etc. £20 each. Phone (085283) 2811

tapes etc. C20 each. Phone (089283) 2811 after 4pm and ask for David. • Will swop my broken ZX printer and two

rolls of printer paper (printer can be fixed) for any offers, will swop original software a well. Phone (0639) 730442. Hurry or I will

throw it away.

Tasman Centronics printer interface Tasman Controlics printer interface,
 ribbon cable and software. Perfect condition
 only £25. DK Tronics joyatick interface,
 Kempston and 67890 as new only £7.50.
 Phone Paul on (0602) 641175.
 48K Spectrum, Kempston interface and

Quickshot joystick, magazines, some games and manuals all for £80. Phone Leeds 864719 and ask for Neil.

One Curran MicroSpeech unit for sale £15.

One DK Tronics light pen and interface £10 Tel: (0908) 648189 after 4pm and ask for

. 56K ZX81 for sale plus manual, plot 'n'

56K ZX81 for sale plus manual, plot in print paper, five original tapes including Inch Curse. Startrek, Sorcerers Island etc., plus four mags. Asking only £30. Phone Rattlesden 7746 and ask for Steven.
 For sale. One microdrive boxed and under guarantee £20. RAM Turbo joystick interface and Quickshot 2, and five ROM cartridges £20. £250 software including JSWII, Raid etc. £30. First offer secures. Tel: (0525) 378148 and ask for Michael.
 ZX80 manual £3. Making Most of ZX80 £3.

* ZX80 manual £3. Making Most of ZX80 £3. thirty ZX80 programs £3. ZX80/81 RAM 4K extra £11. ZX80/81 Power Pack £6, ZX81 complete plus business software ×3 £36. complete plus business softwar (All postpaid). Tel: 01-834 5592

(All pospaid). 1er: 01-838 5592.

* Spectrum printer with three rolls paper £16 ono, inc. P+P, Also DK Tronics keyboard £20 ono or both for £32. Mark Payne, 5 Bassett Road, Coundon, Coventry, West

Bassett Road, Council, Council, Midlands CV6 1LF.

* Brand new VTX 5000 Modem to swop.
Particularly interested in microdrive but will consider any swop offered. Tel: (0777) 84305 now! Also nearly complete set of Your Spectrum to swop

 LTR-1 printer for sale. Hardly used.
Complete with spare ink rollers. Two months old. £80. CR Smith Flat 6, Wych Hill House. Wych Hill Rise, Woking, S.

PEN PALS

 Penpal wanted. I have nundreds or games Send your list for mine. Don't wait, write now! A. Mohammed, 29 Amherst Road, Withington, Manchester M14 6UR.
 I am a 20 year old student at the Coalmining Institute. I am interested in computers and have a Spectrum+. I would like a computer supply. like a computer-owning penpal. Jerzy Chlebicki, W. Ryszki 59/59, 41-500 Chorzow, Poland.

. Hurry! Last chance offer! I'm 15 (tall, dark nd handsome) seeking attractive English smale Speccy owner, preferably same age. to swop progs, pics, games etc. Write to Matt Taylor, 11 St. Hilarys Close, Lincoln. * Lonely male 6ft blond, blue eyes seeks female penpal 16+. Interested in M/cycles, music, videes, computers. Own Speccy, Kempston joystick and 60 games. Richard Neal, 10 Maryland Court, Rainham, Gillingham, Kent ME8 8QY. * Mature (34) Speccy user with less than

Mature (34) Speccy user with less than no knowledge wants to swop hints and programs with anyone, anywhere. Send tape or letter to Roger Wallis, 58 Old Heath, Heathgates, Shrewsbury, Shropshire.

21-year old, especially into add like to swood the second female programmers.

and female programmers, would like to swop ideas, games and hints with anyone. Over 400 games owned. Glenn Smith, 182 Brighton Road, South Croydon, Surrey CR2 6AE.

13-year old Speccy owner requires a male or female penpal to swop hints and POKEs with. I have a lot of up-to-date games. Write to Steven Mackle, 19 Beattle Avenue, Aberdeen AB2 5AQ.

Male or fernale penpal (20+) wanted by male Spectrum owner (23). Likes include adventure games, photography and football. Graham Munro, 24 Glendee Road, Renfrew, Scotland PA4 0AD.

Scotland PA4 0AD.

I am 13 and would like a penpal of any sex to swop software, hints, POKEs etc. Write to Paul Robson, 72 Stokesty Crescent, Billingham, Cleveland TS23 1NE.

Illingham, Cleveland TS23 1NE.

Software for hardware and other peripherals. Also interested in starting a magazine.

Gordon Hamilton, 4 The Clouds, Duns, Berwickshire, Scotland TD11 3BB.

Berwickshire, Scotland TD11 3BB.

• Penpal wanted for 14-year old Speccy freak to swop tips, games, mags etc. Preferably female, but all letters will get a reply. Write to Dominic Bunn, 3 Church Road, Ashmanhaugh, Wroxham, Norwich, Norfolk NR12 SYL

 Penpal wanted to swop software, maps, hints and POKEs, about 12+. Write to David Saunders, The Bungalow, Station Road, Wath-upon-Dearne, Rotherham, S. Yorkshire S63 7DG.

Yorkshire S63 7DG.

* Late 20's sailor owns a Speccy+ and seeks a lonely lady penpal (18-25) anywhere in the world. A beginner to computer programming and would like to know more about it. Educational and game tapes for swop are also welcome. Nelson Falconite, M/V Galloway Express, c/o James Scott & Co., Lower Glanmire Road, Cork, Eire.

Co., Lower Glanmire Road, Cork, Eire.

Lonely male (14) seeks female penpal (1315). Write to David Wickes, 19 Fairlawn
Park, Sydenham, London SE26 SRZ. If
possible, please enclose a photo.

Female penpals wanted by male Spectrum
owner (23). Swop programs, ideas etc. Write
to Graham Wolfe, 31 Kingscourt Road,
London SW16, 1TA.

to Graham Wolfe, 31 Kingscourt Road.
London SW16 1TA.

I would like a penpai far away from
England, if possible America or Australia.
Any age. Likes computers and making
graphics but not very good at writing
machine code. Matthew Barton, The Old
Vicarage, Broadwoodwidger, Lifton, Devon
PL16 0EP.

16-year old matthew

PL16 0EP.

* 15-year old male would like a female penpal 15-17 years. I like computers, music (especially Tears for Fears) and tennis. Enclose photo. S. Riley, 2008 Broughty Ferry Road, Dundee, Scotland DD4 6JY,

* If you're looking for a tedious writer who has games that make you cry at first sight, don't write. I'm the opposite! I'll swop software etc. Send your list. Hurry!! José Rosada, Rua General Silva Freire No 7 R/C Esq. B, Olivais Norte, Lisboa, Portugal.

* Name: Calle. Age: 14. Profession: student. Searching for female from any nation. Hobbies: fishing. Spectrum, movies, books, photography and all kinds of music. Write to:

photography and all kinds of music. Write to: Calle Nordlund, Barkspadev. 2, 752 47 Uppsale, Sweden.

Female 23+ as penpal. Just started

Pemale 23+ as penpal, Just started computing myself and don't know much. No need to know about computers. John Cavanagh, 190 Liverpool Road, Huyton, Liverpool, Merseyside L36 1RJ.
 Any interesting males aged 14-16 want to write to a wonderful female with a great sense of humour? Write now to Marie

Walker, 33 Welch Avenue, Stapleford, Notts. NG9 8EJ.

. I'm 14 and would like male or fe penpals of about the same age for tips, adventure tips, POKEs and maps. Write to Bosco Lam, 26 Acres End, Amersham, Bucks

Penale penpal wanted aged 14-15.
Please send a photograph. Will swop
games, POKEs, hints, etc. Write to Aamer
Rafiq, 73 Tolworth Rise North, Surbiton,
Surrey, London KT5 9EN.
Penpal wanted, male or female aged about
15, bits swopping games, m/code.

Penpai wanted, male or female aged about 16. Into swopping games, m/code programming etc. Will reply to all letters, paper or tape. Write to Dave Moore, 5.
Burdett Close, Skegness, Lincs. PE25 2NY.
A 16-year old boy would like to meet females between 15 and 17. I am interested in computers, music and having fun. Please send photo to Cart Bianco, 20 Greenvale Drive, Brightons. Falkirk, Sterlingshire, Scotland.

· Var år ni alla Nordiska Spectrum ägare som vill byta program, POKEs eller bara prata Spectrum? Skriv eller ring till Tornas Söderquist, Strandvägen 15, 45200 Strömstad, Sweden. Sänd din lista för min.

WANTED

Following games urgent: Ghostbusters, Darts, Snooker, Alien, Gremlins, Lord Of The Rings, Blockbusters, Buy or swop any for Tasword 2 and Chess and Music-Master. Paul Das, 34 Granville Road, Middlesbrough, Cleveland TS1 3PF.

VTX 5000 miles.

Cleveland TS1 3PF.

VTX 5000 will swop RAM Turbo interface and Robot Messiah, Taios, 911TS, The Boss and Jetman and Fighter Pilot. Ring now (0296) 32646 after 5pm and ask for Kiranjit.

Speccy disk system wanted. Swop for Fist, Gyroscope, Match Day, FB Boxing, Spy Vs. Spy, Doomdarks, Match Point, Computer Hits. Sim Jones, 3 Cradoc Close, Brecon, Powys LD3 9UH.

Wanted Multiface 1. Will swop for Component

 Wanted Multiface 1. Will swop for Comcon and five games from my collection. Write to C. McRobert, 6 Martello Avenue, Holywood, N. Ireland BT18 0DH.

C. McRobert, 6 Martello Avenue, Holywood, N. Ireland BT18 0DH.

* Elite (original) wanted urgently. Will swop Brain Damage, Winged Warlords, Spectipede, Robetics, Spacewalk. Write to S. Ashby, 290 Grange Road, Gillingham, Kent ME7 2TB. Also have tips and POKEs.

* Will swop tons and tons of unboxed space Lego for Saga Lo profile keyboard of Alphacom 32 printer and paper and interface for Spectrum. Please write only. Matthew French, 8 Birchall, Pixley, Ledbury, Herefordshire HR8 2BR.

* Has anyone got the advanced Dungeons and Dragons, Dungeon Masters Guide to sell. I will buy or swop for software. Please ring (0502) 741236 Sunday and Monday 8.30pm — 9pm.

* Wanted. Currah MicroSpeech, will swop for tapes e.g. Jetpac, Penetrator, Flight and other BASIC games, also book on computing. Write to Peter Merrick, 57 Lennox Street, Rockdale, Sydney, Australia 2216 (preferably Australian).

* Software to swop, send your list for mine. Write to Kevin Chan. 77 Browett Road.

Software to swop, send your list for mine.
Write to Kevin Chan, 77 Browett Road.
Coundon, Coventry CV6 1AX. P.S. I would swop software worth over £30 for a ZX

printer.

Wanted: Interface 1 in good condition.
Phone Northwood (09274) 21104.

Wanted: Robin Of The Wood. Swop for Arc Of Yesod and F.B. Boxing (or Exploding Fist)
Tel: (0723) 352517 after 6pm. Originals only.

Will swop five new games for Kempston Scoreboard Joystick. Must be in good condition. Games include Monty Mole, Traxx, Street Hawk and Jason's Gem.
Contact Brian McKelvie on (0290) 23276.

I will swop Clumsy Colin and Soul Of A

Contact Brian McKelvie on (0290) 23276.

• I will swop Clumsy Colin and Soul Of A Robot for Skool Daze. Must be original. Geoffrey Mole, 9 Abbeystead Drive, Scotporth, Lancaster, Lancashire LA1 4QS.

• ZX printer with or without paper. Will pay up to £10, or swop for hand-held (two-channel) C.B. Write to Mark Frith, 2 Falcon Green, Farlington, Portsmouth PO6 1LW.

1 would like to twop 3D Deathchase and Android 2 for either Gyroscope, Alien 8 or Highway Encounter. Also I would like to swop hints, tips and POKEs. Tel: Grimsby

swop hints, tips and POKEs. Tel: Grimsby 695675 and ask for Nathan.

* Swop electric guitar with Ferguson Revolver radio tape amplifier. Also three air rifles. Wanted: hard and software and Spectrum manual for Spectrum + Anything considered. Ring (0924) 378621.

* Wanted: VTX 5000 Modern. Will swop Datel Digital Sound Sampler. Tel: (0472) 602445.

* Wanted: Interface 3 for Speccy. Will either

Wanted: Interface 3 for Speccy. Will either swop for Currah "U" Speech and Avaion/Tech Ted or will buy for £20. Tel: (0484) 687083 and ask for Jason between 4.

and 7pm.

Interface 1 and microdrive in good condition. Tel: (0703) 769938 and ask for Aidan.

Swop some of my Crash 3-12, YS 5 and 8-21, 16-48, 3-10 and 14. 6 software titles. Offers please. I want a Currah MicroSpeech in good nick with full instructions etc. J.D. Prentice, 39 Meeting Street, Ramsgate,

Wanted: Siomo by Nidd Valley Micro
 Products: Will swop for Machine Lightning original and manual. Write to S. McCarroll,
 Slingsby Drive, Upton, Wirral, Merseyside L49 0TY.

Wanted: help on Sherlock and H Comes The Sun. Write to Jo at 67 Plodder Lane, Farnworth, Bolton, Lancs BL4 0BX. Please help if you can.

Paper for ZX printer urgently needed. John Ellis, 19 Wentworth Place, Scholes,

ham S61 2QX. Tel: Rotherham 562219.

S62219,
Wanted: ZX printer. Swop for any two of Gremlins, Knightlore, Nightshade, Sebre Wulf, Alien 8 or Ghostbusters. Paper wanted. Phone (0424) 388 between 4 and 6pm and ask for Danny.
Wanted: VTX 5000 Modem. Will swop

drive in good working order. Tel: (0843)

68522 evenings only.

• Wanted: Interface 1, methods or software to connect the Interface 1 to Tandy CGP-115 printer. State price and please write to Thomas Lee, 11 Halbeath Road,
Dunfermline KY12 7QZ.

• Wanted: copy of The Hobbit 48K Speccy.
Book not required. Phone (0733) 235018

after 6pm.

• I've 90 per cent of the top 20 gar

hundreds more! Your list and sae for mine. Interested!!! I am!!! Mathew Hook, 5 Rocky Lane, Bournheath, Bromsgrove, Worcs. Bo

MESSAGES, **CLUBS & EVENTS**

Kevin Dominey thinks it is funny to advertise that to swop a CMB 64 for Horace And Spiders would actually amuse the readers of YS. I think he is a zero. Dan Green, Birchwood, Theobald St, Radlett,

Herts.

Wayne Rothan, don't give up your Spectrum. Life doesn't end when you can't beat Lords Of Midnight. Alan Bradshaw, 25 Bockingham Green, Felmores, Essex.

Does anybody need POKEs or playing tips. If you do send a sae and I will send you the tips you need. Write to D.A. Culley, 24 Gayland Ave, Luton, Beds.

Wanted: any POKEs you Speccy owners have up your sleeves! Please write: POKES, 12 Oaklands Close, Fordingbridge, Hants. Please hurry!

Get better at Hyper Sports!! Send a sae for a 20p information sheet with over eight

 Get better al Hyper Sportsti Send a sae a 20p information sheet with over eight screens-worth of information in it to J-P Wilkinson, "Laggan", Kilbryde Grove, Dunblane, Perthshire FK15 9AY.
 Wanted: light pen. Swop for Quill, Hulk, World Series Baseball or Worse Things Honney At See, Prop. Pichall Wirard Happen At Sea, Pogo, Pinball Wizard-originals, Tel: 01-602 6758 and ask for

Savar.

Please, please, please, anyone with a copy of Triumph's Rock And Roll Machine, write to me. I'm prepared to pay enormous sums of money for this item! Obviously the condition of the record is important, but all replies will be considered. Please write to Miss J. Francis, 85 Ball Road, Rumney, Cardiff.

Cardiff.

Well done Pam and Alan, over 12 months since you loaded, you're still running okay and you haven't crashed once. Love and best wishes Jo and Colin. Good luck.

I had a penfriend called Adam. I lost your number! Contact me. Nick Wetsalot, Radlett

6214.

8214.

Would Ronald Windett of Rainham, Essex, please contact us. We are sorry, we have lost your address. St Brides School, Burtonport, Co. Donegal, Ireland.

Fergle, Klernan and Meickle: don't forget 3/3/86, 10 am, Top Pool. Hi also to Chisler and all the Hunts. Transinvainall tower and zzzoom rool! Good luck and Happy Bloomers, Sinom. Carrigaline, Co. Cork, Eire.

Eire.

Spectrum maps 50p each. Send sae for list. You send us the game, we'll make the map. Don't get lost, send to us now. Simon Richards, 68 Westerlands Road, Wadebridge, Cornwall PL27 7EU.

Boltz. Get lost with tape. Letter. Speccy and fingers tired. From Wyns. Down with Commodore 64. Long live the Speccy. Mock exams are over now. Hoorah! Night night Wyns. 15 Reid Close, Haughton Green, Denton, Manchester.

Wyns. 15 Heid Close, Haughton Green, Denton, Manchester.

• Illustrator: I have complete commercial adventure but graphics need improvement prior to publication. Quill, Illustrator and Patch used. Can you collaborate quickly? Split any proceeds. Terry Braverman, (0223) 58100. 68100

68100.

Spectrum Unemployed User Group wants members. Tape magazine, swop club, legal advice — all free! Non-profit making club. For details send sae only to SUUG, 86 Crewe Street, Normanton, Derby DE3 8QP.

Help! Any tips for Sorcerer Of Claymorgue Castle, Ship Of Doom or Hobbit? I'm sure there's a genius somewhere. Write to 104, Soring Lane, Castlethury, Kent Please help. here's a genius somewhere. Write to 104, Spring Lane, Canterbury, Kent. Please help.

• Discovery Users Club, The Netherlands, is looking out for fellow users in the UK. Please contact D.C. Kruithof, Boeierkade 6, 2725 CH Zoetermeer, The Netherlands.

• Issues of Sinclair User for sale. 3 to 22 £5 each, 23 to 37 £3 each. 37 onwards £1.50 each. Tel: Garstang 5066 after 6pm and ask for Garatin.

or Gerald.

• Your Spectrum complete. Best offer secures. Phone (0724) 763334.

 Alice, I told you I'd get you in the best mag there is. J.D. P.S. Write soon. 5 Exbury House, Brent House Road, Hackney London

Has anyone got any POKEs for Carnell's Adventures Of St Bernard, or Mastertronics Release. Will swop for games. Andre Osborne, 31 Saffron Platt, Guildford, Surrey. Tel: Worplesdon 235987.



BACKLASH

Iolo Davidson — the profit of programming.

t's been brought to my attention, somewhat abruptly, that there's no money to be made in programming home computers anymore. Sure, software's still selling, and cash continues to change hands at a great rate, but not much of it's sticking to the people who do the actual programming. The businessmen have got in.

Time to become a businessman, I guess. They may be an unsavoury lot, but my principles will certainly stretch to it. I wouldn't care to tell you how I earned my living before a series of unlikely accidents brought me to the back page of this magnificent organ. Who am I to be fussy? It's the lads I worry about.

A few years ago we were all hearing stories about home computer whizz kids getting fabulous salaries and company cars before they were old enough to drive. I wonder what happened to them. They can't all have become journalists, not unless their spelling has improved. If they're still programming, then their standard of living must have taken a tumble. And that's a great pity. For the first time since John Lennon the wearing of spectacles actually became cool again. There was even a movie with a young hero who not only happened to be clever, but was the hero because he was clever. Pity the stupid nerk sparked World War Three.

It seems that the

shortage of machine code programmers of a few years ago has apparently been transformed into a glut. And on top of that, the whole home computer software scene has changed. Software companies that were started by gifted enthusiasts have sold out or faded away, leaving the field to the professional marketing companies. Some of these seem to employ no programmers at all.

Successful software companies now spend their time wheeling and dealing, working out how to get the best results from their advertising budget, finding a duplication company that'll record cassettes for a few pence less, and most vital of all, clinching that tie-up with the latest movie or TV show. Plenty of time to hire a kid to throw a game together when they've got the important business sorted out.

The simplest way of coping with the bothersome business of coming up with a product on which to exercise those all important selling skills often turns out to be subcontracting the chore to another firm. I've noticed a lot of advertisements in the computer press for programmers since the beginning of the year. But I didn't recognise any of the names of the companies, not as software publishers.

That would square with what happened to me. At about this time last spring, I was looking for some free-lance work, having just become an ex-editor. Since

programming had paid better than most of the other wheezes I'd tried in the past, I approached a company that was advertising for Z80 programmers. They said they'd have something for me shortly, then all went quiet. Don't call us, I thought, we'll call you. Well, a man has to eat so eventually I found less demanding activities to occupy my time. In August they were back. Was I still available for an upcoming project? they asked. I admitted that I retained some spare capacity. A full month later, the postman delivered a very ambitious program specification and a two month deadline, along with a flat rate, no royalty, monetary offer which in no way excited my avarice.

It was also revealed that the program was to be published under a name much better known than the company that contacted me. It would be quite unprofessional (and a bit rotten) of me to reveal the names of the program, publisher, and subcontractor after trying to get them to hire me. But if I were to do so, you'd certainly recognise the first two names. But I shan't, so there's an end on't.

At this point I turned the project down, pleading that I had no confidence in my ability to meet the specification in the time allowed. I tell you this not to impress you with my laziness and greed, notable though they be, but because I notice that the program in question did in the end get written — it

went on sale around the end of January. Apparently the deadline was allowed to slip or the thing would have been out before Xmas as planned. We journalists have to take our deadlines more seriously, of course!

Anyhow, the point is that someone apparently worked on the program for three or four months for a remuneration that I'd felt was inadequate wages even for two months. Put it another way, knowing the cost of magazine space and the rate that was being offered for the job, I'd say some whizz kid wrote the program for little more than the cost of just one of the full page colour ads used to hype the thing.

Maybe I've been spoiled.

Maybe I've been spoiled. Maybe it would have been a worthwhile chunk of cash for a sixteen year old, living at home, with little hope of getting a proper job. The chance to be exploited by a viable business might be more attractive than a stint on a YOP scheme. But there isn't any future in it — not while there's a seemingly inexhaustible supply of brilliant teenage programmers trying to break into the business.

So the next time some anxious parent asks me which computer they ought to get their kid to give him a good start in life, I shall tell them to forget it. "Worried parent," I shall say, "If you want your offspring to be a star, give him a thick ear, a guitar, and a couple of pints of hair gel. The stone age has returned."

Editor Kevin Cox; Art Editor Martin Dixon; Deputy Editor Teresa Maughan; Production Editor Sara Biggs; Designer Caroline Clayton; Technical Consultant Peter Shaw; Editorial Consultant Andrew Pennell; Software Consultant Gavin Monk; Contributors Steve Adams, Luke C., Steve Coke, Iolo Davidson, Tim Hartnell, Ian Hoare, Gwyn Hughes, Max Phillips, Rick Robson, Rachael Smith, Phil South, Chris Wood; Advertisement Manager Mark Salmon; Advertisement Executive Neil Dyson; Production Manager Sonia Hunt; Group Advertisement Manager Chris Talbot; Managing Editor Roger Munford; Publisher Stephen England; Published by Sportscene Specialist Press Ltd, 14 Rathbone Place, London W1P 1DE. Telephone (all departments) 01-631 1433. Telex 8954139 BunchG. Company registered in England; Typesetters Carlinpoint, London; Reproduction Graphic Ideas, London; Printed by Chase Web Offset, St Austell, Cornwall; Distribution Seymour Press, 334 Brixton Road, London SW9. Telephone 01-733 4444. All material in Your Sinclair © 1986 Felden Productions, and may not be reproduced in whole or part without the written consent of the publishers. Your Sinclair is a monthly publication.





Ocean Software is available from selected branches of: 1999, WHSMITH, John Menzies, WOOLWORTH, LASKY Rui

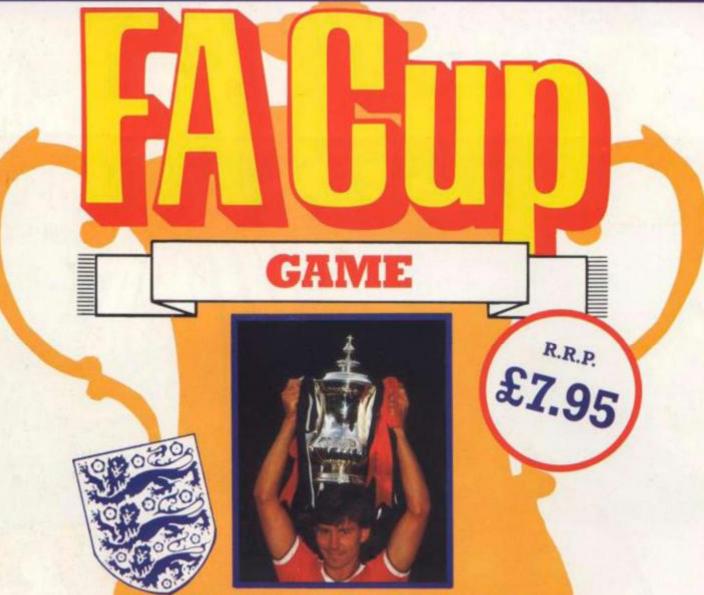
T All available on the SPECTRUM ONLY £7.95 EACH



M2 5NS Telephone 061-832 6633 Telex 669977

(YS Rumbelows. Greens. Spectrum Shops and all good software dealers. Trade enquiries welcome.

THE OFFICIAL



For the first time the Football Association has fully endorsed a computer football game. It is a realistic football simulation which lets you take 10 teams through the competition from the First Round.

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 cup run!

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 ☐	Amstrad CPC 464/664/6128	
	Tick appropriat	e Box	
All versions of FA	Jun Football cost £795 Ples	se make chemies and postal orders	

Virgin Games Ltd, 2-4 Vernon Yard, 119 Portobello Road, London W11 2DX

to **Virgin Games Limited** and post to the address on this advertisement.

Please do not post money.