CODENAME MAT

MAT is mankind's last hope. The desperate plan to place in the mind of a teenager the combined tactical skills of all the planetary leaders in the solar system. Now your mind is MAT's mind. Take control of the USS Centurion Battle Cruiser and Tactical Command Centre to control the planetary defence fleets against the Myon attacks in MISSION: ALIEN TERMINATION.

MICROMEGA

3-Dimensional arcade strategy on the 48K Spectrum — £6.95
Compatible with Kempston, Protek/AGF, and Interface 2 joystick types.
A WINNING TEAM
Crash Profile on New Generation Software

REVIEWERS' COMPETITION
Entries from three more of the runners up

PRINT AND PRINT
A Thermal Printer for the Spectrum

EDITORIAL
Comment plus Advertisers' and Reviews Index

CRASH FORUM
Lloyd Mangram — snowed under by your letters

NEWS INPUT
A brief roundup for the month

PLAYING TIPS
Lloyd's desk expands for our new section—your playing tips

THE ADVENTURE TRAIL
'I can also see . . .' Derek Brewster

RUN IT AGAIN
Fifth in our series, we look at Panics

THE TERMINAL MAN
Owing to illness of the artist TERMINAL MAN must skip a month — SORRY!

CRASH/P.S.S. QUIZ
100 readers must win Blade Alley!

ATIC ATAC—THE MAP
Get your mapping equipment out for this Ultimate competition

TAKE AIM, FIRE!
5 Stack Light Rifles and games to be won!

WIN AT THE HOBBIT
A competition with the new book from Melbourne House, as a prize

CRASH QUIZ & ANSWERS

CRASH/MICROMANIA QUIZ
Can you win the new game from Micromania? 100 will!

TIME BOMBS TAKE WING
2 games from C.O.S. Microsystems are the prizes for this competition

CRASH SMASHES pages 8 & 74
Reviews galore!
As I write, the 'Crashitionnaire' forms are still coming in, so thank you everyone who has taken the trouble to complete and send them back to us. Some interesting results have emerged from a pre-collation done on the first 500 forms received. A full collation will be undertaken as soon as possible - it's quite a mammoth task!

Just briefly for now, here are some answers. On reviews of software, 95.5% said they like CRASH works excellently, and a further 52% said it works reasonably. We also asked how much reading software reviews in CRASH has affected recent games buying and 70% replied that it has. Most interestingly on the subject of CRASH reviews, we asked whether, on playing a new game, you have agreed with the review of it, 19% said, 'always', and 73% said, 'Most of the time.' Further details on the review section of the questionnaire have yet to be collated.

On the subject of including software for other computers in CRASH, the result seemed overwhelmingly against the idea. 78% said they would be irritated, 12% disturbed, and 10% were either not bothered or actually interested. We were impressed by the number of forms which added that they would stop buying CRASH if it did move on to including other machines.

Another overwhelming NO was to program listings. 96.5% replied that they did not miss them, and a similar percentage said that they did not want any space used up for listings.

We will be publishing the full results as soon as possible, but in the meantime you may be sure we are taking note of the findings! The one, slightly touchy subject was the Terminal Man comic strip. This question seems to have aroused very strong partisan feelings! At the moment the split seems to be approximately 48% for it and 52% against it. What is surprising, though, is that those for it are generally VERY for it, whereas those against are VERY against! But given the figures we have seen, we feel that if almost half the readership really do like it, then four pages is well worth having, as it hardly detracts from the total amount of pages devoted to reviews and other articles, and shouldn't really be a severe annoyance to those who do not appreciate it.

The response to this questionnaire has been most encouraging, with well over one thousand returns already. Since that one was compiled, we have thought of several other interesting questions to which we would appreciate answers, so there may well be another questionnaire in the near future. You're warned!
AMSTRAD LAUNCH

Having just said that we are taking care to bow to your recommendations regarding the inclusion of other computers in CRASH, it is worth keeping an eye on new developments. In April the Hi-Fi tower unit giants Amstrad launched their first ever computer, the Amstrad CPC 464. In keeping with Amstrad's policy of systems, the CPC 464 comes complete with built-in datacorder and a monitor - a green screen for around £200 and a coloured one for around £300. For around another £100 more you will be able to get it with CP/M disc drive. Quite clearly, the CPC 464 is aiming to bonk the QL on the head.

What's interesting from a Spectrum owner's point of view is that quite a bit of Spectrum software, slightly re-written, is likely to appear for the machine when it arrives in the shops later this month. At the launch in London we saw one well-known Spectrum game running on the Amstrad - Durrell's Harrier Attack. Romik also had a game there, one which was designed specifically for the machine, and so used its excellent resolution and colour capabilities rather better. It is going to be interesting to see how many Spectrum software houses turn their hands to the new Amstrad during the latter part of this year.

Meanwhile the Spectrum software goes on from strength to strength and continues to show how easily it leads all other computers when it comes to ideas and content. It isn't often you find one magazine praising a rival publication, but congratulations to Computer & Video Games - or rather to the parent company E.M.A.P. for their excellent game Psytron, released under E.M.A.P.'s new software company, Beyond. Beyond got off to a rather soggy start with the good-looking but unplayable Space Station Zebra. Psytron, a CRASH SMASH this month, is a different kettle of alien fish altogether, and indicates that programmers are still determined to pack everything possible into the available RAM of the Spectrum.

LIVING GUIDE

Despite an assertion in last month's issue that the Living Guide would be dealing with the arcade section this month, there is no Guide in this month's issue, for which we apologise. There are two reasons, one being that we have had to make some room to include programs for younger players in our Crash Course section. This will be an occasional look at what might be loosely termed 'educational software'. The second reason is that the Guide itself is in need of a revamp and some updating! This is an enormous task, as you might well appreciate. At the same time we have received literally hundreds of letters with update details on guide info and with suggestions to improve it, all of which we wish to examine carefully.

The Guide has become rapidly very big and we would like it to be helpful, informative but without becoming a bore. It needs some thought - but don't despair, it hasn't vanished from our pages for ever!

COMPETITIONS GALORE!!

In response to the demand for more competitions, this issue is crammed full of them! We hope you enjoy them, and the prizes too. Thanks to all the companies who have participated and made them possible.
GAMES FOR BOYS

GAMES FOR GIRLS

All available for Spectrum 48K at £5.95. Selected titles available from larger branches of Boots, Greens, John Lewis Partnership, Rumbelows, W.H. Smith and all good computer shops or mail order from Cases Computer Simulations Ltd., 14 Langton Way, London SE3 7TL.

Strategy Games. They're no pushover.
Psytron

Producer: Beyond
Memory required: 48K
Retail price: £7.95
Language: machine code
Authors: Tayo Olowu and Paul Voysey

A thriller and an arcade strategy game. A prog-games with this colossal group who also own software

Psytron comes in a large box containing the cassette, a competition entry form (more containing the cassette, a very detailed 20-page booklet explaining how the game is played, and what Psytron is. It looks rather daunting but is essential reading. However it can be read in stages until all the six levels of the game have been absorbed. Psytron is not a game for a few moments play - it will take ages.

The action all takes place on a huge base on the planet of Betula 5. The planet's atmosphere is not compatible with humanity, so the base is sealed within its own life support system. The base has an inner ring from which radiate the various surface installations. These are the medical centre, firefighting generator, oxygen unit, docking bay and teleport centre, recycling unit, pleasure dome, crew quarters, fuel dump, power plant, matter disruptor and the food store. The game provides 10 screens which are views of the base, seen from the centre and all the way round.

The Psytron is in sole charge of Betula 5, and as the Psytron, you will have to undertake everything to protect the base. Shooting aliens out of the skies and dealing with the remote droids they drop which run around the inner ring to blow up the vital airlocks make up the arcade component, but repairing facilities and deciding what installations to sacrifice at critical moments makes up the strategy element.

Psytron is a game of six levels of progressive difficulty, which have been designed to take you into the game step by step, piling more and more responsibility on your shoul-ders. Each level must be mastered before the next is attempted. The computer looks at your last five scores and calculates an average - if it's over the passmark then you can move on to the next level. The computer keeps a service record of your achievement which may be saved and reloaded after game load. This is all important because the service record is used in compiling your overall score for the final level. Beyond are running a competition with a prize of a QL computer for the winner. If someone conquers the game completely, then they will win, but it is considered almost impossible to survive for an hour on level 6, which is really required to get the special code. The competition closes on November 30, and if not already won, the prize will go to the highest scorer at that time.

The screen display is split, with a little over half the top being the monitor views of the base (10 in all). These views are drawn in detailed black line and cross hatching with a yellow strip for the ground and a pale blue for the sky. It all looks like a comic drawing. Below is the white and black ringway with airlock access. In this ringway enemy droids are dropped and they can be seen running along to their randomly selected detonation points. Below is the screen report which details what section of the base you are seeing, and updates damage and status reports. Other info provided includes fuel levels, percentage of damage, crew status and time.

At the bottom right-hand corner is a 3D view of the ringway looking down. This will show a droid on the run. Your pursuit droid also shows up on the ringway and may be guided to chase the enemy droid until it comes into view on the 3D panel. It must be destroyed by fire before it reaches its destina-

Meanwhile, overhead, enemy saucers are constantly attacking the base from all directions, dropping bombs which explode colourfully. A gun sight is provided. The enemy saucers are animated in 3D as well.

Describing this game in a review would take pages, and there is a great deal more to playing it than we, have said here - after all, it takes 20 pages for the producers to describe it!

CRITICISM

Psytron is a fantastic arcade type strategy game. The graphics are very good, with alien ships in the sky above the excellent views of your base. Challenging, addictive and difficult are words which sum up this game. In fact, the word game is almost an insult to this Beyond scenario. As there are several tasks to be done in maintaining the base, learned at the various levels,Psytron has plenty of lasting appeal! Don't let the useful booklet put you off, you can load and play...
Psytrom straight away, although the advice it contains is more essential on the higher levels. Side B of the cassette has a glimpse of their next big game, the adventure Lord of Midnight.

The rapid access to any of the 10 screens, combined with the natural change of views if your gunsight leaves the screen, makes for a very exciting background against which to play this furious and tiring game. The graphics are superb, oddly not very colourful, but the way they have been done is very convincing. At this stage of reviewing the game it is impossible to say what the higher levels are like - it will be some time before I ever get up there! But if the three I have so far seen are anything to go by, it's a great game all the way and very addictive as well.

'This game builds up your skill qualities until you are ready for the grand finale - a very good idea. The graphics move about realistically and in full perspective, the 10 segments of the space station are all very well drawn. The upward scrolling information on the Screen Report is great, as you can see what damage is occurring while you're fighting off the alien saucers. Colour and sound have been used well, although there isn't a great deal of colour in the game itself. Your last five scores are taken and averaged for promotion, which is a marvellous idea, although it can be disheartening if one of them happens to be very high. Psytrom is fantastic fun to play and the difficulty of each level and the fact that there are six levels means that it is going to take a long time to master, making it dangerously addictive. Definitely a thousand percent better than Space Station Zebra, and overall breathtaking and overwhelming.'

COMMENTS

Control keys: (droid)
Q = forward, A = turn around, M to fire (Skywatch), Q/A up/down, O/P left/right, M to fire, N = fast scan, S = skywatch mode, D = droid mode

Joystick: Kempston
Keyboard play: very responsive
Use of colour: original and very well used
Graphics: excellent
Sound: well used
Skill levels: 6
Lives: 1
Screens: 10
General rating: well planned, designed and implemented, very addictive and overall excellent value for money. Highly recommended.

Use of computer 85%
Graphics 83%
Playability 86%
Getting started 98%
Addictive qualities 91%
Value for money 88%
Overall 91%
We all enjoy a good action game on our home computers, but after a while doesn’t chasing the alien across a screen wear a little thin? That’s the time to take on the superior challenge of a Warmaster strategy game — plenty of action, plenty to think about, and plenty of titles to suit every taste.

Take on Warmaster and really put your home computer through its paces.

**CONFRONTATION**
Build-on game that offers a basic format for any modern, non-nuclear conflict. Contains a modern European scenario with facility to create others of your choice using air and land forces.
Two-player game.
Spectrum 48K £7.95
BBC-B £7.95

**RED BARON**
Offers the excitement of arcade action but requires the tactical thought of war games. Pit your biplane against one or two of the Kaiser’s aces in this serial combat game.
Spectrum 48K £5.95

**DREADNOUGHTS**
Suspense-filled high seas drama as the pride of the German Grand Fleet is locked in battle with the Royal Navy.
Two-player game.
Spectrum 48K £5.95

**PARAS**
Dramatic all-graphics campaign. Your hand-picked force has dropped behind enemy lines to capture a strategic river crossing. Two versions of the game with ten levels of play.
BBC-B £8.95
Spectrum 48K £5.95
Oric 1 48K (coming soon) £5.95

**BATTLEZONE 2000**
Futuristic wargame. Your tanks, missile launchers, infantry etc. have to destroy an all powerful computer-controlled battle machine. Can you save Planet Earth?
BBC-B £6.95

**JOHNNY Reb**
There’s still plenty of fight left in the Confederate South as each side select forces to manoeuvre on a full-graphics battlefield. Play against the computer or challenge a friend.
Spectrum 48K £5.85
Oric 1 48K £6.95
BB-8 £6.95
Dragon 32/Tandy Colour 32K £9.95
Commodore 64 (coming soon) £12.95

Available from John Menzies, Lightning Dealers and better software shops or clip the coupon for fast delivery.
Titanic

Producer: R&R Software
Memory required: 48K
Retail price: £7.95
Language: machine code
Author: Paul Hill
Music: Rare Breed

There have been recent programs out which have combined arcade games, ones like Phoenix's Dodge City, where you must complete the arcade game in order to play the adventure, and of course there have been arcade adventures like Atic Atac. Adventures tend to have a strategical element in them, but R&R are probably the first software house to come up with a multi-stage game which is both strategy and adventure. The first is also the shortest and involves trying to raise sufficient finance to mount a search to locate the wreck of the famous Titanic. The scenario suggests that a fabulous fortune in gold went down with the ship, and that's what you're out to recover. Initially you are presented with a menu of 15 institutions whom you may approach for finance, and the idea is to get the best deal you can. Each contract, if accepted, restricts you to finance from that institution only. A further sum of money is given as an advance, with further sums to be awarded if you discover a wreck.

Having selected a backer and signed the contract by entering your name, it is time to spend the money on essentials. A NASA Satellite Photo (infra red) shows all large objects below the surface; you need food and supplies at a cost per day; you need teams of expert divers; and you need repair kits (quite a few actually). Once you have spent your allocation you may put to sea.

Stage two presents a map of the North Atlantic with coloured blocks representing events. You only get this if you have purchased a NASA photograph, as the blocks are large objects below the surface of the sea. These may be the sites of wrecks or icebergs. Hitting an iceberg may result in sinking, but strikes can as often be repaired if you have sufficient kits. If a wreck is reported your financial backers will probably give you another advance and you have the option of ignoring the siting or sending a team of divers down. Once they dive, the message screen reports on their progress - it's dark down there - is the wreck the Titanic - or will they be killed? Your backers are understandably disinclined to come up with a further advance on siting a second wreck, if you've already lost one team of divers!

Discovering the site of the Titanic's last resting position switches you into stage three, the exploration. You are only able to explore one level at a time, and there are three. A simple 3D line drawing above the text shows the location. Commands do not have to be entered. The possible directions and location description are all combined. Pressing the desired direction key causes an instant response and carrying out of the command. Ideal locations to find are the service rooms on each deck, as these have deck plans of the ship. With something like 170 locations per deck, the plan is a valuable help. There are several types of hazard down there, and losing a team of divers can be catastrophic if you only have one left and not enough money to get back for another team.

The adventure, when finally reached, is quite straightforward and I missed some atmospheric descriptions. On the other hand it makes up for it by the enormous number of locations to be searched, and there is still the strategical element in using your diving teams to their best advantage. Mine got crushed by a collapsing deck - they were only my fifteenth team...

'It's nice to see R&R Software as a possible institution to approach for money! My first go at the game they offered the biggest sum of money on the board in return for buying all their games for the next five years! Second try, and they just said, "Sorry!" No reflection, I hope, on my skill as a marine salvage expert!' Stage 1 does require a bit of careful planning and thinking, in spending your advance money. A NASA photo is essential, but leaves insufficient funds to easily purchase both enough diving teams and the essential repair kits - in this game the North Atlantic looks like a Scotch on the rocks, full of ice cubes! The adventure part is fun, although for a long time it seems like you are just going round in circles, and unless you come across a deck plan, it's sensible to keep a drawn map going. R&R say that anyone finding the gold should donate some to their programmers' retirement fund. The song on the reverse side of the tape is very good. I thought Titanic was quite an interesting combination of games.

'The graphics are all very clear and well laid out, with instant response times on the adventure. The graphics are quickly built up, most being outline drawings. It's fun to play, but I felt the adventure hadn't got quite enough going for it to be totally compulsive, and it turns more into a watery exploration without the relief of interesting location descriptions. This one's quite a good family game.'

COMMENTS

Control keys: cursors or N/S/W/E move the ship
Joystick: Protek, AGF
Keyboard play: responsive and simple with on-screen prompt. The ship moves slowly, but this avoids over-reacting
Use of colour: sensible, well used
Graphics: good text panels, generally good
Sound: not much, but try the rock single on the reverse!
Skill levels: 1
Features: good song by Rare Breed on tape, Currah compatible
General rating: entertaining, reasonably involving adventure and good for simple strategy gamers.
Use of computer 78%
Graphics 76%
Playability 69%
Getting started 72%
Addictive qualities 73%
Value for money 72%
Overall 73%

On each of the three decks one service room holds a plan of the deck.

CRITICISM

'With 17 located possible sites (courtesy of NASA) and most of them being icebergs or lethal World War 2 wrecks, finding the last resting place of the Titanic can be very frustrating indeed, and take some time and several goes. Each time you try the blocks change place and what they represent is randomly selected, so experience is only gained in how to use your money for buying supplies, etc. I found the most useful items were the expensive repair kits - hit an iceberg without one and that's..."
Jet Set Willy £5.95

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In fact, for the full spectrum, you can't do better than come to the people who know the game.
Battle of Britain

Producer: Microgame Simulations
Memory required: 48K
Retail price:
Language: BASIC
Author: R. Erskine

Nine German bomber squadrons with fighter escorts (raider 1 to raider 9) are flying by various routes to one of three possible targets. As commander of 9 RAF squadrons your mission is to intercept the enemy before they reach their target. The last known positions of the enemy are plotted on the map, plus the present positions of your own.

Enemy squadron routes and the target are chosen randomly at the start of each game. You can scramble your squadrons to intercept the enemy along their estimated routes. If one of your squadrons comes within one square of an enemy flight it will, lock on and run an attack. Each squadron can be reinforced by having another within one square of the attacking squadron. Running low on fuel, squadrons will automatically return to base and are out of action until they are ON STANDBY again. If a fighter squadron has a chance encounter with a raider it will attack on its own initiative. The Germans have up to 55 planes each including escorts. British flights have 10 planes each.

The screen shows a map of the South East of England with the edge of London in the top left corner, going right round the Kent coast to just beyond Hastings. Your nine fighter bases are marked as black squares with yellow figures. They are situated approximately in the positions of Folkestone, Dover, Ramsgate, Sheerness, Chatham, Maidstone, and three clustered to the south of London. Squadrons in flight are shown as rectangles with squadron number and aircraft symbol in blue for the RAF and red for the Germans. A squadron in combat flashes inversely.

The top left side of the screen are divided into grid co-ordinates A to T vertically and 1 to 2 horizontally. The player may press command keys to scramble a squadron, change its course, send one on a preset patrol, return it to base, report its status, check the instructions of quit the game. A message strip at the base informs on enemy squadron dispositions as soon as they are known. Here also you can use the commands, being prompted as to squadron number and desired direction of movement. Pressing X gives a tally to date of destroyed aircraft on both sides. Variable difficulty levels may be set by altering the number of bombers required to reach their target before the game is lost. This may be one only, or up to the total number allowed. The program has 100 as normal.

CRITICISM

"A slight problem in getting started is that the instructions are only on screen (apart from the command keys which are shown on the inlay) with a scroll? at the bottom of each page. Following normal hit-and-key procedure will cause a break into BASIC - they don't tell you until the end of the instructions that breaking into the program can be overcome by entering RETURN or GOTO LOOP. GOTO 1 will also do. I found the game somewhat uninspiring to be honest. The idea of remote command of fighting units is interesting, and must be a bit what it was like to be in control actually during the Battle of Britain, stuck away in the command centres, but as a game it is naturally much less fun that actually taking part in the combat - and that's the problem. It's all a bit cold."

"Battle of Britain is a strategy game with spatial problems. As you can only estimate the route the enemy are taking, to intercept them it is important to use your squadrons wisely in saturating the airspace in front of the approaching bombers to find them." I found it became quite absorbing for a while, but the inherent lack of action in the game means that it palls after a bit."

"The graphics are very simple, and so is what you have to do, which makes Battle of Britain a bit short on addictivity and playability. I'm sure a lot more elements could have been added to make it more interesting. It could also have been a bit faster but the BASIC makes everything quite slow, with enemy known positions being updated only at long intervals. This might appeal to some wargamers, but I would have thought it lacked complexity, and its very nature will mean it won't appeal to arcade players at all."

COMMENTS

Use of colour: adequate for the purpose
Graphics: very simple symbols and map outline
Sound: on or off, just beeps
Skill levels: very variable
General rating: a rather simple strategy wargame lacking in action.

Use of computer 56%
Graphics 43%
Playability 53%
Getting started 45%
Addictive qualities 34%
Value for money 46%
Overall 46%
Try pulling a stunt like this on your Spectrum

Leap on a moving train... jump from carriage to carriage... duck under fast-approaching bridges.

But before you do anything, make sure it's with Sinclair's new action-packed game - 'Stop the Express'.

That way, you can try dramatic feats like Buster Keaton's - without risking your neck!

'Stop the Express' is one of five exciting new games from Sinclair. Its graphics are superbly fast and sharp. The action is non-stop. And the challenge is a very tough one.

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At only £5.95 each, they're destined to be big stars on the small-screen!

Selected Sinclair software lines are available from WH Smith computer stores, larger branches of Boots, John Menzies, Greens and most other software stockists nationwide.

Sinclair Research Ltd, Camberley (0276) 685311.

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We’re sorry you’ve had to wait so long for our first new release of 1984 but your patience will be well rewarded.

From Bob Hamilton, author of ‘The Pyramid’ and ‘Doomsday Castle’ we present BEAKY AND THE EGGSNATCHERS and introduce Beaky, our new star of the video-game screen.

(Ziggy is having a well earned rest!)

Beaky belongs to the family of Andromedan Armed Condors, the rare goggled variety.

The numbers of his species are dwindling fast because of their rather foolish choice of breeding ground, on the planet of Crackit. This unfortunately happens to be the home of a particularly evil band of creatures collectively known as the Eggsnatchers. Their sole malicious intent in life is to extinctify Beaky’s species by stealing or destroying the eggs by any foul means available.

Your objective is to try and brood, hatch out and rear as many little Beakys as possible through 12 different screens of formidable but delightful arcade action.

FANTASY SOFTWARE is available from W.H.SMITHS, JOHN MENZIES, BOOTS, WOOLWORTHS, LASKYS, GREENS, RUMBELOWNS, SPECTRUM GROUP and all other good software retailers.

Beaky and the Eggsnatchers is available for 48K Spectrum and Commodore 64 at £6.50 on cassette or on disk for the Commodore 64 at £9.50 from

FANTASY SOFTWARE, FAUCONBERG LODGE, 27A ST GEORGES ROAD, CHELTENHAM, GLOS GL50 3DT
despached by return first class post together with free membership of the Fantasy Micro Club.
Trade Enquiries welcome – telephone 0242-583661.
**Zig Zag**

Producer: DK Tronics  
Memory required: 48K  
Retail price: £6.95  
Language: machine code  
Author: E. Hickman

Zig Zag is one of those games that provides you with some pretty sophisticated equipment, namely a Vectrakker DKT Mk II prototype fitted out with the latest in Navtraq series MD12 guidance system, electron pulse interrogator, residual plasma drive monitor, sector entry code display and junction indicators. Junction indicators?

The screen shows the control console of your Vectrakker, with the sector entry code in a panel to the lower left, energy drain in a similar panel to the right, score bonus in between and the junction indicators and sector map in a long panel at the top. In between is the view through the windows.

The object of the game is to traverse the mazelike corridors of each of six sectors, pursuing the inhabitants called Scarabaqs until you trap them in a dead end. When the interrogator is fired at them, they give up part of a code for entry to the next sector. A second burst will kill them, which saves you chasing the same Scarabaq again, but drains energy.

The sector is very simple, merely a square of corridors with a long dead end. On the other side there are short dead ends along every corridor. It takes one Scarabaq to get the code to enter sector two.

Sector two is far more complex, and each subsequent sector after that gets more complicated. In sector two you must interrogate two Scarabaqs in sector three, three and so on. As you progress through a sector, turning this way and that, a map builds up on the screen above, with a cursor dot showing your position. The SED panel flashes red when a Scarabaq is near, and is reported verbally if you are using the Currah microspeech. Once spotted, the Scarabaq runs away from you, turning corners and then waiting. The idea is to learn the sector layout and disrupt the Scarabaq's normal retreat method to finally trap it in a short dead end when it may be 'interrogated'. Should you select the incorrect dead end, the beast will escape and have to be chased all over again.

While this is going on, be on the watch out for hoverdroids, which flash out from a junction and fire at you, draining energy. They can be destroyed by firing the interrogator at them.

The view of the corridors of the maze is in striking three dimensions. Bonus scores for each sector drop with movement/time, but much more quickly while stationary.

**CRITICISM**

'Ve havf vays and meanz!' A poor little Scarabaq is cornered and put under interrogation.

'The quality of the graphics is very high, which helps to make it fun to play. The corridors are described as a series of vertical black stripes ending in perspective cut off which accurately forms walls, corridor floor and the suggestion of corridors leading off to the left and right. When you turn a corner, everything scrolls round giving a very real impression of turning a corner. The Scarabaqs are also excellently done, with large 3D graphics, pounding feet, armoured backs, squealing mouths. Seems a shame to zapp them or gunning them (or interrogating them), but they seemed rather scarce. The graphics are very impressive, with fast, smooth scrolling 3D corridors, but I found the striped verticals tended to make my eyes work overtime. Generally, the game was reasonable with fast movement and good graphics. I thought they could have made it a little more exciting though.'

Zig Zag is an unusual game. The quality of the graphics is very high, which helps to make it fun to play. The corridors are described as a series of vertical black stripes ending in perspective cut off which accurately forms walls, corridor floor and the suggestion of corridors leading off to the left and right. When you turn a corner, everything scrolls round giving a very real impression of turning a corner. The Scarabaqs are also excellently done, with large 3D graphics, pounding feet, armoured backs, squealing mouths. Seems a shame to zapp them or gunning them (or interrogating them), but they seemed rather scarce. The graphics are very impressive, with fast, smooth scrolling 3D corridors, but I found the striped verticals tended to make my eyes work overtime. Generally, the game was reasonable with fast movement and good graphics. I thought they could have made it a little more exciting though.'

The 3D effect in this game is quite fantastic, it all moves very smoothly. Chasing a Scarabaq can become extremely tiring due to the fact that the maze is made up of stripes; I don't think this detracts from the game though. One of the most useful features is the map which is drawn as you explore a new sector, so you can retrace your footsteps. Monsters scurry very quickly through the maze trying to avoid you and take ages to catch - they are very well drawn. Other than chasing the Scarabaqs, there isn't a lot else going on in the game but still, it remains quite addictive to play. Sound and colour are well used and the Currah microspeech enhances the sound considerably. By the time you finish this game you feel physically as though you have run right through the maze.'

**COMMENTS**

Control keys: A = forward, Z = fire, O/P left-right turn, or Sinclair keys, 6/7 left/right, 9 = forward and 80 = fire  
Joystick: Sinclair ZX 2, Kempston, DK Tronics  
Keyboard play: highly responsive  
Use of colour: very good  
Graphics: excellent 3D effect, generally of a high standard  
Sound: excellent  
Skill levels: each sector is harder  
Lives: depends on bonus or
Cybo-Run

Producer: Calisto
Memory required: 48K
Retail price: £5.95
Author: Andrew Taylor
Language: Machine code

Cybo-Run is a ‘Berserk’ game in traditional style, that is, a series of rooms with randomly generated walls to make them into very simple mazes. The rooms are infested with robots which shoot at you, and your job is to rove around, clearing them.

One alteration on the theme, is the time bomb which flies into the room and chases you into the room and enters another. This is the time bomb which flies into very simple mazes. The robots are quite unintelligent and they just move and shoot. Because of the block movement, I found my man difficult to move about the screen. The time bomb is a very good idea – it speeds you up! Colour and sound have been well used and the game is fairly good if you like this type. Pity about the cursor key controls.

This was a fairly typical ‘Berserk’ game with small and simple graphics and on the whole, not very memorable. The character block movement is not very smooth, and it’s irritating that you can’t move and fire at the same time. The wails, of course, are electrifying.

COMMENTS

Control keys: cursors and 9 to fire
Joystick: Kempston, Protek, AGF
Keyboard play: quite responsive (more difficult with joystick), although the cursors are a bad choice
Use of colour: uninteresting
Graphics: small, block mode nothing new
Sound: above average
Skill levels: 1
Lives: 3
General rating: fair.

Use of computer: 55%
Graphics: 50%
Playability: 60%
Getting started: 68%
Addictive qualities: 58%
Value for money: 55%
Overall: 58%

Craddock Strike

Producer: Pulsionic (Warwick Leisure)
Memory required: 48K
Retail price: £2.99
Language: BASIC

Warwick Leisure under the marketing name of Pulsionic, have launched a range of new games for various computers (eight for the Spectrum) at an extraordinary low price – £2.99. At that sort of price one would expect that the collection would contain nothing very extraordinary low price – £2.99. At that sort of price one would expect that the collection would contain nothing very extraordinary. However, this is the case, with a few reasonable games and some very poor ones. The question remains to be asked, despite the low cost, are the games worth it?

Submarine Strike

Submarine Strike is a sort of simplified version of Hunter-Killer (Protek). You are the captain of a submarine with a mission to destroy as many enemy ships as possible with 10 torpedoes. The enemy has to get ships from Base A to Base B, which show up on the centrally placed radar. A map facility shows the total playing area and relates to the radar’s more limited view. Hazards include reconnaissance planes which must be destroyed, enemy air attack, land-based guns, suffocation if submerged too long, running aground in shallows, and sea attack if your torpedoes miss their target. The screens include the map, control room with scanning radar of the immediate area, speed indication, depth, course, torpedo supply, on-board computer

warning, air-raid warning and air-raid over indicator, then there is a periscope view for attacking shipping and also for shooting down aircraft.

Controlling the sub is quite simple with self-evident keys described in the inlay, card. Messages are given you by the computer along the lines of, enemy shipping movements, imminent aircraft attack and damage reports. The mission is terminated if an enemy ship reaches base, you run out of air or fuel, run aground, use up all torpedoes, or if you are spotted by reconnaissance planes.

CRITICISM

‘Of the Pulsionic games, this was about the best one, I thought. Although it couldn’t be described as a highly technical simulation, it certainly manages to be fun to play. The radar screen is actually quite effective, with the scanning line rotating round, and recreating the image each time. The depth indicator is rather primitive, merely a sub shape on top of or under the blue water, with a graphic representation of the sea bed. I think this one is worth the price, although it’ll never replace Hunter-Killer for the real simulation addict.’

‘I found this game quite good. It has reasonable graphics and control is not too bad either. Generally, even at £2.99 Pulsionic games seem to be poor value. This is due to the fact that they use so much BASIC and many of them are very dated. However, this one is probably just worth the asking price.’

The graphics work quite well, especially the radar, and things happen quite quickly.
It's easy to get killed off, especially when twice in a row you are spotted by reconnaissance planes. There is a chance to get killed off, especially when twice in a row you are spotted by reconnaissance planes. There is a chance to zoom about on the bottom right-thirds. At the start of each game the 10 sheep are 'floating' about on the bottom right-hand corner. First they must be herded along to the left and over the bridge. Being sheep and somewhat brainless, they will fall into the river and drown if you're not careful. Once over the bridge, your dog must get them safely into the pen at the top right. The landscape in the top section is heavily wooded and the sheep wandering into the trees tend to get stuck or lost. The other problem is that the woods are prowled by a red wolf who eats sheep.

Each sheep safely herded into the pen is returned to the game for the next 'life'. After four goes, all the sheep are returned for the next stage, but trees appear below the river and attract the wolf, and everything starts moving faster too. Although the sheep drown, your sheep dog is a better swimmer, and he can be moved around the screen very fast as well. Unfortunately there's nothing he can do to frighten off the wolf, so it's as well to keep the sheep out of the trees where they are most vulnerable. When a sheep falls into water a big SPLASH flashes across the screen, and between games the Wooluf winks salaciously at you.

CRITICISM

'This shepherding game is a lot better than the Virgin one of last year in several ways. The graphics look better and the game moves much faster. The sheep resemble summer clouds on legs and your dog at least looks like a dog, although the speed at which he can zoom about on the screen seems a little unrealistic! Unfortunately, I was convinced at first that the wooluf was really a brown cow - until it ate a sheep. The wooluf is a rather, small, but quite detailed, over-all it looks a bit primitive. The game will get boring very quickly, despite the increases in playing speed, because there isn't really much to do. I thought this was a poor offering from Crystal.'

COMMENTS

Control keys: N/M up/down, Z/X left/right

Joystick: responsive, but oddly laid out keys in a straight line
Use of colour: average
Graphics: reasonable, good radar
Sound: poor
Skill levels: 1
General rating: average

Use of computer 50%
Graphics 52%
Playability 45%
Getting started 43%
Addictive qualities 45%
Value for money 60%
Overall 49%

Some time back Virgin Games released a game called Sheepwalk in which you had to guide Rex the sheepdog around and herd the sheep into a pen, avoiding various hazards and farm crops which the sheep ate. It wasn't a very good game with slow BASIC programming and unconvincing animals. It's the Wooluf! is a very similar idea, and somehow better looking.

The screen is dissected by a river towards the bottom with a bridge crossing to the top two-thirds. At the start of each game the 10 sheep are 'floating' about on the bottom right-hand corner. First they must be herded along to the left and over the bridge. Being sheep and somewhat brainless, they will fall into the river and drown if you're not careful. Once over the bridge, your dog must get them safely into the pen at the top right. The landscape in the top section is heavily wooded and the sheep wandering into the trees tend to get stuck or lost. The other problem is that the woods are prowled by a red wolf who eats sheep.

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Keyboard play: responsive, but oddly laid out keys in a straight line
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Sound: poor
Skill levels: 1
General rating: average

Use of computer 50%
Graphics 52%
Playability 45%
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Addictive qualities 45%
Value for money 60%
Overall 49%

It's the Wooluf!

Producer: Crystal Computing
Memory required: 16K
Retail price: £6.50
Language: machine code
Author: Martin Buller

Some time back Virgin Games released a game called Sheepwalk in which you had to guide Rex the sheepdog around and herd the sheep into a pen, avoiding various hazards and farm crops which the sheep ate. It wasn't a very good game with slow BASIC programming and unconvincing animals. It's the Wooluf! is a very similar idea, and somehow better looking.

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It is astonishing how an industry as young as the Microcomputer games business is so rich in talent. But almost as surprising is the variety of backgrounds and age groups. What they do share in common, however, is an all-consuming interest in microcomputers and, for those involved in programming, a desire to write games which are better and better.

This variety in talent is reflected perfectly in New Generation Software, who are lucky enough to have three exceptional programmers of totally different backgrounds with their own unique styles.

Malcolm Evans, whose latest creation is the exciting and hilarious hit game Trashman, is the founder of New Generation Software. Paradoxically, perhaps, Malcolm has a background in hardware. He has a B.Sc in electronics from Portsmouth Polytechnic, and after graduating he was employed by Marconi for 11 years on spacecraft design. But by the mid-1970s Malcolm’s career was gradually heading towards computers. After Marconi he worked for Smith’s Aviation at Basingstoke, coordinating research for computer-based engine control. He also wrote test programs for the hardware he designed. Then in 1979 he moved to Bristol as a microprocessor scientist with Sperry Gyroscope. Through this appointment he became familiar with the technology used in the earliest home computers.

Because of this interest in April 1981 Malcolm’s wife bought him a birthday present that was to change his life—a ZX 81, which completely hooked his imagination. By November of that year he had written his first computer game. On the other hand, another of New Generation’s programmers, Paul Bunn, is only 16. He left school with seven O-levels and a maths education program. In fact it helped him to complete a pontoon program and a maths education program for his project.

When he was still only 15 years old Paul replied to an advertisement in a computer magazine asking for help in writing a book on the Atari. In fact he was invited to write it all himself. The book, Making Most of Your Atari, published by Interface, included all his programs written to that date, 14 games in all in basic plus a tutorial about some of the points which had not been raised in the Atari manual. The book was very successful and with the royalties Paul was able to buy a disc drive.

Within just one month Paul wrote another book, Games for the Atari, published by Virgin. This had 21 games in basic but with machine code subroutines. The book was so successful that he was able to buy a modern, a touch tablet, an Atari 800, an SX printer and an interface module. Paul’s latest book, Getting Started on Your Atari, published by Future, is in the shops now.

Paul joined New Generation Software after he saw an advertisement in the Bristol Evening Post. Says Paul, 'I jumped out of the chair and dialled the number immediately, because it offered everything I wanted.'

The decision by Malcolm Evans to form New Generation Software was not so spontaneous. Rather than leaping out of his chair Malcolm engaged in a slow thoughtful process which led him inevitably to the setting up of New Generation Software in the city of Bath.

Malcolm designed his first game in 3D, really just to see what his ZX 81 could do. Someone suggested that it was good enough to sell, and so by February 1982 3D Monster Maze was launched. Soon after this Sperry Gyroscope closed down in Bristol and rather than move to Bracknell Malcolm took voluntary redundancy and concentrated on computer games. From the outset New Generation and Malcolm Evans have become synonymous with 3D graphics, of which his second game,
Escape, is a famed example. From now on things just kept on improving for Malcolm and New Generation Software. In June he obtained his first Spectrum, by November he had written Escape for the machine. This was followed by 3D Tunnel in February and Knot in 3D in April 1983. At about this time Malcolm was joined by his brother Rod. Rod is now the managing director of New Generation Software, thus allowing his brother to concentrate on what he is best at and enjoys - writing games. In September 1983 Corridors of Genon was released and in February of this year what is widely expected to be their best hit to date, the highly imaginative Trashman game was launched.

New Generation’s other programmer is James Day. At 19 years old this is James’s first job, he is planning to go to college to read physics and electronics. Already he has developed several games.

Malcolm, James and Paul work very closely as a team, meticulously considering every detail, ensuring highly finished quality graphics. Malcolm believes de-bugging is very important and ensures every sub-routine is thoroughly checked. That’s why their games are so polished. That’s why the Trashman partly comes from the realism of the graphics. For example, when the Trashman develops a limp after being bitten by a dog, or when he slows down with the weight of a dustbin.

The amusing messages that come on the screen in this game show how much thought has gone into it. That’s why Malcolm believes that hardware must improve before he can develop more complex games.

The quality and finish of New Generation’s Games has so impressed one of their rivals, Quicksilva, that they have made an agreement to market all New Generation Games world-wide, for the Commodore 64.

With recognition like that New Generation’s programmers must have a shrewd idea of what makes a successful game. Malcolm says it must have ‘addictiveness and good presentation’. Paul also thinks ‘addictiveness is essential plus good graphics and sound’. He also thinks a game should be ‘something different, like Trashman’.

So that’s the team: Paul, an ambitious teenager, typical of his generation, except for his astonishing aptitude for computers. Malcolm, an electronics wizard who was lucky enough to discover he can make a business around his love of microcomputer programming, and James, soon to go to university but in the meantime an essential part of the team.

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Cord length and termination is as the standard QuickShot controller.

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It's been very tough to choose a letter this month. I was a bit alarmed when I saw the mailbag after issue one, but this is ridiculous. I mean - like how many trees are you cutting down out there this month with so many excellent writers to choose from. In the end, and because he's obviously a Lloyd Mangram champion, this offering from Ian Foster gets my vote this month (this should get you all grovelling again!).

Dear Lloyd,
Friday the 16th came and went with so many excellent writers to choose from. I was a bit overwhelmed - and so alarmed when I saw the mailbag after issue one, but this is it's been very tough to choose a letter this month. I was a bit overwhelmed - and so alarmed when I saw the mailbag after issue one, but this is it's been very tough to choose a letter this month. I was a bit overwhelmed - and so alarmed when I saw the mailbag after issue one, but this is it's been very tough to choose a letter this month. I was a bit overwhelmed - and so alarmed when I saw the mailbag after issue one, but this is it's been very tough to choose a letter this month. I was a bit overwhelmed - and so alarmed when I saw the mailbag after issue one, but this is it's been very tough to choose a letter this month. I was a bit overwhelmed - and so alarmed when I saw the mailbag after issue one, but this is it's been very tough to choose a letter this month. 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of the official 'on sale' date in London, whereas it's common enough to find it appearing three to four days after that date in country areas. Can't comment on Pilkington — as you say, 82½% is quite high, very high by our standards.

As to advertising, you are right; about one-third of CRASH is taken up with ads. Most magazines have a ration of between two-thirds and one-half for advertising. Alternately, they say how many editorial pages there will be and then the rest will all be advertising, the bigger the magazine has a ratio of about one-third of CRASH is quite high, very high by our standards.

To four days after that date in London, whereas it's common to see significantly more ads in future, read.

There will also be more pages to read, so should there be between two-thirds and one-half taken up with ads. Most

Pheonix

Dear Editor,

I would like to correct your review of Pheonix in the Living Guide of the April issue. For people who get bored with listening to the music you can stop it and the scrolling stars and get straight on to the game by pressing the fire button or SPACE. This should make the game less annoying and more addictive.

Your magazine is brill fantastic, just more than words can say.

Keep it up. I would be grateful if you could review Space Station Zebra, Mugsy and Peytron as none of the local computer shops have these games.

Simon Webb, North Bransholme, Hull.

Thanks for the tip on Pheonix, Space Station Zebra got done last issue, Peytron's CRASH SMASH this one, and Mugsy isn't released at the time of writing — next month with luck.

LM

IS THIS A RECORD?

Dear CRASH,

Nowadays praise for software houses is few and far between, but I feel I must write in total praise and admiration for Quicksilva. Not only do they produce the highest quality games for the Spectrum, but they are faithful to their public. A few months back I humbly wrote to them on such trivial matters I thought I would receive no attention. But only one week later I got a reply by first class post signed by Ms. S. Clifton, which said that the software manager was away, but as soon as he came back he would be troubled by her to pass comment on my letter. Astonished, I eagerly awaited a reply. Lo and behold a letter fully commenting on mine was sent, this time signed by the 'big boss' himself. After this I continued a correspondence with Ms. Clifton for four more letters, all of which she answered personally. I can't put into writing the respect I have for Quicksilva in an age when letters are replied to with printed sheets and advertising blurbs.

Congratulations to Quicksilva for remaining faithful to their customers.

Jason West, Orpington, Kent.

PS. In April's issue a Mr. Higginson asked if one million miles! Another person has a record.

Dear Lloyd.

Why is the March issue No 2 and the April issue No 4? Have I missed out on No 3? I think CRASH is excellent and would not want to miss a copy.

Martin Jones, Leigh-on-Sea, Essex.

No you haven't missed out, Martin, but the layout artist has — he's missing a finger on the left hand, which must account for his strange method of adding up. The way he counts it goes: 1 _ 2 _ 4 _ 4 _ 6 etc.

LM

MISSED OUT?

Dear CRASH,

I know you will not believe me but my mother can vouch for me. I have just scored 257,260 points on level 19 of Lunar Jetman. Last I saw the missiles needed 26 or 27 laser hits to destroy it. Is this a record?

Vincent Woolf, Mertton, Dyfed.

Of course we believe you, Vincent. My mother vouches for me all the while.

LM

IS THIS A BLACK ROUND THING WITH A HOLE IN THE MIDDLE?

Dear CRASH and readers,

In the third issue a Mr. Holman stated he had got on to level 13 of Lunar Jetman. This is nothing! My friend knows of a boy who has got on to level 20. The aliens are overwhelmingly terrible. Kids at our school have got on to level 32 on Chuckie Egg. Another person got 93 cups on Trans-AM and did over half a million miles! Another person has completed 75% of Jet Set Willy. We keep asking him for the secrets but he never tells us. I would be pleased to ehar of other hi-scores.

Kuker Khan, W. Knighton, Leicester.

PS ('approximately). PPS. I think your mag is brill.

Good grief! Who are all these people you know? As for Trans-AM, it might be interesting for readers to know just how many major services did the vehicle require to do that distance?

LM

PHEONIX SOUND

Dear Editor,

I would like to correct your review of Phoenix in the Living Guide of the April issue. For people who get bored with listening to the music you can stop it and the scrolling stars and get straight on to the game by pressing the fire button or SPACE. This should make the game less annoying and more addictive.

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Keep it up. I would be grateful if you could review Space Station Zebra, Mugsy and Peytron as none of the local computer shops have these games.

Simon Webb, North Bransholme, Hull.

Thanks for the tip on Phoenix, Space Station Zebra got done last issue, Peytron's CRASH SMASH this one, and Mugsy isn't released at the time of writing — next month with luck.

LM

RECORD JET

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Vincent Woolf, Mertton, Dyfed.

Of course we believe you, Vincent. My mother vouches for me all the while.

LM

CHEQUERED CRASH

Dear CRASH,

On the subject of reviews, I would like to complain about the negative attitude shown by your reviewer of Chequered Flag (May issue). It is obvious that he/she was playing the game on his/her own as he/she wrote.

There is no competition spirit in it. The whole point of Chequered Flag is to beat the fastest lap time, i.e., race against time. This nothing the excitement of the game can be increased if several friends come along and have a competition. The overall percentage should have been far higher than 71%. Also, your reviewer failed to notice that the game can be played with a joystick. It can be played with any joystick so long as the interface is Sinclair ZX 2. The rest of your reviews were excellent and, I am glad to say, a joy to read. Keep up the superb work!

Richard C. Leslie, Dunblane, Perthshire.

You're quite right of course, he/she, she/he and he/she were playing on their (non-discriminatory) him/her-selves, which may account for the medium high satisfaction rate afforded. For myself, I think Chequered Flag is pretty good, but as I have absolutely no friends, I'm obviously missing out on the competitive fun side of the game.

Must try and meet people more.

LM

ATIC ATAC-ERS

Dear CRASH,

On reading the April issue I saw the first of what will be many letters on Atic Atac. Stuart Mitchell wrote that he thinks he may be one of the first people to crack this game. Well, Stuart, at 72% your score is still a little low. I have reached 99% on five occasions. If CRASH or anyone else can tell me how to get the extra one per cent I'll be an extremely happy Atic attacker.

J. Marsay, Scarborough.

A mysterious fellow who calls himself 'Eye of the Night' claims, in our new Playing Tips section, that the Pytron is a good thing to do with the score in Atic Atac. And this makes sense; the percentage indicates the number...
of rooms entered during playing the game. You may well argue that to get through successfully with the least possible percentage actually indicates a better result than a higher percentage. As to that extra one per cent - there's obviously a room and half you haven't visited each time - or 99% is top marks.

LM

WHICH SPECTRUM?

Dear CRASH,

Your magazine is wonderful, sensational, etc...

Could you tell me, please, how you can tell if your Spectrum is an issue 1, 2 or 3? I think it has something to do with the colour of the sticker on the back. I have a blue sticker.

Mark Simmons, Elly, Cardiff.

Mark, it has little if anything to do with the colours of the sticker. It depends rather largely on when your Spectrum was bought: What is important is the serial number of your model. Any serial number before 001 354000 is an issue 2 Spectrum. Anything after either of these numbers is an issue 3. In general, the differences aren't important, except in that issue 3 Spectrums read the keys in a different way, which makes some games programmed on or for a series 2 a little odd to control on a series 3. Most software houses have now taken these differences into account.

LM

YOUNG REVIEWERS

Dear CRASH,

I would like to ask why don't you have a young person reviewing some of the games features in your magazine? This would help readers because they would have an idea what different age groups thought of a game. A game may interest a child more than an adult and therefore they will have a different opinion. I saw a TV programme where a 13-year-old boy in America worked for a computer magazine. He would review the games at home and then tell the editor what he thought of them. Why don't you at CRASH try the idea?

Also, Mr Wimpy, Hunchback, Atic Atac and Punchy do not work with the Currah Microspeech. I thoroughly enjoy your magazine.

Mark Powell, Warrington, Cheshire.

Mark's letter was much longer and included many items about playing Jet Set Willy, most of which are covered in our Playing Tips section later on in this issue. As to the question of why so long over the reviews - well, firstly, I would say CRASH can claim to be about the first with most games reviews. Obviously some mags do get a review out before others because they are weekly or because they come on sale the week before CRASH, but in the main most of them don't review a fraction of the games we do. The February issue, which stated that a full review of Atic Atac would follow, was on sale on January 13th. It went to the printers on December 19th (Christmas makes a hole in the schedules), its layout was being completed around about December 2nd to 5th, which means that the reviews had to be written by about November 20th - approximately the time Atic Atac was released for sale.

The preview pictures of Jet Set Willy were taken from a pre-production copy of Matthew Smith's and not from a sale copy which we could review. CRASH collected its mail order copies the day after Software Projects took delivery of the first copies, at which point it was reviewed for the last issue.

What you are not taking into account is that if a brand new game arrives at our offices a few weeks after an issue has finished writing, it won't appear as a review for almost five to six weeks. I might point out that some magazines were still reviewing Terror Daktil 4D as a new game in November last year, when the game came out in early August (I think).

As to the games you list not working with Microspeech, I don't think anyone in this magazine has ever said they do. Punchy certainly has speech on it, but that's built into the program. Glad you like the mag though!

DON'T LOOK IN THE BEANO

Dear Lloyd,

Congratulations and many thanks to you and your colleagues for finally filling the yawning gap in computer magazines. I unfortunately missed the first issue but found the second and third in W.H. Smiths. The difference in quality of paper and colour is probably the biggest improvement you could have made on issue 2, and it is good to see you putting effort into the magazine's appearance as well as its contents. However, issue 3 does appear to be a bit disordered, but perhaps that's because of the additional articles. Maybe you should try to set the news, editorial and letters in a closer section, and keep the regular features in the same place each issue. It's a small point, but with so many different parts it isn't easy to keep track of where you've read, etc.

If T.S. Hammond looks to the Beano for comic strips, then he's looking in the wrong place! Keep the Terminal Man, it suits the magazine well, as long as it doesn't get too silly ("loathing and blood lust!"). As a comics collector of many years I can assure you, Terminal Man is well written and drawn.

Talking about drawing, one thing that is not so good in issue 3, namely the top cartoon on page 53 (and 65)! Is this stupid sexism really necessary? Obviously most of your readers are young males (including me) but this particular type of drawing keeps vicious circles going round and round. Again, it's a small point, but it is all the more noticeable because of the quality of the rest of the magazine. Life imitates art!
Which only leaves me to mention the reviews themselves. . . Exciting! Witty and clear, they are enjoyable and informative to read. Please don’t ever be afraid of slamming a bad program. Pour encourager les autres, I think. Keep the three personal comments and the rating system. Again, the effort put into this shows clearly. It is good that you aren’t just regurgitating the cassette inlay (and that it comes under criticism too).

Keep articles on programmers and software houses coming, but try not to succumb to their hype.

Eye of Night, Purley, Surrey.

I must say (well, I’m paid to say things like this) that issue 3 (the one that was called 4 in error) was rather jolly looking. It’s considered normal, or aesthetic, or something anyway, to divide a magazine up into clearly defined sections so that everyone always knows where everything is. Of course, to a large degree that happens with CRASH as well. But as reviews are our main staple, it was thought it would be bonng to have a lump of them with other, things like this (that issue 3 (the one that was called 4 in error)

STEERING OFF THE ROAD
Dear CRASH

I am writing to tell you and warn others of a bogus software company that is ripping off loads of people! The company, called Spirit Software, placed an advertisement in Personal Computer Games magazine in their February and March issues. Finding this to be an interesting idea and a good version of Atari’s Pole Position game, I decided to send off for it. After four weeks we were up I received a letter stating how sorry they were because they had received faulty steering wheel mouldings from their supplier and the game would be delayed until 12th March.

Fair enough, I thought, but three weeks later nothing had arrived. I phoned up the company to enquire but I was greeted with an answering machine and that they couldn’t do anything.

I decided to phone Atari Ltd to see if they had received anything from Spirit Software but it appears that they have not. It is possible that Spirit Software is a front for some other company that is ripping off loads of people!

LM

A BIT OF BOVVER
Dear CRASH,

I would just like to talk about a bug I found in Artie’s Bear Bower. I haven’t yet seen anyone mention it as Bear Bower seems to have a reputation for being an almost impossible game with the characters so big.

The bug occurs in sheet five. You can’t die - the other bears just walk straight through you. Bear Bower has around eight to 10 sheets (I wasn’t really counting) Now for all you eager Bear Bower fans who are just aching and dying to know the identity of the star guest after Jetman, who appears in sheet three - well sorry, but there isn’t one. It just goes through the sheets and back round again. What a disappointment to such a great game - or is it that I’ve got a dud tape? Will someone out there tell me please, has someone seen the next guest star? I’ve got to know. Again, come on CRASH, let’s have some reviews on Moon Buggy by Aniorg, Moon Alert by Ocean and Troop-a-Truck by Rabbit. This, to my mind, is about the best game in the arcades and I need to play it at home, but which

one is best? Let’s have more competitions too!

Michael C. Shepherd, London E9

Okay, Bovverites, let’s here it for Michael. Moon Buggy, by Aniorg’s, was reviewed last issue, and Rabbit’s Troop-a-Truck is fab on the Commodore but not yet ready for the Spectrum. David Lewis of Rabbit tells me it shouldn’t be long now, and they are trying to cram in as much detail as possible. Pity they won’t be able to get the same great sound track going though.

LM

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DENIS

A zany political adventure in which you take the role of Denis Thatcher striving to avoid Maggie and all your favourite political figures to escape from the political jungle.

COMMODORE 64, 48K SPECTRUM, 48K + ATARI
£5.50 inc p&p

THE TEBBIT

Denis

As you will have noticed by now, iain, CRASH is including more advertisements as we go along. We’ll look into the Digital Fantasia feature idea. Chris Passey has just left the office with a red face (he puts it down to the effort of climbing the stairs).

LM
Allo? Ah ahm Unspectet Cleudeau of the Sureté....

Les Flics

ah ney eggsactley weut yew are eup tew, because that ees mei jeub.
Ah ney yew are geuning tew trah en steal a gem steun in mei care beut eet weel naught be eezee mei friend, eau neau, me and mei treusly servut Kaolin weel be tryin to steup yew.
Not eaunly zat, beut Les Flics, the treu gendarmerie eunder mei commant weel be out en force, so, you foel, you 'ave neo chance aggenst Cleudeau............

You control that Pink character with the tail in your quest for the Purple Puma, a priceless gemstone, avoid the Police cars and enter the buildings, evading Gendarme Kaolin (disguised as a chef) and of course Cleudeau himself.
Pick up the items as you find them, we leave you to find out what they do!
Bon Chance

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Arcade Adventure For Spectrum 48K

Items to collect:
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Your castle is under siege from the vile Orc hordes. They mount a frenzied attack, scaling the castle walls with ladders, firing their lethal crossbows.

To defend yourself, you hurl rocks from the parapet onto the Orcs below. If an Orc reaches you, dagger in hand, you grab your broadsword and leap to the attack. Your ultimate weapon is a huge vat of boiling oil that you mercilessly pour over the hapless Orcs.

This brings but a brief respite... out of thin air a Sorcerer appears and you have to pit your wits against his evil spirits. Only after fighting the living dead, the Stone Warts and the Demon Trolls will you be safe.

Orc Attack is available for the Spectrum 48K and any Atari computer. You should find Orc Attack in any major software retailer. (And it carries an offer of a free poster of the original oil painting featured on the pack.)

£6.95

FOR SPECTRUM 48K

CREATIVE SPARKS
**Blade Alley**

Producer: P.S.S.  
Retail price: £5.95  
Language: machine code

Blade Alley is a 3D shoot 'em up with six screens which uses quite simple graphic devices to create the sense of high-speed movement through trenches, over desert plains and so on. The object of the game is to climb aboard your ion driven interceptor and then shoot out of the sky a variety of enemy craft, saucers, tie fighters and space hoppers as well as asteroids.

The 3D effect is created in three different ways. First of all, enemy craft grow bigger as they approach going through what looks like six frames of increasing size, the second device is that everything casts a shadow on the ground, which also grows bigger with approach, as well as defining the apparent height of thecraft above the ground. The third method is that the landscape is created with alternate bars of flashing red and mauve, which gives the impression of movement.

In all the screens, your craft is seen at the foreground, facing out into the screen. Movement is in eight directions with fire possible while moving. In the first screen you plunge into the trench and are assaulted by tie fighters and saucers. The second is fought out over a plain with hoppers and saucers. The third represents your craft flying between two layers of some giant space station. In the fourth you are over a plain with mountains in the background with all four hazards. The fifth screen takes place in outer space without shadows to help you judge height, and the sixth is in a bottomless trench, again without the help of shadows. Moving from screen to screen is accomplished by shooting down the indicated number of saucers, the indication appearing at the bottom of the screen.

**CRITICISM**

'Blade Alley' is a convincing 3D action game which takes some of the themes of Zaxxon like the shadow on the ground which gives you an idea of height. Depth is also enhanced by seemingly being placed on a hill over which the approaching enemy craft appear as they hurtle towards you. The aliens are varied and with a fair amount of detail. The game is playable, quite hard, especially as being a realistic 3D it's difficult to judge the height of enemy craft. The explosions are fairly realistic although not very detailed and they are short lived. The hoppers cope with their bouncing action exceptionally well, and I like the way they are animated. Blade Alley is fun to play - I think the scenery could be improved upon instead of just having the changing colours of the ground, and this would add to the fun. Otherwise it's quite an addictive game with a fair amount of action.'

'Blade Alley is a fantastic 3D arcade type game. In my opinion, this is the best ever game from P.S.S., and definitely one of the best arcade games I have seen over the past few months. Shooting down the attackers involves getting your ship at the same height as them, and this is achieved by gauging the distance between yourself and your shadow on the ground, relative to the attackers. The space hoppers are excellent and the graphics generally are very clever with just the right amount of colour usage to create pseudo scenery like the walls and plains. Very addictive and fun to play.'

The title screen during loading is a very accurate representation of the inlay cover, and in many respects the actual game doesn't disappoint either. I thought the effect of 'your' forward movement was only half successful, and the main feeling is that you are stationary in a trench with the enemy dashing up on you. My other niggle is that once into the demo, you can't break out, and each screen is demoed until the fighter is hit by an enemy or an asteroid, which can sometimes take quite a while. But in playing Blade Alley is action packed and fun. A lot of its involvement is due to the difficulty of learning the knack in judging correct height to hit the enemy, and I think most players are going to find it very addictive.'

**COMMENTS**

Control keys: top row = up, third row = down, Q to T = left, Y to P = right, bottom row = fire  
Joystick: Kempston  
Keyboard play: responsive, and reasonably laid out  
Use of colour: good  
Graphics: very good, with effective 3D on several levels  
Sound: continuous, good  
Skill levels: 1  
Lives: 4  
Screens: 6  
Features: Currah microspeech compatible  
General rating: a good to excellent game with plenty of arcade appeal, and a game which should prove addictive.

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<thead>
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<th>Use of computer</th>
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<td>Graphics</td>
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<td>Playability</td>
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CRASH June 1984
Opposition

Producer: Pulsonic
Memory required: 48K
Retail price: £2.99
Language: BASIC

Opposition is a board game that may be played between two people or one against the computer. It is one of those sort of games at which computers tend to excel. The screen is divided into a board of 40 squares, five high and eight long. Each vertical base is a 'goal' line and vice versa. Each corner square is a 'goal post', so the defensible area is only three squares. Each player takes a turn consisting of a one-square move diagonally or up and down by entering the co-ordinates N, NE, S, SW, etc. You may not move on to an adjacent square to one already occupied by your opponent.

'Played against another human, I found this game to be not bad, but not too good either. The graphics are poor. Not much lasting appeal.'

As it says in the instructions, if attacking, the computer always wins. But you do have a chance to beat it if you are attacking. The second game is played out on a larger board of 70 squares with seven of them occupied by obstacles. Played in the same way the Spectrum, however, defends and only on the back two files. With this game it is possible to type in the final command is 'Put on CAPS LOCK now.' I know this is a simple game and in BASIC but surely the programmer can do better than this? As to the game itself, it's a simple and quite clever idea, made totally unplayable by the parameters for programming it. In which case, I don't think there was much point doing it in the first place. The computer will always win.

Wally Kong

Producer: Calisto
Memory required: 48K
Retail price: £5.95
Language: machine

codeAuthor: M.I. Barnard

The Wally of Kong probably refers to the way your man leaps about like a wallaby in this version of the venerable platform game with four screens. On each screen there are generally five platforms each connected with various ladders. The features include lifts, moving platforms, barrels, fireballs and bonus objects.

The object of the game is quite traditional, climb to the top of each screen and rescue the maiden from Kong's clutches. This is done against the clock. Ends of platforms are dangerous in as much as you can fall to your death from them! The game claims to have an amazing 200 skill (speed) levels, but since the slowest and fastest have about the same relationship that you would expect from a game with 9 levels, this seems rather pointless.

Comments

Control keys: curs(e)rs and 0 to fire or Q/Z up/down, U/I to left/right and P to jump
Joystick: Kempston, Protek, AGF
Keyboard play: good
Joysticks: above average Kong, despite some programming oddities.

Use of colour: good
Graphics: average to good
Sound: poor
Skill levels: 200
Lives: 200
Screen: 4
General rating: above average 'Kong', despite some programming oddities.

Use of computer 64%
Graphics 57%
Playability 62%
Getting started 74%
Addictive qualities 60%
Value for money 59%
Overall 63%

'Wally Kong is a fairly typical 'Kong' game, and not bad either. The graphics and movement are both reasonable, and the man jumps very well. I liked this version but I still feel that the Ocean Kong is the best. This version tends to look sound.'

'I didn't quite know what to make of the graphics in this game. They are clear and bright and reasonably detailed, and yet they still manage to look quite primitive. Your man leaps with gusto, but not while he's moving forward, which is silly. He can't jump near a ladder either, so it's important to time the run up to a ladder rather well. There are other oddities too. If you have the forward key pressed when a life starts, your man is invisible! But he still dies when a barrel rolls over where he ought to be. The second screen is pathetically simple, while the third with its two lifts is almost impossible because of their speed. It has good points, but it fails to be a very good or playable version.'

The four screens are fairly copied from the original arcade version, first two screens being easy to clear, while the third is incredibly difficult due to the extreme speed of the lifts. Most of the characters are small and fairly primitive in their drawing. Unlike the other Calisto games I've seen, this one offers a second keyboard option as well as the 'cursors' as they refer to them on the menu - I'm sure the spelling is intended!'
Splat. Spodgo has three demented ice-cream salesmen across the screen to survive in this very original arcade game. In the first, you must shoot up the taffies and a purple snake. Spodgo fires in the direction of the other, the middle one being the shorter but faster. A blue path is used to chase you round the screen, avoiding the gates. The object is to guide Spodgo from the top right to the bottom right of the screen, avoiding the gates, and dodging across the railway tracks between trains.

Surviving this stage moves Spodgo on to a screen across which three trains move from left to right, one above the other, the middle one being the shorter but faster. A blue path zig zags down the screen blocked by opening and closing gates. The object is to guide Spodgo from the top right to the bottom right of the screen, avoiding the gates, and dodging across the railway tracks between trains.

The third screen Sam the demented ice-cream salesman hurl endless supplies of ice-cream cones across the grass at you, and they must be dodged.

**CRITICISM**

"Gobstopper is a good game. A main criticism is that your hero does not move very quickly, and as the screen is very crowded because of the large graphics, it means hit and run tactics have to be used. Generally the graphics are good but jerky, although the trains move very smoothly. I found the game mildly addictive with joystick play. The keyboard play is terrible."

"Gobstopper has nice large graphics, well drawn details as well. The gobstoppers' mouths all move up and down as they float about, the trains are very big and detailed, a pity the wheels don't revolve though. There are nice touches like the cartoon-style strip at the start of the game, and the explosion when you lose a life has a little "pop" written in its centre. Nevertheless, I thought overall it looked a bit childish and is probably intended for younger children despite its difficulty. It is quite hard to play, but once mastered, there is insufficient scope to really be addictive."

"I have never seen a game quite like this - it is totally unique. I found the first screen very active, quite hard, but pitched about right so you can get on to the second after a few minutes' practice. I like the idea of firing paper clips at the trains without being attacked by frenzied taffees. The trains are drawn nicely, but move fairly slowly and make the screen too easy. The third screen is very difficult - almost impossible. The graphics are large, colourful and move very well. Great sound. I quite enjoy this game, but I think the addictive qualities will wear off after a few hours' play."

**COMMENTS**

**Control keys:** cursors and @to fire

**Joystick:** Kempston, Protek, AGF

**Keyboard play:** responsive, pity about the cursors though

**Use of colour:** good

**Graphics:** very good but a bit jerky

**Sound:** excellent

**Skill levels:** 1

**Lives:** 3

**Screens:** 3

**General rating:** good.

**Use of computer:** 52%

**Graphics:** 68%

**Playability:** 70%

**Getting started:** 68%

**Addictive qualities:** 67%

**Value for money:** 69%

**Overall:** 66%

**Mummy Mummy**

**Producer:** M.C. Lothlorien

**Memory required:** 48K

**Retail price:** £5.95

**Language:** machine code

**Author:** Dave Stevens

The cassette inlay has a fairly lengthy explanation of what the game is about, which is just as well, as it isn’t very self-evident. What is, however, is that this is a ‘Panic’ game of platforms, ladders, monsters and hole digging with some very different variations on the theme. The basic story line is that you are Dioranic, a distant cousin of old Nefertiti, woken up from peaceful pyramidal slumberings by the ghost of Mad Clive, an archaeologist. None of this has much to do with playing the game, but it sets the scene for the antics to come.

To get yourself peacefully reburied again, you must find and read 25 magic cartouches (no, we didn’t know what they were either). In this task you are hindered by three types of monster and the ghost of Mad Clive. The first screen shows the pyramid with seven floor levels. You start at the top, and can dig holes and build ladders down. Several monsters infest the lower levels. The idea is to entice the monsters to attack you and then dig a hole and bury them. When they’re all gone, you get properly inside the pyramid with the whole screen taken up with the seven platform levels, connected with ladders in various positions. New ladders cannot be added. At the base level is a cartouche (still don’t know, which must be read before). In this task the monsters in the traditional ‘Panic’ method. After five cartouches (no, sorry) the door to your sarcophagus is revealed. You may then continue on reading cartouches (ah - just got it - dictionary says: scroll ornament, an oval ring containing hieroglyphic names and titles of Egyptian kings, etc. Pheew!) or read the door’s inscription to pass through when all the monsters are killed. Got that?

Digging holes too close to other holes may result in rock-falls, plunging you through or trapping you. You cannot fall through a hole as in most ‘Panic’ games, except in the first screen.

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CRITICISM

'It's quite clear that this is a 'Panic' game of a sort, but despite the instructions and game objectives being stated on the inlay card, I couldn't make head or tail of it. A lot of strange things seem to happen, perhaps not surprising inside an ancient pyramid, but confusing in a game. As a 'Panic' it seems pretty easy to kill the monsters before the oxygen ran out (why would a mummy require oxygen?) and yet I still progressed on to the next screen. One reason why I couldn't kill them all off was because having just built a ladder, one monster climbed immediately up it and then proceeded to hover on the top of the ladder with obviously no intention of moving further. The 'Panic' elements are all fairly good, but the attempts to make it ever so different have made it a bit unplayable too.'

'This is a "Panic" game in which you must become a mummy. I found this game had a large but rather flickery graphics. It was fun to play but seemed to lack something. There were half a dozen keys required to control things, and this removed some of the fun. Nevertheless, this was a "Panic" game which grew on me with the playing.

'Even after playing the game for half an hour I was still unsure as to what I was really supposed to be doing - everything was so unclear. This wasn't helped by some funny things occurring, like the moment when I dug a hole in a spot and apparently 'jammed' the monsters up. One on a ladder and one just the other side of the hole, merely moved a character square forwards and then backwards, and continued doing that with the rest of them following suit until the oxygen ran out. The graphics are nice and large. The keys didn't always respond when pressed, it has some good tunes, which tend to drive you up the wall!'

COMMENTS

Control keys: Q/A up/down, 1/P left/right, dig D or O, Read cartouche D, O or R, build a ladder D or O, Fill hole F, 1 or SPACE
Joystick: Sinclair ZX 2, Protek, AGF
Keyboard play: difficult with so many, and not always responsive
Use of colour: above average
Graphics: quite good, large although flickery, but nice animation detail
Sound: above average
Skill levels: 1
Lives: 4
General rating: average if you can understand it.

Use of computer: 60%
Graphics: 66%
Playability: 55%
Getting started: 50%
Addictive qualities: 46%
Value for money: 55%
Overall: 55%

Genocide rains down from the sky as you fly Mission Omega—could it be the last of its kind?

CRITICISM

This is the old bomb-dropping game—there were games of this type about for other computers over two years ago. That's a long time in this business. Why bring out more now? Even at £2.99 it's poor value—probably not even worth the waste of cassette tape.

'I think this is the best of the Pulsonic games I have seen. The game is quite enjoyable, and this version manages to be quite hard to get through. The various difficulty options make it reasonably interesting. With this game I think I would generally recommend it as reasonable value for money, and a reasonably playable game too.'

'Mission Omega plays quite well and may appeal to some players who haven't seen any other version. But I think it is outdated. On top of that, compared to Spectrum games these days, this is pretty simple in graphics and sound. At £2.99, however, it does represent fairly good value, although I would rather pay twice as much and have something like Atic Atac.'

COMMENTS

Control keys: M for missiles, B for bombs
Joystick: none needed
Keyboard play: responsive
Use of colour: average
Graphics: fair, but jerky
Sound: poor
Skill levels: 10 speeds and three variables with 10 options

Lives: 1
Features: 1 or 2 players
General rating: felt to be one of the best of a rather poor offering.

Use of computer: 60%
Graphics: 55%
Playability: 53%
Getting started: 58%
Addictive qualities: 45%
Value for money: 50%
Overall: 54%
Mutant Ant Attack

Producer: Calisto
Memory required: 48K
Retail price: £5.95
Language: machine code
Author: S. Allaway

Your miniaturised laser tank is under attack from marauding ants which have mutated into a super-species. Your mission is to destroy them. Beware the mutant ants and flying missiles. As they relentlessly march towards you bent on making a beeline (sorry) for you and content themselves with eating up into clumps of individuals, the ants don't actually make a beeline (sorry) for you and content themselves with marching around, performing neat military manoeuvres along the grids.

CRITICISM

'Ant Attack looks very simple at first glance, and indeed the graphics are nothing very special, being small one character sized blocks. But the beauty of the game lies in its simplicity as a grid game. You can fire continuously in any of the four directions, and your worst enemy is usually yourself! Dodging your own missiles as well as the ants becomes very exciting. That's just about all there is to the game. It's important to get the idea of animated ants homing in on your tank which isn't quite as it conjures up the idea of what happens. It's a little misleading.

'Mutant Ant Attack' is actually a grid game played out on a screen which wraps around both vertically and horizontally. Your tank and the mutants all move along the green lines of the grid. Should you fire, the bullet travels off the screen and re-enters on the same line from behind. It's therefore essential to get off that line as fast as possible after firing if you don't want to blow yourself up. The ants are character blocks with detail in them. They form up in lines and march about, the line gradually breaking up into clumps of individuals. The ants don't actually make a beeline (sorry) for you and content themselves with marching around, performing neat military manoeuvres along the grids.

CRITICISM

'Mined-Out used a mine-proximity indicator system which turned that game into one of clear and logical thinking, and then added many other complexities. In this one you also have an indicator at the top of the screen which tells whether there is a mine (or more) beside you. In this sense Harry is a copy of Mined-Out. But not in the graphics, which are small, unattractive and very slow because of the BASIC.'

This game is the sort of thing one would have expected in the very earliest days of the Spectrum - or even the ZX81 come to that. It might do for the younger player, but no one else will be very interested. Quite honestly I'm surprised this game requires 48K. The game is a good idea, but that's not the programmers and the implementation is far, far below the standard we expect today.'

'Harry Goes Home is the sort of game one would have expected in the very earliest days of the Spectrum - or even the ZX81 come to that. It might do for the younger player, but no one else will be very interested. Quite honestly I'm surprised this game requires 48K. The game is a good idea, but that's not the programmers and the implementation is far, far below the standard we expect today.'

'Harry Goes Home' is a copy of Ian Andrew's original game and very addictive. This game bears no resemblance to the Ant Attack of Quicksilva! This grid game would be a good one indeed if it weren't for the fact that the game control is terrible - not responsive, the cursors make your brain in a mental twist. You must cross a blank screen and collect his doorkey. Finally you have to blow yourself up to get Harry to his front door safely. He must cross a blank screen with hidden mines, collecting his doorkey along the way. If he does get home, the next screen has more mines.

CRITICISM

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Harry Goes Home is a poor man's version of Ian Andrew's game Mined-Out. Mined-Out, however, was a very clever game. Harry Goes Home is less so. The object is to get Harry to his front door safely. He must cross a blank screen with hidden mines, collecting his doorkey along the way. If he does get home, the next screen has more mines.
PSS, Personal Software Services, started its life in the front room of co-founder Gary Mays' two-up, two-down terraced house in Coventry.

Gary, together with fellow ex-graduate Richard Cockayne, had studied Management Sciences at Warwick University and, after they had researched potential markets in which to operate, decided to devote their energies to the fast-growing enthusiast market of the home computer. Initially, PSS survived on a £40 per week grant from the M.S.C. and both freely admit that 'they ate, because of that grant.'

With the M.S.C. doing its bit, Gary and Richard were marketing their first products, advertising for more programmers and, because of the very nature of the market in 1981, 'picking and packing' tapes for despatch following mail order sales. This was the era of Sinclair's ZX81 and due to the success of products such as QSAVE, PSS was able to move into premises during the latter half of 1982. They even managed to pay themselves some wages!

With the release and subsequent success of the Sinclair Spectrum, PSS was adopting a more professional approach, employing as many full-time staff as possible and, while still relying on freelance programmers, beginning to recruit full-time 'in-house' programmers. This enabled the company to spread its program base across as many machines as they were released. PSS was also one of the first companies to employ a full-time sales manager, John Fletcher. Constantly aware of the volatile nature of the home computer market, PSS recognised that the days of mail order were numbered and John's role was to ensure that enough outlets had been established both in the UK and overseas to continue the company's growth.

1983 was the year of consolidation when, going from strength to strength, PSS made themselves one of the top software houses in the country by continually producing top programs. Recognition of this achievement has come recently by becoming finalists in a Radio 4 sponsored New Business Enterprise Award. The broadcasting of a half-hourly programme on Radio 4 should coincide with the company move to new premises, a smart modern office building in West Coventry.

PSS has shown that recession hit areas can produce success, and they look forward to the future with eager anticipation.

CRASH June 1984

100 LUCKY AND CLEVER READERS CAN WIN A COPY OF BLADE ALLEY!

The latest 3D shoot 'em up from arcade specialists PSS is the prize in this ludicrously simple competition from CRASH. In association with PSS, we are giving away copies of this great new game to the first 100 entries drawn from the ever-expanding competition bag.

Blade Alley

Blade Alley uses a shadow of the space ship - like what other famous arcade game?

1. Blade Alley uses a shadow of the space ship - like what other famous arcade game?

2. Name the four types of hazard encountered in playing Blade Alley.

3. What do the initials PSS stand for?

4. How many times does the title Blade Alley appear on pages 33 and 34 of this issue?

5. Count up how many times '3D' appears on pages 33 and 34. Add up all the 'threes' together and multiply the result by the game's retail price. What's the answer?

6. Judging your height in Blade Alley is achieved by gauging the distance between yourself and...

7. Give the titles of three other games for the Spectrum by PSS.

8. How many 'frames' do the enemy craft go through before they reach you?
Football Manager
Designed by Kevin Toms

Some of the features of the game:

* Matches in 3D graphics
* Transfer market
* Promotion and relegation
* F.A. Cup matches
* Injury problems
* Full league tables
* Four Divisions

* Pick your own team for each match.
* As many seasons as you like
* Managerial
* 7 skill levels
* Save game facility.

Comments about the game from press and our customers:

FOOTBALL MANAGER is the best game I have yet seen on the Spectrum and my personal favourite of all the games on any micro...to the ordinary person it is an excellent view of what can be done in the field of computer games.

The Crownjoy game of the year is the short list pieces which highlights which show little tricks to players around the pitch shooting, defending and scoring...it is a competitive game for any player which I believe could be used in practice for clubs.

MANAGEMENT HOPE is another important game...The graph in Addictive Games certainly deserve the name...It’s 19-25 (Practical Computing - August 1983).

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GOING BEYOND

With the launch of Psytron, Beyond Software and the game's two young programmers have been thrust into the limelight.

The two names behind Psytron are Paul Voysey and Tayo Olowu. They have graduated from an engineering course last summer and opted not to get involved in the engineering industry. Instead they went out and bought a Spectrum. Two weeks later they had taught themselves machine code and then spent almost seven months producing Psytron.

Paul is a voluble person with fairly strong opinions about the way magazines in general review games and present screen pictures. Tayo is Nigerian, and in discussion at the Psytron launch I discovered we had been neighbours (though separated by some years), living almost next door to each other in Lagos.

Paul and Tayo work very evenly together, Paul claims to have survived for 20 minutes on level 6 of the game. He says he could have carried on but the phone rang – oh yeah?

Going Beyond the adventure is Mike Singleton, author of The Lords of Midnight. Mike is the result of months of hard work, and he has planned two sequels, Doomdark and the Eye of the Moon, which should be available in the autumn.

THE EPIC GAME

Although it wasn't entirely ready for the launch, Beyond's new adventure game, The Lords of Midnight, was featured with several screens working. Beyond claim that this is the world's first Epic game, which allows the player to blaze a heroic path through a story background, drawing the scenery and characters every step of the way.

This is possible through a technique called landscaping. It means that every time you leave a location and return to it from a new direction, it will be drawn again with a different background. Every time you move forward, so the landscape changes, distant features coming nearer and revealing new detail. Beyond claim that there are 32,000 views to be seen in The Lord of Midnight!

You take the part of Lord Luxor the Moonprince, guiding his compatriots and gathering armies to defeat the evil Witchking Doomdark. As Luxor splits his forces, you are able to see through the eyes of each character. The game is extremely complex and what it allows you to do and the ways in which it can be played. Fortunately it is accompanied by a 32-page booklet which sets the scene and describes the game in detail.

Author of The Lords of Midnight is Mike Singleton, who started inventing games as a youngster. While working as an English teacher on Merseyside, he produced a computer moderate game called Star Lord which is played by hundreds of people every week, sending in their orders for the game to Mike's house to be processed on his Pet. The Lords of Midnight is the result of months of hard work, and he has planned two sequels, Doomdark and the Eye of the Moon, which should be available in the autumn.

DORCAS CHANGES NAME

Close observers of our last issue may have noticed the half-page advertisement for The Oracle's Cave, the animated graphics adventure from Dorcas. We received a letter from DORic Software, Chris Dorrell, saying, 'We decided to change our name to avoid confusion with another software house at the business end of the market and with the Oric micro.'

The name Dorcas is derived from DORic Computer Adventure Software, and reaffirms the company's intention of producing adventure games. The latest release from Dorcas continues the text/graphic approach which was used so well in The Oracle's Cave. The new game due soon is called The Runes of Zenos, and will consist of 12 separate but closely linked adventures, each with monster animation, problem solving, sound effects, sentence input, performance evaluation and microdrive facilities. It will run on the 48K Spectrum.
W.H. SMITH EXPAND COMPUTER SHOPS

W.H. Smith's retail shops will open at least 11 more Computer Shops and extend at least 26 existing Computer Know-how departments by the beginning of September. The company already has 33 Computer Shops in W.H. Smith stores, plus two Computer Shops at Heathrow airport, as reported in our March issue, and more than 220 Computer Know-how departments.

The well-designed compact Computer Shops offer customers a place where they can sit at console units and use complete systems, which include the Acorn Electron, Acorn BBC Model B machine, the Apple, Commodore 64, Sinclair's ZX81 and the Spectrum. Computer Know-how departments (according to their size) also have a similar range of systems.

Computer Shops and the Computer Know-how departments also offer a comprehensive range of software (including education programs and games), as well as other computer peripherals, and also W.H. Smith's own-brand Computer Program Data recorder. This machine is called the CPD-8300. It costs £38.95 and is specifically designed for use with personal computers.

Customers can also make full use of the computer staff's expertise at W.H. Smith. 'We want people to be able to try out hardware for themselves and have the opportunity to discuss and compare the various computer specifications and software packages with our specially trained staff,' said Mr. John Rowland, Merchandise Controller for personal computers at W.H. Smith.

W.H. Smith is planning a series of computer exhibition evenings (run by W.H. Smith's computer staff). The aim of these evenings is to demonstrate the specific use of computers and peripherals, as well as to encourage people to try out the hardware and software by using the W.H. Smith staff's expertise. Often attending the evenings are software suppliers and hardware manufacturers. In addition there is a great deal of literature available for people to take away with them.

W.H. Smith have 355 retail shops. By the beginning of September 1984 nearly 50 of these will have Computer Shops and more than 220 will have Computer Know-how departments.

New Computer Shops will be opened at Bolton, Chester, Coventry, Derby, Lewisham, Oxford, Preston, Southend, Sunderland, Watford and York. Extensions to Computer Know-how departments will be at Basildon, Bedford, Blackpool, Bournemouth, Bradford (Kirkgate), Chelmsford, Cheltenham, Colchester, Crawley, Guildford, Harlow, Harlow (High Wycombe), Ilford, Luton, Peterborough, Putney, Nottingham (Victoria), Richmond, Slough, Solihull, Stockport, Sutton, Swindon, Woolwich and Worthing.

Computer evenings planned for the future will be at Birmingham, Cardiff, Glasgow, Kingston, Leeds, Leicester, Liverpool, London (Holloway Circus and Brent Cross), Nottingham (ListerGate), Reading, Southampton and Swansea.

LE CHEF de BUG-BYTE

Liverpool-based software house Bug-Byte have taken to the kitchen for their latest release. Ian Hoare, chef to British Routiers, has produced a world first in the home computer software market.

He explains: 'Last October an old friend asked me for the recipe of a dish which has always been a favourite with guest at lunches which I have cooked for Routiers. As a joke, I tried to put the recipe into the computer.

One thing led to another, and before I quite knew what had happened to me, I found that I had an appointment with the marketing manager of a major software company to show him an outline for a computerised cooker book.

I gave enough of a demonstration to be offered a contract for the finished product. Now, some four months later, I have managed to compile the "cook-book," which runs on a Spectrum and which contains over 80 of my most popular recipes.

More than just a cookery book, perhaps one-third of the program is taken up with a comprehensive index. You can tell the computer that you have some pork, in the fridge, and it will make a selection of suitable recipes. It will also list recipes by category such as Starters and Desserts. It will select recipes according to such criteria as price, time taken in cooking and preparation, simplicity and country of origin.

To round off the index, Ian has penned a "hint" - that of wine consultant - and has suggested wines to accompany the dishes he has invited you to cook.

In the recipes themselves, Ian has again found a use for the particular strengths of computers. All the recipes are displayed in either Imperial or Metric measurements and for any number of people (up to 200). He has brought his practical expertise to bear highlighting any tricky sections and explaining how he deals with them.

'I was amazed to discover,' he says, 'that this is the first time anything like this has been done. It seems to me to be so obvious, with computers being found more and more in the home, uses should extend beyond games programs and home budget accounting, excellent though that area is.'

Tony Baden, director of Bug-Byte, first saw the program at the Christmas Computer Fair at Wembley. He was so impressed that he offered Ian Hoare a contract on the spot.

The Cookbook consists of a special two-cassette pack, one for the index and the other for the recipes. Available from all good software outlets at £9.50.
obviously make a smashing month, and then to late spring. Christmas, then it was put back a release has been put back to a new game panting for Melbourne House's Sherlock Holmes. Its release has been put back to September. It was first hoped to have it out immediately after Christmas, then it was put back a month, and then to late spring. Paul Byrnes of Melbourne House (organisers be as a part of the programming team are still slaving away because the complexity of the program has made it difficult to cram it into the memory of a 48K Spectrum. Still, Sherlock Holmes will obviously make a smashing Christmas present for the end of this end, and the amount of work that has gone into making it possible should ensure that it is a fabulous game too.

SHERLOCK DELAYED

Sad news for adventure fans panting for Melbourne House's new game Sherlock Holmes. Its release has been put back to September. It was first hoped to have it out immediately after Christmas, then it was put back a month, and then to late spring. Paul Byrnes of Melbourne House (organisers be as a part of the programming team are still slaving away because the complexity of the program has made it difficult to cram it into the memory of a 48K Spectrum. Still, Sherlock Holmes will obviously make a smashing Christmas present for the end of this end, and the amount of work that has gone into making it possible should ensure that it is a fabulous game too.

HEWSON CONSULTANTS GO FRENCH

Hewson Consultants' trilogy of 3D Science fiction games are to be supplied to over 300 outlets throughout France. The trilogy, 3D Space Wars, 3D Science fiction Attack and last month's CRASH SMASH 3D Lunattack, were written by Steve Turner for the Spectrum and have now been converted for the Dragon by Andrew Braybrook to fulfill the French contract.

At the same time, Hewson's new adventure game, Fantasia Diamond (a CRASH SMASH for this month), has been entered in for a French adventure games competition. When first approached, Andrew Hewson was faintly bemused by the notion of an English written game being seen in France. The competition organisers, however, felt that this was a negligible drawback. But Andrew says that if it does well in the competition then they will get to work on translating the database of the game into French - not an easy task! At least Nord and Sud needn't be a bother - the initial letters are the same!
**TRACK BALLS SOON**

Software house Micromania have announced that they will have Track Balls for the Spectrum soon. The ergonomic joystick controller, which resembles the top of a sphere sticking out of a box, is almost essential for playing fast games like Missile Defence, where a firing sight has to be moved at speed and with accuracy. Existing (and somewhat rare) track balls tend to be very expensive, but Micromania are expecting to sell theirs for around £14. They are being imported from America and should be on sale in a few weeks. Anyone interested, who would like more information, should ring Micromania on 03-727 20152, or write: 14 Lower Hill Road, Epsom, Surrey KT19 8LT. We've been promised one as soon as they arrive, and will be reviewing it as fast as we can.

**TLL FOR VORTEX**

Having completed the draw of correct entries to the Vortex Competition on the CRASH stands at the Eleventh ZX Microfair at London's Alexandra Palace on 26th April, Luke Andrews of Vortex told us about their new release, called TLL. The initials stand for Tornado Low Level. You must fly your Tornado jet fighter against enemy positions. The graphics are a continuation of those seen in Android 2, and are claimed to be detailed and in 3D. The game will provide one landing strip, flights at very low level over varying terrain, including the sea, with the aircraft being guided by use of its shadow on the ground. There will be 42 screens of landscape and a wrap around map area and long-range radar which warns of landscape changes and enemy positions. TLL should be available very soon, price £5.95, for the 48K Spectrum.

**THE BOOK OF SHADOWS**

Fans awaiting the new Carnell megadventure The Wrath of Magra, will be pleased to hear that it is now imminent! Difficulties with fitting everything into the memory space and organising the competition which Carnell are running have caused the recent delays. Magra consists of three 48K programs in one package and requires the full assistance of a marvellously illustrated book to play it. The book, The Book of Shadows, runs to 150 pages and contains 51 black and white drawings. It details the history of The Third Continent upon which Black Crystal and Volcanic Dungeon were also based, in novel form. It is followed by pages and pages listing the enchanted beasts and objects which will be useful in the adventure, plus a recipe book of magic potions and spells and the times to prepare and use them.

The Wrath of Magra promises to be an all-encompassing affair, the sort of classic adventure which will require retreating from the world for several months! On top of that, The Book of Shadows should provide several more hours' entertainment for the ardent adventure fan.
It's the fun game of the year — Trashman.
From the moment you sit down to play you'll be thrilled by this exciting, original, laugh a minute game.

Your job may look easy to the rest of the world, but you know the hazards — speeding cars and pavement cyclists can both shake you up. Let's face it cars can be fatal.

But if that isn't enough you've got the other problems of vicious dogs, the after effects of overeating in the transport cafe or one too many in the boozer.

Not only will you be gripped by the action you'll be amazed and amused by the high quality graphics.

With seven levels of play featuring three attempts to finish the game (assuming you are not run over by a car) Trashman will provide even the most experienced games player with a thrilling challenge. 1 or 2 player option, Hall of Fame and joystick compatibility* ensure this game has all the best arcade features.

Trashman is available NOW for the 48K Spectrum. Ask for it today at your local computer store!

Only £5.95

*Kempston, Sinclair Interface 2, Protek or equivalent.

New Generation Software
FREE POST,
Bath BA2 4TD
Tel: 0225 316924.
Yes, folks! Roll up for the competition of a lifetime. You’ve been searching for the ACG Key in ATIC ATAC for months and now CRASH in association with Ultimate offer you the chance to really own that elusive key.

Even as we write, Ultimate are busy turning the ACG Key into a trophy to be given to the winner of this competition. All that has to be done to be its proud owner is to produce the best, most accurate map of the rooms comprising the game Atic Atac. The plans for each floor must show all the rooms and corridors, all the fixtures and fittings, colours of the doors, the secret passageways and the staircases – as much detail as you can sensibly fit in. How you do it is up to you.

The best drawn set of plans overall will also be used for preparing a large, full-colour poster of the castle, which will be published in next month's CRASH and the following issue after that. Stuck together, the result will be a detailed A3 sized poster.

And, of course, the cartographer/architect of the best set of plans will receive the Ultimate prize – the fabulous ACG Key trophy.

Drawings should be sent to: The ACG Competition, CRASH Magazine, PO Box 10, Ludlow, Shropshire SY8 1DB, and should arrive by the last post on 15th June – so you haven’t got all that long. Get those pens and pencils out now! We have already received plans of Atic Atac from a few readers – it would be best for those people to have another go, but if they wish, we’ll accept the plans as entries for the competition.

The decision of the Editor will be final in judging the entries.
Welcome to our new section! We have received so many letters from you asking for – even demanding – a few pages devoted to playing tips that we have given in. Lloyd Mangram’s desk has been slightly expanded and the budget has even stretched to a Spectrum and monitor for him, so he can test out a few of the less obvious tips sent in. Here, we will mostly (though not exclusively) be dealing with arcade tips, leaving the adventure-related ones to the Adventure Trail.

JET SET WILLY

The most pressing questions of the day seem to relate to Jet Set Willy, and thanks to all those clever dicks who have sent in mini-progs for giving infinite lives, etc. We’re not publishing those yet! But we have also had loads of letters complaining about the so-called bugs in an otherwise magic program. You seem to have been puzzled by the inexplicable loss of lives, which occur in two ways. But before that, for those who observed the ‘Gaping Pit’ in the screens we previewed (issue 3), the copy we used was Matthew Smith’s pre-production version, and a number of features altered slightly before it was actually completed for sale. The ‘Gaping Pit’ now becomes ‘We Must Perform a Quirkafleege’!

As to the ‘bugs’, perhaps our full review in the last issue (4) will have cleared up the point, but to re-iterate: many players have found that they lose all their lives on entering certain rooms after a while – The Kitchen, West of Kitchen, East Wall Base and Quirkafleege to be exact. Someone has said this happens ‘after a while’, others have correctly noted that it happens after you have visited the Attic. This feature has been built into the game to make life more difficult, the object being to close off most of the routes back to bed. Once the Attic has been visited a chain reaction sets in, causing loss of all lives in the aforementioned rooms and causing the guardians in the Chapel and some other locations to move (ostensibly to the killing grounds where you lose your lives).

Consequently, visiting the Attic should be left to the very last, and having been there, the obvious ‘easy’ route back through the Kitchens is out of the question. You will have to retrace your steps through the Banyan Tree (tricky). On the next two pages you will find a plan of Jet Set Willy’s Mansion, which may answer a number of questions. If you complete the game you will have to reload it to remove the block caused by visiting the Attic. This is actually the only mishap with JSW, and one for which Software Projects have already apologised. It was impossible, it seems, to get round the problem because of the sheer size of the program. How do you get under the Wine Cellar, into the Forgotten Abbey. When you’re in the Wine Cellar, the way out to the right of screen isn’t very obvious – try it though.

We said loss of all lives occurs in two ways. The second, which has upset a few readers, is when you fall through the bottom of certain screens and the action repeats until all lives have vanished. But if you think about it logically it seems fair enough. Such carelessness deserves a total loss of life!

Examples are: falling off a platform in the Orangery, down into the Swimming Pool. Actually, here you may be lucky to catch the rope on the way down and save yourself. Another example is up the Quirkafleeg to be exact. Some readers, is when you fall through the bottom of certain screens and the action repeats until all lives have vanished. But if you think about it logically it seems fair enough. Such carelessness deserves a total loss of life!

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WHEELEIE

Through reading your excellent review of Wheetle in the March issue, I trusted your comments and spent my hard-earned cash on it. You gave it 99% for addictiveness and I wholeheartedly agree. In fact I have found myself glued to the screen except for short breaks. Well, people do have to eat, don’t they? If some CRASH readers ever think of giving up, here are the codes to all unfortunate CRASH readers who don’t own it.

John Knight (13), Tamworth, Staffs.

ULTIMATE TIPS

Starting with Jetpac, if you position Jetman on the top right of the screen on the platform and leave him there, the aliens cannot kill him and your score will amass. Now on to Trans-Am. Start by going right. If you find a cup then travel in a straight line, and on the scanner another cup will appear. Do this until you have four cups, then go left and repeat the process. My best time is 1 minute 34 seconds.
Jet Set Willy's mansion is too big to fit right across the two pages, so we have split it into three sections, The House, the Drive and Megatree, and the Beach and Yacht. There is, of course, two-way movement between screens 41 and 48 (the stairs over the lofted and the beach); and between screens 44 and 54 (security guard and the drive). In addition screens 11 and 12 allow two-way movement, although on our plan there appears to be two screens of hyperspace in between. Similarly 'Half way up' (screen 29) and 'The Priest Hole' (screen 14) communicate vertically (up only).

If you manage to get into 'The Forgotten Abbey' (screen 43), you will discover a secret passage leads directly out below the 'Security Guard' (screen 44). It is possible to get out from under the Drive' (59) and emerge in 'The Drive' (54). The least obvious move is to jump off the roof of the 'Watchtower' (1) upwards and emerge in the 'Off licence' (58). There are a number of other less than obvious movements possible, but here we'll only mention that leaping upwards from the top of 'Dr. Jones will never believe this' will result in your emerging in 'We must perform a Quirkaflee' - not very nice...

KEY TO THE ROOMS

1. Watchtower
2. Nomen Lunl
3. On the roof
4. Up on the battlements
5. We must perform a Quirkaflee
6. I'm sure I've seen this before
7. Rescue Eameralda
8. On top of the House
9. Conservatory roof
10. Under the roof
11. The Attic
12. Dr. Jones will never believe this
13. Emergency generator
14. Priest's hole
15. Above the West Bedroom
16. West Wing roof
17. Orangery
18. A bit of sea
19. Bedroom
20. Top landing
21. Bathroom
Since Matthew Smith's mammoth game Jet Set Willy was released, we have received innumerable calls from players asking how to get to certain locations. Getting under the Security Guard is one of the most baffling problems to lots of you. Many of the problems can be answered by drawing a plan of the huge house, but if you can't find your way to all of the 60 locations, that's not much help. So this month we publish a map of Jet Set Willy's Mansion for you.

Each screen as it can be seen in the game is numbered from 1 to 60 with a key below. We have refrained from putting in arrows showing where single or two-way movement is possible, and none of the hazards or collectible objects are shown — that's still for you to find out.

The plan and the concept for it owes a lot to the research of CRASH reader Kenneth Kyle of Retford, Nottinghamshire, who sent in a marvellous drawing which we checked out and used heavily for our own artwork. Also thanks to Timothy Wildmore of Brotton, Saltburn, Cleveland, who was the first person to write in with an 'infinite lives' POKE without which we would have had to spend a lot more time on the planning! We’re not publishing the details of that yet — you’ll have to wait (those of you that haven’t already worked it out!).

CRASH June 1984
Next, Lunar Jeman. To fill up holes do this: keep fingers on the right key, pickup/drop key and ewntar/exit key. Two, continually press right key. Then exit key (I’m presuming you’re in the Moon Rover). Three, press pick up key, walk right a bit and press it again. Walk left. Press enter key. You are now back in the Rover with a filled up hole in front of you.

On Atic Atac: the green key is always on the level you start on and sometimes is just a few rooms away.

Richard Leadbetter, Witham, Essex.

CHUCKIE EGG

From levels 17-24 of Chickie Egg, both the robot hens and the yellow hen are after you. This increases the excitement and makes it much harder.

Philip Davey, Marton, Middlesbrough, Cleveland.

THE ACG KEY

In reply to Stuart Mitchell’s letter about Atic Atac, I have achieved 99% as a Knight, 98% as a Wizard and 95% as a Serf, and escaped each time. The three parts of the ACG key are to be found on different floors, and the only part that is always in the same place is the third part of the key. But it is deceptive as it resembles a golden cup. The spanner kills Frankenstein and if you have the cross you’re safe from Dracula. If you drop the leaf in the room where the Mummy is, he will eat it and then go after you. If you drop the claw in the room where Quasimodo is, he will move on top of it and then you can go through the blue door. After a very lengthy period, he will go back to guarding the door. Congratulations to Ultimate on the best game they have produced so far. Thanks, too, for a great magazine.

Paul Reynolds, Swindon, Wiltshire.

ANT ATTACK HOBBIT H.O.T.T

Most of my friends have great difficulty in rescuing 8+ people on 3D Ant Attack. The most dangerous thing to do is to follow the scanner exactly, as this leads you through the city where you’re most likely to run into difficulties. The method I used is this: first of all, walk to the extreme left or right wall of the city (bearing the scanner in mind) and walk along that wall until your scanner turns red. As you are on the wall, you can move either left or right until you reach the person. With this method I rescue eightier more people every game. It is automatically finished when you rescue the tenth.

On the adventure scene, I would like to mention these things about the Hobbit. When you meet the Dragon, you must get Bard to shoot him before you take the treasure, and once you have gained the treasure, you must not try to go home through the forest, but let yourself be captured by the wood-elf, break down the magic door with the barrel or arrow, and then go home. To finish, put the treasure in the wooden chest. With Halls of the Things, if you press 2 and SPACE, the door to the bottom level will open. Upon entering this level, you must be very, very quick as all the walls and connecting doors have been destroyed and the playing area is a massive hall. To finish the game you can give up the golden ring and then return to the doorway.

Ronald Smith, Norris Green, Liverpool.

3D ANT ATTACK

ATIC ATAC

My best time is 6 minutes 50 seconds dead! And that’s after knocking two seconds off my previous time. Stuart Mitchell appears to have the wrong idea about the percentage; it’s only a measure of how many rooms you have been in. Try to go for a fastest time or highest score. I managed it once by only going through 57% of the rooms, and once without the red key at all. I only use the knight because the serf doesn’t seem to stop properly, making it difficult to position him on the keys, etc. and because the wizard is the slowest (I think).

There are many tips I can think of, but these mostly relate to the knight, however the ones below are apparently universal.

There are no yellow doors in the caverns, so you can leave the yellow key upstairs. That’s if you can find it! The yellow key is always in the room with four doors, all yellow. You get in by a trapdoor from above – too complicated to explain. But you must get the yellow key to be able to get up to the attic, which is blocked by a yellow door. There is always one part of the ACG key up there on the top floor.

I was disappointed by the end of the game when you escape though. No music or anything.

Eye of the Night, Purley, Surrey.

MORE ULTIMATE TIPS

Psst: After getting past the first level and the slugs, you will need two different cans of spray but you can’t hold both at the same time. So put one above the other in one of the corners, it makes them easier to swap over. Also, get the grow-bags, water cans and fly swatter.

Jetman: If you run out of fuel, all you have to do is get back into the Moon Rover and you fill again.

Jetpac: On the first three levels, it’s better to stay at the top platform and fire left and right very rapidly, leaving the platform only to get fuel, jewels and gold. On level 4 you can stand on the left side of the platform in the middle and the aliens will not hit you – they crash and you get a lot of points.

Tranz-Am: When you are being chased by the crazy black car your engine will overheat and you slow down. Hide behind a tree, stone, etc. and you will cool down while the chasing car cannot usually get you until it has hit the obstruction about five times. This gives you time to cool down and escape.

Cookie: On the Colonel Custards – if you stand at the top and fire down you will knock everything into the bowl, including Mike the Pikes and Tin Tin Cans, which come out of the bin, but you will eventually fill up the mixing bowl. Tery Tacks, Bernie Bolts and Wally Washers home in on you, so watch out for them. Before a nasty is thrown out of the bin, a thing will pop up. If you throw a bag of flour at it, he will not throw a nasty out. It’s best to do this on the higher levels.

Scott Cooper, Wantage, Oxon.
LUNAR TRAILER

In Atic Atac there are various things like a claw and a leg and a football with a pacman on it. If you put them all together along with the head and helmet you can create a monster! In Lunar Jetman after you have progressed past level 10 it is possible to find a trailer for your moon buggy which will hold three more implements. (Can anyone tell me how to type in your initials on the hi-score?)

Matthew Callaghan, Ravensden, Beds.

LUNAR HOLES

In last month's issue you remarked on how hard it is to fill in the holes in Lunar Jetman. Well, you needn't fill in the holes at all. When you reach a hole hold down the key for the direction you wish to go in, then continuously exit and enter your buggy. Each time you do this the buggy will move a little more over the hole. Once you are over the hole remain in the buggy and continue on your way. I hope this solves your problem.

JU. Flattery, Skelmersdale, Lanes.

CORRIDORS OF GENON

Anyone who has played this game will appreciate that the quicker you crack the computer's code, the easier it is to escape, because Bogut will have had less time to clone. Once you reach the computer, press a number. If a black square appears, remember that number and go on to another number. Do this until you have the three numbers of the code. Then, without looking at the screen (which wastes time), type in all six combinations of these numbers, eg. If the numbers are 3, 6 and 7 start with 3, 6, 7 then 3, 7, 6, go on to 6, 3, 7 and so on. By this time, the computer's code will have been broken and Bogul will only have had time to clone, at the most, four times. On the way out, if you see Bogul coming, don't panic. Turn the other way and walk. You can walk faster than Bogul, so walk past a few doors until his footsteps fade away.

John McKinlay, Lichgelly, Fife.

JET SET MAGNETIC

A rather amusing point about playing Jet Set Willy is when you get on to the sheet called the Orangery. You get a magnetic head! To get a magnetic head you must position yourself on the diagonal line going down the screen, and just under the orange ledge that sticks out about half way up the left-hand side of the screen. Then press jump and keep it pressed. Lo and behold, a magnetic head!

Stephen Jarvis, Ryde, Isle of Wight.

Okay, Stephen, I tried this most useful of playing tips out, and you know what — it works. Great, so what can you do with it? LM

More tips next month. Keep 'em coming! Lots of you have included playing tips in letters to the CRASH FORUM, still write to the FORUM, but make sure any playing tips are kept separate from the main text of your letter to Lloyd, because it makes life easier for those sorting the mail (and we could do without a strike for shorter working hours at the moment)!
MERLIN’S RECIPE

To create a Dungeons and Dragons game can be as much fun as to actually play it. With programs such as THE QUILL by Gilsoft or DUNGEON BUILDER by Dream Software, very little programming knowledge is required. Let there be warning however that a logical and skillful mind is essential, as even the most simple detail of the program requires careful planning. If our hero, the player, is to stand a chance against the pitfalls and Dragons of the adventure. If you have a preference for graphical adventures, the Dungeon Builder is your comrade in arms. Discover the secret weapons at the reach of your fingertips...

The curious cassette box hides a 100-page manual containing hidden secrets and instructions and a single cassette loaded with the latest dungeon construction gear and dragon breeding equipment. The cassette also stores a hors d’example adventure to whet your appetite and to get you started on the right track...

The manual reads like Merlin’s recipe book, advising you of the eight powerful menus at your disposal and introduces you to every single command feature with an example, which gradually allows you to build up a simple doorless two-chamber horror quickie to the most sophisticated multi-level dungeon mansion with all mods and cons such as self-locking doors and cliffs, trap doors and spiral staircases, secret passages and spacewarps, wall-to-wall treasures and blood curdling monsters.

The central playing ground is the Main Display Screen displaying a portion of a 40 x 40 cell map. Each cell is octagonal and represents a room with eight walls. A cursor pinpoints the editing location and the co-ordinates of every cell are displayed. In the upper right-hand corner is the memory gauge, indicating the amount of free bytes left. Below appear the various menus with command selections.

Upon selecting CREATE from the Outer Menu, all cells are restored with all walls intact and all objects destroyed. The basis of the system is to modify or knock out the walls of the cells, to create descriptions and if required screen pictures for the cells, create objects, etc. The player, all living beings, treasures, stairs, doors, keys, etc, are all treated as objects and must therefore be created individually. To any object is allocated a name, a score, a weight, a (starting) position, commands from the verb list to which it reacts and descriptions, when encountered in a room.

Several action commands may be allocated to one object, for example ‘Open door’, ‘Close door’ and depending on the command taken, one of the following actions may be taken:

- PRINT Prints a message, eg ‘The door is locked’
- DIE Object is killed
- MOVE Moves the object to a new position (Any, Carried, Here, Select)
- STATUS Changes the status of the object (ie from closed to open)
- JUMP Causes player to move to a position specified. For each status a different description of the object may be given. Each command recognised by an object increases the Verb List. Each command can be made dependent on a given condition and the action is to be specified.

This sounds all very complicated, but in fact is made very easy by the automatic prompting of the program. Depending on the previous action a new menu is displayed and makes sure that no logical errors occur.

Basically the creation may be subdivided into the following main activities:
- Create and modify objects (Name, Description, Score, Commands, Position, Weight).
- Create and modify objects (Name, Description, Score, Commands, Position, Weight).
- Create and modify objects (Name, Description, Score, Commands, Position, Weight).
- Create and modify objects (Name, Description, Score, Commands, Position, Weight).
- Create and modify objects (Name, Description, Score, Commands, Position, Weight).
- Create and modify objects (Name, Description, Score, Commands, Position, Weight).

The commands recognised by the objects make up the Verb List. Since the command processor checks on the status of the object and various commands can be allocated to one object, multiple actions are made possible.

The cell walls are double-sided and may be broken through on one side only for access in one direction only. Conditional movement through a wall of the cell is possible, where the command processor makes the movement conditional to the status of an object, an open or closed door.

A wall of a cell may be made to react to the approach of the player, the action involving Say, Die, Move, Status or Jump. With Jump a spacewarp effect can be achieved, whereby the player will leave the room and appear at any given position on the map. Say will allow a message to appear when the wall is approached. For multi-level adventures it is necessary to create pseudo objects. These start with a dot and are therefore not printed on an Inventory or an entry into a report.

Stairs may be created as a pseudo object, which recognizes up and down commands and acts accordingly. When in the middle of a cell the menu asks for a description or picture. Selecting picture will activate the Picture Creator.

The facility includes apart from the basic functions, a colour selection the drawing of lines and the painting of solid triangles. The cursor is controlled by the cursor keys (Caps shift for eight pixels per keystroke). Once completed the resulting picture will be displayed whenever the room is entered.

The unfinished program may be saved to cassette and reloaded. An excellent facility is provided for saving the completed adventure game in machine code, so that it can be loaded and played independently of Dungeon Builder.

In conclusion, the Dungeon Builder is an excellent Graphic Adventure games creator, which simplifies the generation of even the most elaborate adventure and thus provides a possibility for the less experienced programmer to create an adventure masterpiece.
Main Display Screen

- Passage causes consequence list to be executed. (Shown in yellow)
- Open diagonal passage
- Number of bytes free for your game
- X coordinates (Range 1-40)
- Conditionally open wall, displayed in red
- Single wall permits one-way movement from W to E
- Flashing cursor
- Centre editing menu (Displayed when the cursor is on the centre of a cell)
- Edge editing menu (Displayed when the cursor is on the edge of a cell)

The Dungeon Builder

Author: R.D. Parratt

CRASH June 1984 55
Chances are, we've got your new Acorn Electron.

If you’re itching to get your fingers on this long-awaited computer, your best bet is to find a larger branch of W. H. Smith, because we’re the major distributor of the Electron.

Of course it’s not surprising that it’s proving to be so popular.

It speaks BBC Basic. Its 56 key electric typewriter style keyboard is robustly constructed with a good solid feel.

The Electron provides seven different display modes from high resolution graphics necessary in games, to a full eighty columns of text.
ill be supplying
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across the the screen. It comes not only with a comprehensive user-guide, but also with a book that takes you through the principles of Basic programming, as well as a demonstration cassette containing fifteen programs. And it costs only £199: at this price and with its impressive specification, the Acorn Electron represents outstanding value for money.

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CRASH June 1984

CR6

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WIN A STACK LIGHT RIFLE
AND A COPY OF INVASION FORCE

Thanks to the generosity of Stack and Micromania, we've got five Stack Light Rifles and five copies of Micromania's Invasion Force game to give away! The Light Rifle, which normally retails for £29.95, was reviewed in the April issue of CRASH, and so was Invasion Force, a shoot 'em up designed specifically to work with SLR.

HOW LUCKY ARE YOU? IS YOUR SIXTH SENSE HIGHLY DEVELOPED? JUST HOW GOOD IS YOUR AIM?

To enter the competition, all you have to do is write down on a postcard the co-ordinates of the six squares which you think may contain an alien. You must also complete the tie-breaker sentence. The winners will be the five entrants who get closest with their 'shots' to both invisible aliens. In the event of a tie, the best completed sentence in the opinion of the editor will be the deciding factor.

Send your entries to the Stack Competition, CRASH Magazine, PO Box 10, Ludlow, Shropshire SY8 1DB, to arrive no later than last post Friday, 29th June.
Roger Kean ponders upon the problems of educational software.

Educational software poses something of a problem, especially for a magazine like CRASH. We are supposed to be a lively games software review publication, which means that the majority of readers for whom we cater are most likely to be those with a contempt for teaching software. The situation is even worse if a lot of the reviewed software is primarily aimed at infants. In talking to a well-versed games player of some 15 years, I asked him what he thought of 'educational software.' He replied, 'Rubbish,' very firmly, and added that it was probably okay for kids.

Perhaps the taint of school hangs too much around the term 'educational software' for a games addict to take it seriously at all. As long as this attitude persists it remains difficult for CRASH to deal sensibly with teaching software.

A similar problem, I suspect, faces the software companies themselves. There was a feeling abroad at the end of last year that 1984 was going to be the year for educational games and that we were facing a boom in sales. True enough, there has been a flood of product, with many of the established publishers like Heinemann, Longmans and Penguin rushing programs out. It might be thought that as the school standard, the BBC model B computer has been a favourite, but the Spectrum is probably better catered for. It remains to be seen, however, whether the enthusiasm of the publishers will be matched in sales by the public. As with a magazine which isn't sure how to cope with the often opposed demands of its readers, so the software houses haven't discovered how best to market educational software.

The managing director of a leading games software house once told me that it might be possible to 'sell' educational games to the school-age people it was intended for, on the angle that they could persuade their parents to buy a home computer because there would be lots of learning programs available. Then as soon as it was installed it would only be a matter of time before its young owner could switch to the far more important matters at hand—arcade games!

Of course, one way to get around this lack of appreciation from the intended market is to ensure that the learning end of the game is well sweetened. Quite a lot of Spectrum software turns out to contain seriously good games, in some cases games well able to hold their own with their less learned arcade brethren. Heinemann's Ballooning is really tough and interesting simulation. Longman's Robot Runner is a reasonably difficult arcade game and Sinclair Macmillan's Magnets makes a fine and deceptively hard board game. I think any of these, and others besides, would actually sell quite well if they were to be repackaged and have the faint odour of school dinners flushed away by being turned into straightforward computer games.

Mind you, this begins to echo those older arguments that champions in the cause of computer games have put forward that any computer game is actually teaching the player any number of skills during play. They are just not always obvious, but they are there. So, turning the coin over, you are left wondering whether, in the search for sweetening learning with excitement, software houses have actually left much teaching value in the games.

Another factor that confuses the issue of educational software is the attitude of schools. When the computer first arrived in the classrooms it was largely used to perpetuate its own position: ie, it was used largely to teach people how to use computers and to understand the processes of programming. Today, and with the advent of much cheaper machines leading to more classroom availability, one would hope the computer is used as a tool for teaching all kinds of skills of which computer programming is only one. But do British schools or educational authorities have a coherent policy of software buying? I suspect not in general. In any case, there are serious indications that schools, who happily buy thousands of copies of a particular textbook, prefer to buy one or two copies of a piece of software and then make back-up copies for the classrooms. This situation is worsened by the self-evident fact that there is not a computer per pupil, and therefore hardly a need for thousands of units of a program.

Furthermore, the cost of educational computer software is very high. On the Spectrum it is certainly cheaper than say for the BBC, but still runs out at between £8 and £10. If this puts schools off, it must certainly put off parents too. As Spectrums are more commonly found in the home than in the school, software houses have had to tailor their products to suit parental guidance, especially with programs intended for infants. This is all very well, but for the parent who wants to purchase, for instance, all six of the Mr. T series from Good Housekeeping, it represents an outlay of almost £60, which seems quite a lot to pay for the privilege of offering parental guidance.

So what does it all add up to? A confused market, potentially a huge one, but one that falls between the needs and desires of children, parents and school teachers. It isn't all gloomy of course—the very fact of the computer and the availability of excellent software will eventually establish some stability. There are already signs of this stability with some software houses reporting regular and substantial sales of their programs through schools within a local area authority. But nevertheless, it is likely to be a period of struggle for many companies who have entered the field, and I rather doubt whether the people who are supposed to be learning while they are playing will ever fully appreciate the programs as learning vehicles. Meanwhile, we will continue to keep an eye on the situation and review educational games on a regular basis under the heading of CRASH COURSE.
Caesar the Cat

Producer: Mirrorsoft
Memory required: 48K
Retail price: £6.95
Language: machine code
Author: Andromeda Software

Caesar the Cat is a game designed with younger players in mind, but its graphics, content and playability lift it into the realm of original arcade games probably worth anyone having a look at. The larder comes with four shelves, well stocked with items of food and a few jars.

Caesar must prowl the shelves and catch the mice which are constantly nibbling away at the food. He can walk either way along any of the shelves as well as jump up or down. But knocking over a jar will cost 1.000 points, and the red jar will end the game. However, Caesar may walk behind them without any harm, it's only if he jumps up or down where a jar stands, or when he's right beside one that he trouble happens.

Catching mice is not an easy task as, but refuse to stay on the same shelf as Caesar, so the cat has to act in a cunning way. If he jumps up or down where a jar stands, or when he's right beside one that trouble happens.

First seen on the Commodore 64, this Spectrum version has translated very faithfully. In fact, much common with some other games which are available on both machines, I found the graphics here clearer than in the 64 version. Caesar is excellently animated and characterful - so are the mice with their little tongues busily at work on the disappearing food. For kids it should come as a thrill to discover how to catch the tricky mice - it may even come as a surprise to adults! For the arcade player it is certainly worth half an hour's attention.

Other problems are that Caesar must not be allowed to sit down, or your score goes down rapidly to zero. The cat is also docked points for banging his head on walls or ceilings.

CRITICISM

This game contains some good, large graphics, the cat is well animated when considering its size. I personally found the game a little aimless after catching a few mice, but with its colourful graphics it should appeal to the younger players, say 10 and under.

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Musicmaster

Producer: Sinclair
Memory required: 48K
Retail price: £9.95
Language: BASIC
Author: Incognito
Software

It's unlikely that the sound output of the Spectrum will ever rival that of the London Symphony Orchestra or that a budding Beethoven will claim his Spectrum taught him what he knew. Mind you, unless you significantly amplify the sound output for this Sinclair program, you might think you are simulating Beethoven's inability to hear what he was playing because of his deafness!

Music Master's keyboard mode.

Music Master is a rather jolly tutorial program which allows you to create tunes and play them. The program can hardly be claimed as a utility, and it probably fails to be educational in a detailed manner. There are two modes available - Stave or Keyboard. Stave mode provides a range of two octaves upwards from A below middle C and uses the alphabet keys a to g and a to G. The notes may be prefaced by pressing keys S (sharp), L (flat) or N (natural). Keyboard mode allows the two top rows of the keyboard to be used as a keyboard instrument with 10 white notes and 7 black notes from middle C upwards. There is an overlay supplied for the keys to help you play.

The main menu allows you to select Notes On Music. a sub-menu with five sections offers reasonably detailed notes on music and writing it as it applies to this program. Note pitch, duration are covered.

CRITICISM

The main drawback with any music program for the Spectrum is the Spectrum itself. It's sound limitations really make it little more than a toy when it comes to music. Obviously with one one channel it isn't possible to make up really interesting sounds and one is restricted to the familiar beep with different durations. That said, it is possible to write neat tunes with this program and the Notes section does help to make it a valuable early learning aid (not necessarily for children either).

Being in BASIC there are aspects which are slow. Some of the graphics take their time to build up. and you can get stuck for ages in the notes section on duration, I wouldn't think this is intended as a serious music learning program, although it could be useful for back up purposes in learning.

I was surprised to see that in Keyboard mode you can delete the last note written, but apparently you can't do so in Stave mode.

Musicmaster may be a way of learning about music, or a way of teaching people about music BUT being written in BASIC it is impossible to get any beats and tempos going realistically. It's odd that Sinclair have released something that is written in BASIC when they could have done a program in machine code and included far more features like synthesis.

COMMENTS

Control keys: all by on-screen prompts
Use of colour: simple. But
Graphics: stave and note representation works very well
Sound: rather depends on you
General rating: within its BASIC limitations and that of the Spectrum itself, this turns out to be an interesting program that should provide fun and entertainment - but it has got limitations

Use of computer: 55%
Graphics: 68%
Playability: 72%
Getting started: 79%
Value for money: 60%
Overall: 67%
Ballooning

Producer: Heinemann
Memory required: 48K
Retail price: £9.95
Language: machine code
Author: Five Ways Software

This is a simulation game in the Heinemann educational series of games. Yet it actually rides up into the airy atmosphere of a game playable as a game and not as a learning vehicle.

If the price seems a little steep it may be because of the packaging, which comes in the form of an A4 sized book within a plastic holder. The 18-page colour book contains a fair amount of information relating to lighter-than-air balloon history, and is illustrated with drawings, monochrome and colour photographs relating to diverse subjects such as the Hindenburg disaster and why it happened, the use of balloons today in advertising and how to plan a hot air balloon flight. There is also plenty of detail on how to use the program and what to accomplish with it.

The game contains a training mode to familiarise the player with controlling the balloon flight, a test phase, which demands certain tasks to be completed, and a live mission phase, where the player must land, collect items or people and fly them to destinations at specific distances. There are four balloons to choose from, but their only distinction is the colour of the envelope. Next the level must be selected – training, test, live mission and, finally, the rank of the player (difficulty level), cadet, officer, ace.

The scrollable landscape below, and controlling it is done by lighting the burner, or opening the vent at the top of the envelope to let hot air out. Careful control of these two opposing forces is essential to land safely.

On the two higher levels there are a number of hazards which may be encountered like turbulence on landing, instrument failure or the vent being jammed. The program also allows for changes in wind direction (a symbol for a windsock is shown at the top of the screen) which may force you to change heights. Going much above 1,000 will take you out of sight of the ground.

CRITICISM

'Ballooning is a fascinating and compelling game, with the added advantage of colourful and interesting back-up information provided in the packaging, which should keep a wide range of players happy for hours. I liked it very much.'

This game is a simulation on ballooning even though it is aimed at the educational market. Once I started playing it became difficult to leave it alone. The essential R.O.C. display:

Use of colour: good

Graphics: smooth, detailed, very good
Sound: none
Skill levels: 3
Features: excellent packaging with colour book included
General rating: a good educational program, which rises to the levels of a compelling game in its own right.

<table>
<thead>
<tr>
<th>Use of computer</th>
<th>70%</th>
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<tr>
<td>Graphics</td>
<td>76%</td>
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<tr>
<td>Playability</td>
<td>78%</td>
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<tr>
<td>Getting started</td>
<td>86%</td>
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<tr>
<td>Addictive qualities</td>
<td>77%</td>
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<tr>
<td>Value for money</td>
<td>70%</td>
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<tr>
<td>Overall</td>
<td>76%</td>
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Time Traveller

Producer: Sulis Software
Memory required: 48K
Retail price: £8.65
Language: machine code

It is the year 1507 BC and you are lost in a great forest of oaks. It is getting dark, and as you try to reach the Time Gate wolves are gathering to attack you. Can you reach the gate in time?

So starts Time Traveller, a genial history question and answer game from Sulis. Aimed at 7-year-olds and upwards, it combines some straightforward with some quite specialised questions on five periods of history. These are the Bronze Age, the Roman age, the Eleventh Century, the Sixteenth Century and the Nineteenth Century. The game takes the form of transporting the player to the next period up. On arrival there is a time gate question to be answered along the lines of, "What do you associate with this period?" You are then presented with an option of three typical answers, one of which is correct.

When this is completed there are three questions asked of you before you leave the age. This is presented in the same way as the time gate question at the start.

Eventually you are transported to the twentieth century, where you are told that the people there are fussy and won't let you in unless your score is high enough. If this is the case then you must choose an age to return to where more questions will be asked of you. This is repeated until you have scored enough points to make it to the modern age.

CRITICISM

History is so often a boring subject for children so anything which is designed to add an element of competition and gameplay is to be considered welcome. The combination of arcade games (which get faster when and if you have to return to them a second or third time) and questions is likely to appeal, whilst imparting knowledge of an age at the same time. The questions are asked and answered in a way which shows the player what is correct. Some of the questions are quite general (where was the Boer War fought?) others are designed to sort out common confusions (in the 19th century were terrace houses, villas or brick-built houses typical of the age?).

The result is a very good learning game, with a surprising amount of questions stored away in its memory banks. As the questions are picked at random, there is the chance of being asked the same ones twice in a particular age, but this is no serious drawback since it reinforces the correct answer and gives the player a feeling of accomplishment in remembering.

The graphics throughout are snappy and appropriate, although fairly small moving characters are used. They are jerky too, but this doesn't really detract from the overall idea. Perhaps the only quibble one might have with questions like the ones used here are that they sometimes tend to channel thinking too much. For instance, asked whether forts or factories were something the Romans had as well, Nevertheless, a program like this is not really designed for specialist learning and it represents a fairly sound concept. Perhaps the price is set too high for schools use though.

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Spellbound
Besieged

Producer: Sulis Software
Memory required: 48K
Retail price: £8.65
Language: machine code

This package comes with two cassettes in a plastic video-style box. The games within are one of a series of four spelling programs under the Spellbound heading. Besieged has as its graphical theme that of a castle being attacked by the Infidel. You must get a Crusader to cross the moat and relieve the castle. This can only be done by building a bridge, the stones of which are made up by correctly spelling words. On the back of the box it suggests the age group for these games as being 15 to adult, and certainly the words encompassed in these two programs are not simple ones. Each has three difficulty levels, easy to difficult. On the two easy levels you are given a clue and below it 12 jumbled letters from which the word must be made up. On the harder level you are not given any letters to use. An incorrect entry results in the broken span of the bridge above being repaired by one block containing the entered letter. If the entire word is correctly spelt then the bridge is fully formed and the crusader can cross into the castle. When 10 are successfully over the Infidel are beaten. Any incorrect entry results in the letter appearing as a building block against the castle walls and an Infidel leaps up on to it. With three incorrect entries the building blocks reach the top of the castle wall and the game is lost. That's basically all there is to the game. The reason, presumably, for having two cassettes in the package (they are both the same) is to incorporate a sufficiently large vocabulary of words to make it worth while.

CRITICISM

The graphics work very neatly with visuals complementing the game idea in a suitable fashion. Input and response time is quite fast, so there's no hanging about. The words to be spelt and the clues given make for an entertaining as well as educational program which should prove valuable as a home teaching and revision aid. It should also make for a family quiz evening game. The use of clues adds a crossword problem solving element to the straightforward problems of spelling correctly some quite hard words. Clues like 'distinct, separate' turn out to be the word 'discrete'. And this points up another aspect of Besieged: that of forcing the player to recognise the vagaries of English spelling. Discrete and discreet, principle and principal are examples of the sort of thing we all stumble over, and this program makes the most of them.

COMMENTS

Control keys: alphabet keys
Responses: fast
Use of colour: simple and effective
Graphics: good
Sound: useful beeps
Features: two cassettes in one box
General rating: for advanced and not so advanced spellers, but it does require some knowledge of words.
Punctuation Pete

Producer: Heinemann
Memory required: 48K
Retail price: £9.95
Author: Five Ways

Software

This package contains two games, Punctuation Pete and Wordfinder. Wordfinder provides three separate smaller programs, the first being the wordfinder itself, a sort of mini-thesaurus with about 1,000 words in it. The theme is travel and the screen presents you with a list of words related to various forms of travel. From this list it is possible to investigate similar words, find similar words and make connections between words. The wordfinder is then incorporated in the following two games, Anagrams and Hangman. Anagrams mixes up the letters of the words in wordfinder and asks you to unscramble them. It is possible to interrupt, go to the wordfinder and search for the word if you get stuck. Amazingly, even the most obvious of words can cause confusion. What would you make of C-C-L-E-Y? It took ages to discover CYCLE.

Hangman is a guessing game where you must create the chosen word from nothing, with the computer placing correctly guessed letters in the right place, or drawing one more line of a hanged man for incorrect ones. This guides children to the use of vowels as major building blocks. It is possible to give up and see the correct answer.

Punctuation Pete presents the problem of punctuating quite long pieces of prose. Seven lines are displayed on screen, usually a very short story, Punctuation Pete can be made to walk along the lines, and by using the punctuation keys of the Spectrum, the correct punctuation may be added where it should be. On the higher of the three skill levels, this will include quotes for speech with all the attendant problems of whether full stops or commas come before or after the quotes. When a piece is completed, Pete will return to the top of the screen and point out any mistakes, which may then be corrected. Afterwards, he will return to the top and check every line, jumping for joy if everything is correct.

The game contains many neat touches; Pete is very well animated for instance. It is essential to change lower case letters into capitals where required, and when this operation is carried out, Pete gives the offending letter a casual kick with his foot to alter it.

CRITICISM

Wordfinder presents some tough problems and looks like being a real aid to learning the meaning and association of certain types of word. Punctuation Pete is just marvellous. The polish on this piece of software is evident, and the animation of Pete himself should delight younger children, and amuse adults. In fact the exercises provided should prove valuable to adults as well, and this is not a patronising game at all. The back-up booklet provided in with the package contains 16 pages devoted to the history of writing, comments on writing stories, place names, playing with words, code breaking and the simple background to printing. Despite its rather high price, Punctuation Pete is a worthy game with probably more usefulness as a learning aid than many so-called educational games.

COMMENTS

Control keys: punctuation keys, well described in book
Use of colour: simple
Graphics: very good
Sound: none
General rating: a little pricey, but an excellent program.
Magnets

Producer: Sinclair/Macmillan
Memory required: 48K
Retail price: £9.95
Language: machine code
Author: Five Ways Software

Magnets is part of the Science Horizons Series of software, and is educationally aimed to give an understanding of the polarity of magnets. This might sound like a rather dry subject, but the model has been simplified so that the attraction force operates only in two dimensions, and the scenario has been provided as a draughts board game.

The result is an entertaining game of strategy. It is played on a 12 by 12 square grid between two players or one against the computer. Each player has five supermagnets, one on the board at a time and 10 pawn magnets with a force value of one. The supermagnets are lettered A to E and each has an increasing power. Each player’s pawn magnets may be used to attract or repel the opponent’s. A player may also combine his own magnets by lining them up so that their values are added together, and sucking up an opponent’s pawn magnets will result in their value being added to the winner’s pawn magnet.

A further 25 pawns are stored in a bank and may be brought out on the board at will.

To win you must either conquer all your opponent’s supermagnets, or remove all your opponent’s pawn magnets from the board.

CRITICISM

Magnets is a game of very simple graphics and with a rather simplistic attitude towards the way they work. It’s rather doubtful that anyone will really come away knowing much more about them beyond the fact that like poles repel and unlike poles attract, and that a stronger magnet is capable of exerting a greater force over a weaker one. However, what does have to be said is that the resulting game is curiously satisfying, involving quite a lot of skill in the manoeuvring of pieces to gain the upper hand.

The game comes complete with detailed playing and objective instructions.

COMMENTS

Control keys: Y/N up down, G/U left/right, C to rotate, SPACE to move cursor.

Use of colour: very simple, red, green, white and black.

Graphics: just grid and colour blocks.

General rating: of probably dubious educational value but certainly a game worth playing!

A red pawn magnet has just blown away one of Green’s few remaining super magnets.
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In association with the Guild of Software Houses (GOSH) we are offering readers a service which should prove to be of great value. In effect it is a Consumer Service to help right wrongs and if all else fails to write wrongs as well.

The past couple of months have been very active for GOSH with twelve more software houses joining the organisation including Audionic, DK Tronics, Widget, Oxford Computer Press, A & F Rest, Artic, C.D.S. and Llamasoft. The present level of membership now stands at 25 and is increasing all the while as more software houses see the benefits of belonging.

A major item on the meeting agendas of GOSH is the serious matter of piracy, and GOSH is actively lobbying for support over piracy in conjunction with other computer trade organisations. As a result of legal action taken by GOSH on behalf of one of its members, a recent police raid resulted in seizure of thousands of counterfeit tapes, illegal copies of programs with cleverly reprinted covers.

In addition to protecting its members, GOSH is also concerned with customer relations and has drawn up model terms of trading. It is in this area that CRASH will be active. We have already received a number of letters and phone calls from readers who feel they have been treated badly. In some cases the writer had good cause, in some cases a software house has failed to respond to a genuine complaint, and in some cases the complaint was barely justified. A lot of complaints appear to be generated by slow repair times of Spectrums at Sinclair, which falls outside our brief, although any complaints will be investigated where possible.

Our aim is to act as a go-between, with the help of GOSH in sorting out problems. Very often software houses lack the staff to cope with out of the ordinary matters, and with the best will in the world delays can occur in processing complaints—sometimes it turns out to be the post! Whatever, we will try and do our best to see that both reader and software house gets a fair deal. If you have any problems and would like us to look into them, write to:

CRASH HELPLINE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB.

Please do not use the CRASH HOTLINE, as this is not monitored on a daily basis, and your call may not be intercepted in time.

CRASH June 1984
THE CRASH HOTLINE PHONE NUMBER IS
0584 (Ludlow) 3015

HOW TO USE THE CRASH HOTLINE
Method 1
Ring the Hotline telephone number (above) and record your votes on the answering machine. Please speak clearly, spelling out names and addresses if it's a "difficult" one! List your five games starting with the number one.
Method 2
Use the coupon below, making sure you fill in all the details. Pop the coupon in an envelope and send it to us. Alternatively you may send a letter if you don't want to cut up the mag. The telephone Hotline is getting very jammed after a new issue comes out, so bear with us if it's engaged. If all else fails - write in!

BRILL 'N' FAB HOTLINE PRIZES!!

Whether you phone or write in, all names go into the voluminous bag to be drawn monthly. First out receives £40 worth of software plus a CRASH tee shirt, and the five runners-up receive three issues of CRASH free plus a CRASH tee shirt.

Others may try and copy us but the CRASH HOTLINE CHART is the one that counts — and you are the people that make it count.

YOUR VOTE IS EXTREMELY IMPORTANT — USE IT PLEASE!

This month's Hotline winner is
John Stubbington,
Croesyceiliog, Cwmbran, Gwent.
The four runners-up are:
R.J.
Pomfret, Solihull, West Midlands,
Darrin Clark, Newbold, Chesterfield, Rob Holmes, Wirksworth, Derbyshire, and S.
Young, Reading, Berks.

CRASH HOTLINE WRITE IN COUPON
Please use block capitals and write clearly!

Name

Address

Postcode

I send your coupon to: CRASH HOTLINE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB

CRASH HOTLINE SPECTRUM SOFTWARE CHART

My top five favourite programs in descending order are:

<table>
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<th>TITLE</th>
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TOP 50 FOR JUNE

Figures in brackets show last month's position

1 (41) JET SET WILLY Software Projects
2 (1) MANIC MINER Software Projects
3 (2) ATIC ATAC Ultimate
4 (3) LUNCAR JETMAN ultimate
5 (15) WHEELIE Microsphere
6 (5) 3D DEATH CHASE Micromega
7 (17) SCUBA DIVE Durrell
8 (11) CHUCKIE EGG A&F Quicksilva
9 (3) 3D ANT ATTACK Quicksilva
10 (14) FIGHTER PILOT Digital Integration
11 (6) JETPAC Ultimate
12 (7) CHEQUERED FLAG Psion
13 (8) THE HOBBIT Melbourne House
14 (9) FOOTBALL MANAGER Addictive
15 (18) HUNCHBACK Ocean
16 (10) ZOOM Image
17 (20) ALCHEMIST Imagine
18 (13) PYRAMID Fantasy
19 (23) DOOMSDAY CASTLE Fantasy
20 (22) ANDROID 2 Vortex
21 (36) FRED Quicksilva
22 (19) BUGABOO Quicksilva
23 (16) PENETRATOR Melbourne House
24 (12) VALHALLA Legend
25 (—) BLUE THUNDER Wilcox
26 (25) SCRABBLE Psion
27 (40) KRAKATOA Abbex
28 (—) NIGHT GUNNER Digital Integration
29 (37) MR WIMPY Ocean
30 (—) POGO Ocean
31 (43) THE QUILL Gigsoft
32 (33) SPLAT Incentive
33 (21) HALLS OF THE THINGS Micromega
34 (27) PHEENIX Megadodo
35 (32) PSSST Ultimate
36 (—) CODE NAME MAT Micromega
37 (—) POOL CDS
38 (31) TRANZ-AM Ultimate
39 (35) MAZIACS DK Tronic®
40 (42) HARRIER ATTACK Durrell
41 (—) BEAR BOVER Artic
42 (—) COOKIE Ultimate
43 (30) JUMPING JACK Imagine
44 (—) TUTANKHAMUN Micromania
45 (41) SNOWMAN Quicksilva
46 (—) AH DODGINS Imagine
47 (50) THURSTMA Software Projects
48 (49) URBAN UPTAST
49 (—) MOUNTAINS OF KET Incentive
50 (—) H.U.R.G. Melbourne House

DEADLINE
Votes for the total chart must be in no later than 23rd June. Votes received after that time will go forward to the next month.

Nine new entries this month, the biggest leap being Blue Thunder, in for the first time at 25.
Incentive's adventure Mountains of Ket makes an appearance at 49, closely followed by the utility H.U.R.G. Ocean's Pogo shows a quick rise, in for the first time at 30, and new games from Quickilv and Artic have also appeared in the chart. The biggest riser and the least surprising is Jet Set Willy, but Microsphere's Wheelie is proving a popular hit, with Scuba Dive and Chuckie Egg also very durable. Fantasy's Doomsday Castle has taken a big leap up to settle in behind Pyramind. Follow-up top Fighter Pilot, Digital Integration's Night Gunner has leap in at 26, just pipped at the post by Abbex's Krakatoa. Will Micromega's new Code Name Met follow their very successful Deathchase up to the top? Nice to see The Quill is still moving up the chart and Micromania's Tutankhamun appearing.
Although this issue of CRASH has a few adventure games which are included although not reviewed by Derek, we will be incorporating most reviewed adventures in future within the Adventure Trail. Letters which have been pouring in from frustrated, bewildered and stuck adventurers are being sorted out even now, and hopefully Derek will be able to cope with some of them in time for the next month's issue.

Derek has also devised his own rating system for reviewed adventure games, which he feels is more suitable – it is explained below.

Adventure hints and help requests should be addressed to: Adventure Trail, CRASH Magazine, PO Box 10, Ludlow, Shropshire SY8 1DB.

This month: Fantasia Diamond – a new offering from Hewson Consultants; Here Comes The Sun (alligator); Temple Of Vran, the second in the Incentive Kev Trilogy; Incredible Adventure from CRL; a murder inquiry called Mystery Manor from Bamby; and The Lost Gnomes from Eric Bean Adventures.

**THE SEARCH FOR REALISM**

PUSH, PULL, EXAMINE, HIT, GET, MOVE... STATUE – it often ends up with you entering expletives. If your input is designed simply to match the words in the computer's memory, is this what adventuring is all about? What you need, surely, is a sense of reality in the otherwise fabulous world of the adventure. When engrossed in a good adventure you are aware of the computer as an aid only. It is a good sign when the program responds to as much of the input as possible.

It is infuriating when attacking and leaving a character for dead he returns fit and active enough to give you considerable problems only a few frames later. Never mind, he's carrying some food this time and it'll be worth it – but on examining the dead body you discover no food. Where has it gone?

The way in which a landscape is mapped out is a moot point. Many well-known adventures have vast regions where it is impossible to chart your progress (or retreat). Although this may add atmosphere in a misty swamp or the (unfortunately) ubiquitous maze, in the long run it makes you acutely aware of the data described in its locations, and how logically the problems encountered in an adventure and whether or not you are likely to be killed without warning or chance of escape. Chopping down a tree to cross the forest river is very logical - throwing a rope into a boat which is described in no location at all obvious words associated with these objects. If a tree appears in a location then the vocabulary should contain the word 'tree' as well as the associated world 'climb', otherwise the rating will suffer.

**LOGIC:** This rating reflects the logic of the problems encountered in an adventure and whether or not you are likely to be killed without warning or chance of escape. Chopping down a tree to cross the forest river is very logical - throwing a rope into a boat which is described in no location
Fantasia Diamond

Producer: Hewson Consultants
Memory required: 48K
Retail price: £7.95
Author: K.W. Topley

Fantasia Diamond, a family heirloom and the largest diamond known to man, has been stolen and removed to a fortress across the river. Boris, the master spy, who made his way to the fortress to recapture the diamond, has been imprisoned by the faithful guardian who patrols the rooms and corridors for intruders. On your journey you are likely to meet elves, pixies, gnomes and the decidedly unfriendly woodcutter.

Your mission is to enter the fortress, recover the diamond and rescue Boris. But once you find the diamond the game is not over - you must still get back home, and this can be the most difficult part.

On loading you notice a very attractive loading screen, followed by some pleasing graphical representations of the first few frames of the adventure. The screen that confronts you is very reminiscent of that used in The Hobbit. The screen is divided into two areas. The upper area shows the action taking place and the pictures of some of the scenes from the adventure. The lower area is used for your input and error messages.

This screen presentation is adequate but it can be difficult to keep your place on the upper scrolling portion as it receives fresh information. Using different colours for the objects, characters, etc. would help but it may have been better to clear the screen as you enter new locations.

When you start the adventure you are weak but you can build up your strength by eating and drinking. You should feed regularly otherwise you may become critically weak. Your strength determines how many objects you can carry and if you become too weak you won't be able to pick up the lightest of objects - including food.

The characters that inhabit the adventure lead independent lives with friends more or less sticking by you. During play you become aware of the real time element to the game. Every character takes action every 15 seconds whether or not you yourself do anything. However, if you feel like a breather all action stops when you start to type and doesn't proceed until you ENTER.

To make movement in the four main directions easier use has been made of the cursor keys, which is very useful for a quick early foray when the early part of the adventure can allow much more complex interactions and requires the adventurer to be specific. eg UNLOCK DOOR WITH KEY. Quite complex sentences can be used with each command starting with a verb, eg OPEN THE DOOR AND GO EAST. The vocabulary is varied enough to allow three keys which must be matched to three doors. Similarly with the three books. Another useful feature is that the computer can remember the last verb you used so you can GET KEY (ENTER) - WINE (ENTER), which saves time.

The game uses a powerful LOOK command, eg LOOK AT THE CHEST is distinguishable from LOOK INTO THE CHEST and you can even look across into different scenes with LOOK THROUGH THE WOODEN DOOR or LOOK INTO THE SMALL CAVE. This gives you a chance of avoiding unfriendly characters and so marks an excellent and very useful advance which other aspiring authors would do well to note.

Further examples of the breadth of dialect are seen with FOLLOW ROBOT and SAY TO ELF GET KEY. If you needed to be persistent with this last request CAPS SHIFT and 9 will repeat the commands on the last line you entered - a nice touch and a sign of a highly polished piece of software.

The abbreviations are very helpful - often the first or first two letters are adequate. Fantasia Diamond is a long adventure with many interesting and logical problems to solve. Highly recommended.

Difficulty 7
Atmosphere 9
Vocabulary 9
Logic 8
Debugging 10
Overall value 10

Temple of Vran

Producer: Incentive Software
Memory required: 48K
Retail price: £5.50
Author: R. A. McCormack

Temple of Vran is the second part of the Ket Trilogy from Incentive Software. Your mission in this part of the trilogy is to enter the temple and once there to put an end to all of its evil occupants.

You start the adventure with a sword, some armour, a ring and, of course, Edgar, your friendly assassin bug, who can be trusted to sink his poison fangs into your neck should you decide to shirk your quest.

This is a classic style text-only adventure with a large number of locations and many problems to solve which could
take weeks to complete.

Your travels will take you across the plains of Ket, into the depths of the Wart's Lair and ever forward in time to the years 1940 and 2300 before returning for your final confrontation in the Temple of Vran.

There is a good number of useful (and not so useful) objects scattered around. Care must be taken not to waste useful objects or leave them in another time zone.

The locations are lucidly described and are consistent in creating an exciting and credible atmosphere. Input consists of Verb/Noun couplings which is adequate although limiting when communicating with other characters. The vocabulary is quite flexible but there are a few annoying omissions and the use of the verb 'examine' is confined to those occasions when you are actually carrying an object.

Combat is much more sophisticated than in most other adventures, giving your statistics for Prowess, Energy and Luck. Prowess is your skill in combat. Energy indicates your state of health and Luck your fortune in combat. The tussles take place in rounds in which either you or your opponent is hit. If you are struck you are given the option of running or continuing to fight. Running can often prove to be the most dangerous as you can be struck from behind. All this adds up to make a more interesting game charged with atmosphere.

One small bug I encountered occurred during one moment of gratuitous violence. I was involved in a fracas with a mouse in the same location as an elephant. To my horror the combat status appeared with the mouse having an energy of 20 compared to my meagre 10. In the ensuing battle, which lasted nearly 20 rounds, I was knocked over and kicked several times and brought to the verge of death. Quite a blow to one's delusions of heroism.

This is an excellent game which can be heartily recommended, particularly for novice adventurers as the problems are not too difficult.

**Mystery Manor**

**Producer:** Bamby

**Software**

**Memory required:** 48K

**Retail price:** £6.50

**Author:** D.S. Kelly

As Inspector Sovitt you are called in to investigate the murder of Lord Smedley, who is found dead in the master bedroom of Mystery Manor.

With a serious absence of 'kinder' in the boxes, it's cold inside Mystery Manor.

Moving your user-defined character around the Cluedo-style map of the manor you gather clues but have limited time to find the murderer. Your score depends upon how quickly you can find the murderer and the weapon used.

There are only nine possible assassins and five weapons.

A typical game would have you visit just three or four of the 13 rooms that comprise the house and it is often possible to guess the killer after just one room. In one game, 'You learn that Lord Smedley has used his influence on Prof. Hall to prevent his marrying in the WC (where else?) and that 'The kinder boxes around the manor are empty due to a total absence of chopped logs' in the pool room. It is with genuine surprise you find your first five weapons (Prof. Hall with an axe) is correct. On playing the game for any length of time, clues and their solutions become very familiar. However, the fact that this game is far too easy is not its sole shortcoming.

The game makes use of the cursors keys - a poor choice, but not so critical as this is no fast-moving arcade game. Throughout the game you are pursued by the homicidal nut but it is so easy to escape his deadly clutches that in dull moments it is amusing to reverse roles and chase your assailant. If you tire of being told that you have just entered a room when it is patently clear that you've just left then you can forget about the entrances to the rooms altogether and simply walk through the walls.

Towards the end it is ridiculously easy to crash the game when making your accusations. If you can avoid falling out of the program then you can impress friends if you note that a p will always give you the correct murderer and w the correct weapon.

This game is unlikely to offer more than 15 minutes entertainment even to the most undemanding. The structure of its programming, the ineffective key responses, poor sound and the all too obvious absence of methodical debugging conspire to produce software no better than most could achieve given a wet weekend.

**Overall Value** 7

**Difficulty** 7

**Atmosphere** 7

**Vocabulary** 7

**Logic** 7

**Debugging** 6

**The Incredible Adventure**

**Producer:** CRL

**Memory required:** 48K

**Retail price:** £5.95

**Author:** A. Trenker

As a knight of the Fire you must find the Magical Globe which is protected by an evil Lord Nadish and the imprisoned souls of the Minotaurs, Serpents, Trolls and Skeletons.

So goes the blurb on the cassette cover but really this game is far more mundane. You are a small square block and you walk into crosses. In the bottom right hand corner you find out what you have walked into.

A castle and its grounds are mapped out over a large number of screens, each screen showing a corner of the castle. There is no on-screen scrolling - when you leave a section a new map is drawn. You move your block around with the cursor keys but your progress is hampered every 22 meters (when running) while the beasts' positions are updated. If this wasn't bad enough the program insists on flipping you back to walking when interruptions occur even more frequently.

A status report along the side of the screen informs you of your wealth, stamina, food, water, rating and map numbers. Unfortunately this is only updated when you leave the screen, which can lead to a situation where you are chopped down in your prime when all seemed well. Your wealth is updated when you leave the castle. At one point I had 110 rubies, emeralds, etc. Pressing 0 will fire one arrow in the direction you last moved. But this game is no video nasty - the beasts you must kill are represented by arrow and spade shapes which are in no way intimidating and will not approach to fight.

Given time, and patience, you proceed through the castle to the main part of the game. As if in a sleep (as if?) you come over all funny - dill's an aura and it signifies the presence of a soul nearby. When you've captured the four souls you can confront the Evil Lord. Incredible Adventure is far removed from any length of time, clues and their solutions become very familiar. However, the fact that this game is far too easy is not its sole shortcoming.

The game makes use of the cursors keys - a poor choice, but not so critical as this is no fast-moving arcade game. Throughout the game you are pursued by the homicidal nut but it is so easy to escape his deadly clutches that in dull moments it is amusing to reverse roles and chase your assailant. If you tire of being told that you have just entered a room when it is patently clear that you've just left then you can forget about the entrances to the rooms altogether and simply walk through the walls.

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**Difficulty** 1

**Atmosphere** 2

**Vocabulary** N/A

**Logic** 10

**Debugging** 5

**Overall Value** 1
solving problems. The game is debugged but remains unpolished.

Well, there’s too much software and too little time so I think I’ll wrap this little piece up. This adventure is incredible but for all the wrong reasons. The game is cheaper than sleeping pills, but certainly not as addictive. Computer Rentals market this tape and I would suggest you rent before buying.

Difficulty 4  
Atmosphere 2  
Vocabulary N/A  
Logic 2  
Logic 2  
Debugging 8  
Overall Value 2

Here Comes The Sun

Producer: Alligata  
Memory required: 48K  
Retail price: £7.95  
Authors: M.D. Russell and C.M. Wright

A massive space station is on collision course with the sun and it’s your unenviable task to prevent a solar explosion turning the universe into a black pudding (all right, it didn’t actually say that but you know how it gets after reading so many cassette covers).

Playing Here Comes The Sun you get the impression of an adequate but unpolished piece of software. I’ll show you what I mean.

The program spends one minute loading a screen which is lost there for only 12 seconds before being deleted. This is replaced by a list of the vocabulary – useful, but should it be placed on a loading screen which is lost when the game starts? On the loading screen vocabulary is mis-spelt and this is a foretaste of things to come. If you’re struggling with the word LASER that’s because the computer has been programmed to expect LAZER.

Although the space station appears large there are no location descriptions, more location statements really. Many locations are repeated and so some loss of atmosphere is inevitable. The half dozen or so graphic descriptions add little to the adventure. You can be randomly killed for no apparent reason in locations where you have previously been safe. I’m no great fan of the random element – at best it’s irritating, at worst it can dissuade you from playing again.

Once you’ve settled into the run of things you come to the excretion area to be confronted with a primitive arcade ski slope game no better than the type found in program listings of what seems like eons ago.

However, not all is gloom. The adventure is interspersed with a thousand funny ways of dying. Oh, well . . .

Gilosft’s Quill:  
You take the part of the wily gnome Eric Bean (makes a change from Brawny Barbarian) master adventurer and potential hero. Returning home to the valley of the gnomes, you find the place strangely deserted apart from the curious Snort. But this companion is no animated character – he can neither move or talk. Where have all the gnomes gone? Have they returned gnome or are things much more sinister? I’ve a sneaking suspicion that those goblins in Murgar Mountains are not totally innocent.

Your first task is to find the elusive ferret who may hold the key to the quest. This in itself is not easy as the valley above ground consists of over 30 locations and the ferret is hidden within a maze. A tricky problem when you are equipped with only a torch.

The normal abbreviations for directions are accepted and the response is instantaneous. Talking about speed, the save facility is the fastest I’ve seen, taking only a few seconds. This was very convenient as I regularly ended up on the sharp end of a goblin knife. Entry is restricted to verb/noun, not necessarily bad in itself but unfortunately the vocabulary also proved rather limited. Neither of the verbs EXAMINE or SEARCH are accepted, which is a shame since they help to create atmosphere. Did you have to have checked out the waterfall, cave drawings or the shell-like rock but sadly that was not to be. I think it’s fair to say that these verbs make or breaks adventures because without them the game becomes no more than a problem solving exercise.

The Lost Gnomes is not a bad adventure, but it’s nothing special. I look forward to seeing further Eric Bean Adventures with much improved vocabulary.

Difficulty 5  
Atmosphere 4  
Vocabulary 4  
Logic 3  
Debugging 5  
Overall Value 5

The Lost Gnomes

Producer: Eric Bean  
Adventures  
Memory required: 48K  
Retail price: £5.95  
Author: C.R. Bozicek

The Lost Gnomes, by Eric Bean Adventures is another in the long line of text-only adventures written with the aid of

CRASH ADVENTURE TRAIL CHART

Most computer magazines publish their own charts these days. With only one or two exceptions, adventure games fare badly in these charts. Mainly because few adventurers are stocked by the chain stores who make up the charts.

We at CRASH would like to produce the first adventure chart. This chart will be based on what you think about the games you have played, not on sales figures. This will give the many excellent games not sold by the chain stores a chance of charting. This should prove a much better indicator of which really are the best adventure games than does any other chart.

To contribute all you have to do is give the adventures you have played a rating out of ten and send these ratings to us at CRASH. We will then calculate the average readers rating for each game and draw up the adventure charts accordingly. Voting on the CRASH Adventure Trail Chart need not affect any votes you might want to send in to the main HOT LINE CHART, so don’t go dropping adventures out of your HOT LINE votes because you also want to vote for the ADVENTURE CHART!

The names of all contributions will go into the bag for a monthly draw and the first out of the bag will win £40 worth of software and a CRASH t-shirt, with five runners up winning a CRASH tee-shirt each.

You may WRITE in to us or ring us on the CRASH HOTLINE PHONE-IN NUMBER but please remember to tell the answering machine that your vote is for the ADVENTURE CHART. The number is 05843015.

CRASH ADVENTURE TRAIL CHART, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB

76 CRASH June 1984
Calling all SPECTRUM OWNERS how would you like to own, ABSOLUTELY FREE a new SINCLAIR QL COMPUTER!

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The Spectrum Connection
EVER WONDERED HOW TO GET ACROSS THE RIVER?
EVER SCREAMED IN ANGER AT GANDALF IN SHEER FRUSTRATION?
EVER WONDERED HOW TO GET THORIN TO SHUT UP?
WELL, NOW ALL THESE QUESTIONS AND MORE CAN BE ANSWERED WITH A NEW BOOK FROM MELBOURNE HOUSE

THE GUIDE TO PLAYING THE HOBBIT

In association with Melbourne House, CRASH is offering the book plus the game The Hobbit to the first 10 lucky winners of this little competition. If you already own a copy of the game, don’t worry – you can give it to a friend or use it to replace your well-used copy! In any event, the Guide is a very useful prize.

Written by David Elkan, The Guide to Playing The Hobbit has 76 pages containing descriptions of the locations in the game with screen shots of the graphics. The book is a solution to successfully playing The Hobbit, and as such is a valuable aid to those people who have not yet completed the adventure. Nevertheless, the book is only a Guide and not The Solution – it isn’t intended to spoil the fun of playing the adventure. This is especially true with The Hobbit, because there is no one perfect solution to solving the game.

In addition to the location descriptions with helpful hints on what to do with the characters and objects, there are passages describing various aspects of playing the game, mapping and more detailed descriptions of the main characters.

No Hobbit should be without one!

Send your entries, on a postcard please, to CRASH/MELBOURNE HOUSE COMPETITION, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB, to be received by the last post, Friday, 29th June. The first 10 correct entries drawn from the bag will each receive a copy of The Hobbit and The Guide to Playing The Hobbit.

1. Who wrote the original book of The Hobbit?
2. What language is used in playing The Hobbit?
3. You must steal the dragon’s treasure – what’s the dragon’s name?
4. Name the man responsible for the team that produced the game.
5. What happens to the other characters in The Hobbit while you are playing the game?
6. Why is Melbourne House so named?
7. Name three other programs produced by Melbourne House.
8. What is the name of the character ‘you’ play in The Hobbit?
9. The Hobbit story was a kind of prologue to what famous trilogy of stories?
10. The Hobbit has a strong title screen – with what utility was it produced?
ADVENTURE REVIEWS
"Adventures which have a fast response time, are spectacular in the amount of detail and number of locations, and are available to cassette owners... Simply smashing!"
- Soft, Sept 83
"Colossal Adventure is included in Practical Computing's top ten game choice for 1983: "Poetic, moving and tough as hell."
- PC, Dec 83
"Colossal Adventure... For once here's a program that lives up to its name... a masterful feat. Thoroughly recommended!"
- Computer Choice, Dec 83
"Colossal Adventure is one of the best in its class. I would recommend it to any adventurer."
- Acorn User, Feb 84
"Adventure Quest... This has always been one of the best adventures for me as it seems to contain a lot. In all it took me about eight months to solve."
- PCW, 18th Jan 84
"To sum up, Adventure Quest is a wonderful program, fast, exciting and challenging. If you like adventures then this one is for you."
- NILUG issue 1.3
"Colossal Adventure is simply superb... For those who want to move onto another adventure of similar high quality, Dungeon Adventure is recommended. With more than 200 locations, 700 messages and 100 objects it will tease and delight!"
- Educational Computing, Nov 83

ADVENTURE REVIEWS
"Colossal Adventure... undoubtedly the best Adventure game around. Level 9 Computing have worked wonders to cram all this into 32K. Finally Dungeon Adventure, last but by no means least. This is the best of the lot - a truly massive adventure - you'll have to play it yourselves to believe it!"
- CBM 64 Users Club Newsletter
"The puzzles are logical and the program is enthralling. Snowball is well worth the money which, for a computer program, is a high recommendation."
- Micro Adventurer, Dec 83
"Snowball... As in all Level 9's adventures, the real pleasure comes not from scoring points but in exploring the world in which the game is set and learning about its denizens. This program goes to prove that the mental pictures conjured up by a good textual adventure can be far more vivid than the graphics available on home computers."
- Which Micro?, Feb 84
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- PCW, 1st Feb 84

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7: LORDS OF TIME
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THE MONTHLY CRASH QUIZ

CRASH QUIZ
RESULTS
CRASH QUIZ ISSUE 3
(That's the one that got called 4 in error)

We asked you to identify six shapes, silhouettes of famous heroes from well-known games. The answers were: A ZIGGY from Pyramid and Doomsday Castle; B BUGABOO (THE FLEA) from the game of the same name; C WILLY from Manic Miner (not Jet Set Willy!); D LIL'LE OL' FARMER BOY from Chuckie Egg; E HORACE from Hungry Horace, H And The Spiders and H Goes Ski-ing; F JETMAN from Jetpac and Lunar Jetman.

The winners are: Peter Eccles, Cosley, W. Midlands; I. Bonsell, Chesterfield, Derbyshire; Andrew White, Kearsley, near Bolton, Lancs.

This month's CRASH QUIZ is going to take all the brains you've got! Enough of these ridiculously simple questions! This time you've all got to really get thinking. What we have here are two anagrams - words with their letters all muddled up and made into other words (for those who don't know an anagram from a parallelogram). What we want to know is what the original words are supposed to be.

The first anagram is actually the titles of five very well-known games for the Spectrum. The asterisks below indicate how many letters and words make up each title.

UNDER A FIGHT IMPACT AT (TIC) 3AM, LITTLE JACK SAT ON ACACIAN MINT (NB: The comma, full stop and parenthesis are not a part of any title!)

And the second anagram contains the name of a well-known software house, but that's not what we are looking for. What we want to know is the single word it turns into - a word which could be used to describe the state of the art in Spectrum software . . .

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Wilfred the Hairy, Olaf the Hungry!

Producer: Microbyte
Memory required: 48K
Retail price: £5.50
Language: BASIC & m/c

It is the age of the Vikings and you are Olaf (in blue), pitting your wits against Wilfred (in red), alias your Spectrum, in this game of ancient strategy. The basic object of the game is to conquer the known world, which includes North and South America, Africa, Europe and most of Asia. Your castle and home is situated somewhere on the site of where Winnipeg will one day be built, and the awful Wilfred has his sited somehow to the north of Lake Victoria in Africa. Continents are entered and left via ports marked as green spots and conquering is accomplished by placing appropriately coloured flags in columns and rows throughout the country.

Plagues of rats and fleas are a problem for Wilfred and he often has to return home to delouse. Both sides have an ammo allocation which is depleted whenever one of the enemy's flags is replaced by one of your own. This is also replenished by returning home. It is not possible to enter a continent totally conquered by Wilfred if his ammo level is above 40. Occasionally enemy ships approach your sailing ship and a small area at the bottom left of the screen clears to reform as a view of the sea, crenellated walls and a cannon. The enemy ships appear on the horizon and must be fired at by moving the cannon left and right and pressing key Z.

Movement is via the cursor keys, each army taking turns. A message screen at the bottom informs you of Wilfred's seemingly endless misfortunes, a lot of which have to do with the widely spread Wangu tribe of head hunters.

CRITICISM

"The inlay describes this as a game of High Resolution Action Graphics. If only that were true it might have just overcome the silliness of the program. Because you input the direction of travel, up, down, left right and nothing else, there's very little to do in this game. Then the moves are all very slow. And the game never wants to end. Even if you sit still and let Wilfred slowly turn the world red, it doesn't end the game when he succeeds. Other funny things happen - if Wilfred crosses your actual position, you turn red as well, at least until you make a move. Half an hour's play should convince anyone that they have successfully wasted their money."

The graphics hardly live up to the inlay's claim – blocky, white suggestions of the continents, a blue, black ground, red and blue flags, men and castles and green character blocks for entry/exit points. It all looks very primitive and there seems to be little point to the game anyway. The Wangu tribe are all over the place, so I suppose they are the real winners, having already conquered the world?

COMMENTS

Control keys: cursors during main game, 6/7 left/right and Z to fire for the sea going cannon
Joystick: AGF, Protek
Keyboard play: very unresponsive
Use of colour: poor
Graphics: poor
Sound: very poor
Skill levels: none
General rating: a waste of time and money, and a bugged program

Use of computer 33%
Graphics 15%
Playability 10%
Getting started 25%
Addictive qualities 5%
Value for money 10%
Overall 16%

Close-in

Producer: Pulsonic
Memory required: 48K
Retail price: £2.99
Language: machine code & basic
Author: Shelly & Ofer Ben Ami

A game for a person with sixteen nimble fingers – Close-in.

This offering is a throwback to the 'Tron' style light cycle grid game where you must force your opponent's light trail off the screen. If either trail hits another, it's out on the edge of the screen the other player wins. The game may be played against another human or against the Spectrum itself. There are 10 speeds and the computer may be made to be intelligent in a ratio of 0 to 9.

One element which distinguishes this from other similar games is the hyperspace facility. When the key is pressed, play is frozen for a second and then your trail starts off somewhere else on the screen.

CRITICISM

"Pulsonic really seem to have got themselves in a tangle. With the few really playable games in this collection, there always seems to be something to ruin them. What program or the right men would provide such a listful of badly laid out keys as these to play such a fast game? Eight keys! Each 'go' auto-starts after a few seconds unless you kick it off yourself, and if you're playing the computer you are at a serious disadvantage with eight keys to use. Concentrating on only the four main directions is no good, since the computer uses all eight directions quite happily. It also keeps on hyperspacing. There are much better, more playable versions than this one around."

"The graphics are very simple, as usual in this sort of game, but I thought that having a very thin red line and blue line on stark white was poor planning and hard on the eyes. There are also some colour problems even with this..."
Apollo 11

Producer: Darkstar
Memory required: 48K
Retail price:
Language: machine code
(Pascal)
Author: Ian Rich, BSc

This program is simple to describe. Basically you must land your Apollo 11 mission craft on the surface of the moon. The game is more a simulation than an action game, and although it may be simple to describe it isn't too easy to handle.

The screen shows space, and below it the surface of the moon, with large mountains and flat sections. Obviously you must get the lander down on the surface in one piece and on a flat bit. Below the display area is the instrumentation. This includes vertical and horizontal speed, rotation speed and angle of attack. Each instrument has a red/green indicator and a landing may be made safely if they are all green, which means you are within tolerable limits. If you are landing, at a certain point the screen cuts to a much bigger close-up of craft and intended landing zone, for fine control of the landing jets.

The simulation has an active, but low gravity effect. Movement of the lander is by rotation using side jets and then thrusting with the main engine. Any eye must be kept on the critical fuel level which reduces each time the thrusters are used.

Critical

'This is a Lunar Lander game where you control a spacecraft and try to land it successfully. The hazards are the mountains of the moon. It is quite a good version of the arcade game although nowhere near as thrilling. Once the craft has been successfully landed there seems to be no point in carrying on. Graphics are drawn quite well, but then, only the spacecraft and landscape move. This is the first game I have seen written in Pascal. Overall, not very addictive.'

Apollo 11 is the thinking man's Lunar Lander (its author is a BSc). It's a fairly slow game but is still difficult (very), and I found it challenging. Landing the Apollo 11 is a difficult and precise task. The game certainly has addictive appeal for me. Apollo 11 has curious and very interesting graphics, right from the title screen through, and the explosions, particularly, are well worth seeing. The game has an appeal which lies in the difficulty of landing the craft. Precise thinking is needed and careful timing. Nevertheless, this could hardly be called a thrilling game, and I wouldn't even begin to know whether to recommend it or not. Probably for the more serious minded.'

Comments

Control keys: O/P rotate left/right, CAPS = thrust
Joystick: none
Keyboard play: good, simple and responsive
Use of colour: average Graphics: average to good, unusual in design
Sound: poor
Skill levels: 1
Lives: 1
General rating: mixed feelings overall from average to very good!

Use of computer 73%
Graphics: 70%
Playability: 70%
Getting started 69%
Addictive qualities 68%
Value for money 68%
Overall 70%

One small step for man—Apollo 11 is almost down.
**Butterfly**

Producer: Pulsonic
Memory required: 48K
Retail price: £2.99
Language: BASIC
Author: Hugh Davis

Butterfly shows a simple looking window with one vertical and one horizontal dividing it up into four panes. Curtains hang on either side, and the sill contains an electric wire. You are a spider who must eat at least 12 butterflies per minute and watch out for the purple spider eater that lives in the curtains. There are usually two butterflies visible at any one time. That’s it!

**COMMENTS**

Control keys: Q/A up/down, N/M left/right
Joystick: none
Keyboard play: unresponsive and slow
Use of colour: fair to average
Graphics: very poor
Sound: very poor, just a few beeps
Lives: 1
General rating: rubbish.

Use of computer: 28%
Graphics: 15%
Playability: 10%
Getting started: 40%
Addictive qualities: 1%
Value for money: 10%
Overall: 17%

**CRITICISM**

'This must be the most relaxing game I have ever played! And saying this, there is no real point to the game — it’s almost as if the computer could play on its own — you only have to keep on pressing that dreadful ENTER each time a team member has had his go. Once the game has been played you will probably never want to play it again. The graphics are moved by block, are small and undetailed and I cannot recommend this game.'

‘On the face of it, a program containing 14 different races or competitions sounds like fun, but the trouble is that they are all really alike. This isn’t a game in the normal computer sense of the word at all, because the computer does everything really, leaving you only to judge when to use up that quotient of energy. The races tend to be very long winded as well, especially as you are basically sitting back and watching, and on side two, constantly returning to the Marathon, which must take three minutes to get from one side of the screen to the other, becomes very irritating. The graphics are small and jerky and on the whole it all seems rather pointless.’

This is a topical game for 1984. The graphics are not super-slick but one can see what is going on. The game is playable because of its novelty value, but I found one play was quite enough and its appeal had gone. Armchair sportsmen (sorry, sportspeople) will no doubt enjoy a bash. There are plenty of varied events but they all seem to follow a similar pattern.'

**COMMENTS**

Control keys: ENTER & SPACE
Joystick: none
Keyboard play: hardly relevant

**Use of colour:** average
**Graphics:** small, block, generally fair
**Sound:** very poor
**Skill levels:** none
**Screens:** 14 events
**General rating:** poor to average once the novelty value has gone.

Use of computer: 58%
Graphics: 46%
Playability: 55%
Getting started: 61%
Addictive qualities: 13%
Value for money: 35%
Overall: 45%

---

A purple people eater lunges out from the curtains while another million butterflies go free.

---

**Olympics**

Producer: C.R.L.
Memory required: 48K
Retail price: £5.95
Language: BASIC
Author: Matthew Bradshaw

In Olympics year we have already had the subversive, underground version of the noble event from Automata. Now C.R.L. give us the official one — Olympics is a twosided game. Side one contains eight events which take place inside the stadium. They are the 100m Sprint, 200m Javelin, 110m Hurdles, Long Jump, Shot Put, 800m and Discus. Side two contains events that take place outside the stadium and are Cycling, Swimming, Canoeing, Rowing, Yachting and the Marathon, seen in sections between each event.

The computer holds four teams: Great Britain, USA, USSR and the Rest of the World, although these may be customised. In each case, you control the British team, always at the top of the screen. The events are run across the screen and are completed when the winner reaches the right-hand side. At the same time, the background is made to scroll slowly, thus apparently extending the length of the race. Your man has 9 units of energy and pressing SPACE causes him to accelerate and the energy to drop accordingly. Each track is lined on either side with spectators, trees, buildings or the background of the stadium.

Results (ie medals) can be re-entered on the second side of the program from side one to keep continuity.

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Crash June 1984
Moonbuggy

Producer: Anirog
Memory required: 48K
Retail price: £5.95
Language: machine code
Author: M. Fox

You are the commander of the moonbase defences, out on routine patrol duty in your ATMB (All Terrain Moon Buggy). This amazing vehicle is capable of jumping over holes and craters in the ground and is fitted with forward and upward firing laser missiles.

Whoops! There go the wheels again!

The moon base outer defences have been penetrated by alien attack forces, and that routine patrol is about to become a nightmare!

The aliens use low-level attack from saucers which drop bombs. Apart from probably hitting you, these also make more craters in your path. Surface attack comes from tanks which fire missiles, and land mines which must be jumped. In addition, there are giant boulders, too big to jump over, which must be blasted away. As well as jumping, your moon buggy can accelerate and decelerate. Speed is needed to get over some of the bigger or double craters.

In 'Penetrator' style, the ground and background landscape scrolls from right to left to create the movement. Accelerating the moon buggy causes it to move farther towards the right of the screen. The ground will change colour as you progress.

CRITICISM

'This is a better version than the Visions one, in as much as it follows the arcade original rather better. Keeping an eye on the ground ahead, missiles from in front and above and trying to fire your own missiles can become quite frantic at times. The game is completed after four sectors have been crossed and the base reached. The graphics are quite good with nice detail on the buggy, like the bouncing wheels on their suspension and the way they all fly off if you're hit or drop into a crater. Reasonably addictive and playable.'

Scrolling landscapes and different types of alien that never appear in the same order each time all make for a very playable game. The thought it was generally a 'quite' game which lacked some detail to make it better. For instance, the buggy could have bounced a bit on landing. But I liked the way the wheels fly off when it crashes.'

COMMENTS

Control keys: Cursor keys and © to fire.
Joystick: Kempston, Sinclair 2, AGF, Protek.
Keyboard play: poor positions but responsive
Use of colour: good
Graphics: good - fast, detailed and smooth
Sound: above average
Skill levels: 1 but it gets more frantic as you go on
Lives: 5
General rating: good value and reasonably addictive, very playable.

Use of computer 65%
Graphics 77%
Playability 75%
Getting started 72%
Addictive qualities 75%
Value for money 73%
Overall 73%

Grid Patrol

Producer: MC Lothlorien
Memory required: 16K
Retail price: £5.95
Language: machine code
Author: Simon Cobb

The cassette inlay wastes little space in setting up a scenario for this ultra-fast grid game beyond telling you to avoid the devastating fire from the tanks. Quite right too.

The game takes the basic form of Transversion, but unlike that game instead of static pods to destroy there are a few aliens on the grid which keep moving about. Around all four edges of the grid there are tanks which can move up and down or left and right to fire inwards along the grid lines. This means that your man must constantly face fire from four different directions, with which he must destroy the wandering aliens on the grid. Bumping onto one will result in loss of life.

Each screen cleared moves you on to a more difficult one with more aliens, and they move about more wildly.

CRITICISM

'There have been a few attempts to take the crown away from Ocean's Transversion, but this is the first one I have played which has actually managed to add to that game. It must be one of the fastest grid games ever, and certainly aims to rank with Jeff Minter's. Yes, the idea's ever so simple, but the addition of laser fire for your man is clever. Not only must you concentrate on trying to line up a shot on a moving alien, but you have literally half a second (on the slowest of three speeds) to do it before the tanks get you. It requires manic concentration and a bottle of headache pills. Great.'

'I don't think this is as good as Transversion. It has poor movement responses and it's hard to see the screen in colour. Things just don't seem right. It is very hard to move, avoid and shoot at your attackers. I also discovered that if you die when you reappear (in the middle) by an alien, you can become a nightmare!'
The game that starts on level 1 is impossible! Level 3 is simply impossible!

Grid Patrol is very fast - you need eight eyes: two for the joystick, two for lining up shots, and two for the enemy. Graphics are small, but easily seen. The sound is fairly good, but you don't really need it because you're concentrating on other things. I became so thrilled with this game that I broke a joystick which is to be docked out of my CRASH expenses next month! Very fast and quite addictive.

COMMENTS

Control keys: CO/A up/down, O/P left/right, SYM SHIFT to fire (it does mention user-definable keys on the inlay but there don't seem to be any)
Joystick: AGF, Protek, Kempston
Keyboard play: responsive
Use of colour: average
Graphics: small, fast, generally reasonable
Sound: good
Skill levels: 3 speeds
Lives: 2
Screen: 8
General rating: simple grid game for those who like a fast arcade game.

Use of computer 60%
Graphics 55%
Playability 59%
Getting started 56%
Addictive qualities 61%
Value for money 60%
Overall 59%

Devil's Island

Producer: Gilsoft
Memory required: 48K
Retail price: £5.95
Language: machine code
Author: Colin Smith

"I am in a grim prison cell. A barred window is to the NORTH and a rusting but strong cell door is to the EAST." Thus starts Devil's Island, a Quill-written text adventure from Gilsoft's Gold Collection. That's about all the plot explanation you'll get despite the references on the first intro screen that full instructions are on the cassette inlay. But where? That minor quibble apart, the adventure is a regular Quill one, with instant text response and straightforward, clear and interesting descriptions.

Starting off in a cell on Devil's Island makes your aim quite clear - escape, for those who know it not. Devil's Island is the infamous French prison island set in the tropics. The wings off before eating his breakfast. Great stuff.

An exceedingly well-plotted adventure this, with well-planted red herrings to keep you running around in circles for ages - well not really, because you quickly get shot by the trigger-happy guards. Once I got the hang of it, though, I neatly disposed of my guards and escaped into the jungle in a super smooth Mission Impossible way. But that was just the beginning, and I'm still on this rotten jungle island.

One of those games that goes to prove you don't need pictures to liven up adventure games. Their own accord, can still be so engrossing. I should think this would be a good adventure even for beginners as long as they can get past hurdles like waste chutes, iron bars and searchlights. Keep trying - there are ways and means...

COMMENTS

Responses: instant
General rating: very good, lengthy, well-plotted adventure at a good price.
Use of computer 80%
Graphics —
Playability 85%

Getting started 55%
Addictive qualities 87%
Value for money 79%
Overall 77%

CRITICISM

'Starting this game is a bit like waking in the morning and finding that the nightmare isn't over - you really are a wretched captive. But this prison reminds me of Patrick McGoohan's 'The Prisoner' series. It all seems set up to let you escape a little bit. I thought eating a tasty pie was a good thing (in adventure terms - keeps your stamina up and so on) but little did I realise that it would make me too fat to squeeze through the ... Colin Smith has a nasty sense of humour and must be the sort of person who enjoys pulling flies'
Announcing Mugsy, the first interactive computer comic strip for your 48K Spectrum.

You are Mugsy, the Godfather to a gang of hoodlums and your aim is to be the toughest and most powerful gang leader in the city.

Your tasks involve managing the gang, making lots of money, organizing the protection rackets, buying weapons and ammunition but beware, your reign as the Big Boss is rather delicate. If you are too successful a contract will be put out by other gangs to get rid of you!!

You are the decision maker and one wrong move could mean the end!

Mugsy gives a totally new direction for thrill-seekers — comic animation, stunning graphics and a full arcade game.

Remember — you are da boss!
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Melbourne House
**Spectrum Safari**

**Producer:** C.D.S. Microsystems  
**Memory required:** 48K  
**Retail price:** £5.95  
**Language:** BASIC  
**Author:** A.J. Rushton

Spectrum Safari isn’t exactly a new game. Its author, A.J. Rushton, originally marketed it under his own name when it was released last summer, but now it has been repackaged by CDS and given a new lease of life and better marketing, which is good, because this original and entertaining game deserves it.

The basic aim is to escape from a tropical island with as many of your exploring party alive as possible. Besides yourself, there are two others in the party. The centre of the island is a large swamp surrounded by six native villages. Your party starts off in the north-west, and the only boat to use for your escape is in the south-east. Movement is accomplished by entering in the direction you wish to travel. You need plenty of food as each man eats one pack per move. To get more food the villages may be visited where the villagers will offer to bargain for food (watch your money supply) and you can add to your team or replace lost members by bartering for them. Pitching a bid too low may upset them and they won’t deal with you. This is sad because, once visited, a village can’t be returned to again.

The major problem to be encountered on your safari is the island’s wildlife. Almost every move made will result in your party stumbling upon some creature or other. Some of these are virtually university educated and ask mathematical quizzes of you. Some demand that you tell them their name. Others ask memory questions, but some are down right mean and force you into an arcade sequence. Should you fail the test, one of your party is killed off (hence the value of buying more men from the villages as these represent your lives!). On the other hand, a correctly answered test will give you 1000 more Rubloons’ worth of money for bartering with. Running out of food will also kill off a member of your team, the boat may only be bought at one point, and to succeed in escaping you must have sufficient food with you.

**CRITICISM**

I played Spectrum Safari some time back and remembered enjoying it. So it was nice to get to review it again. Time hasn’t dimmed its appeal either. What’s nice about this madcap game is that it keeps you on your toes and it’s very playable by a family along the lines of those TV family quizzes. To avoid being mangled by a mad marmoset, for instance, you must add up three blocks of them and give the correct answer in a few seconds. It’s not easy, and a quick eye is needed. The little arcade sequences, like getting through the maze of cruel crocodiles, are nicely done, and combines some strategy and combines some strategy and adventure elements with quizzes and arcade pieces. I would call it a lighthearted rather than deadly serious game, but there’s enough in it to keep you going for some time, and it gets to be pretty maddening! Some things first time round are literally killing. The lion who wants you to repeat his name after flashing it on the screen for what looks like a quarter of a second just makes you laugh. You do get better with time.

‘A graphics adventure that combines “soft” arcade with adventure elements and is very interactive with the player. It’s fun.’

**COMMENTS**

**Control keys:** vary from sequence to sequence but prompted on screen  
**Use of colour:** good  
**Graphics:** varied, amusing although a bit small. The hi-res drawings work well  
**Sound:** mostly beeps  
**Skill levels:** 3  
**Lives:** three to start, then depends on your bartering skills  
**General rating:** unusual, entertaining and good value.

**Use of computer**

- Graphics: 65%  
- Playability: 68%  
- Getting started: 68%  
- Addictive qualities: 69%  
- Value for money: 69%  
- Overall: 65%
Inside the Big Top, nothing is as it should be. Probably why they can be a little on the meagre side, and unless hidden places went and overall the Circus tent has switched off. Altogether, just a don't add anything - which is the graphics may look cute but unnoticed. Word recognition is arth is a devious helper.'

Further - although Brian Howarth may send for. Maybe they couldn't drive off and leave the petrol - only to find that I my car with the necessary wise closed tent and reached exploring made an explosive sleeping tiger and after a lot of swam with friendly sealions, Spirits behind to languish. I couldn't drive off and leave the Spirits behind to languish. I managed to get back into the tent and that was that. Great fun!

Unbelievable 3D arcade action in Orpheus, as the Quasar Silos and 3D Ectetras come hurtling out of the cavernous void.

Use of computer 80%
Graphics 50%
Playability 73%
Getting started 65%
Addictive qualities 62%
Value for money 65%
Overall 66%

Orpheus
Producer: C.R.L.
Memory required: £5.95
Retail price: £5.95
Language: machine code
Author: Jay Derrett

The instructions on this game contained on the screen are written in a specially designed character set. It seems odd that programmers can go to the trouble of doing this and then say a 'missile flies' at you and that it is 'indestructable'. No one is perfect, and typographical mistakes can occur and fail to be spotted, but there should be no excuse for such poor spelling in a game intro. As for the intro, it describes Orpheus as being a task to deliver a secret document to headquarters by way of an enemy occupied tunnel. The enemy will send Tai fighters at you, which by some odd freak of nature are alternately destructable and indestructable. There are land-based objects like Quasar silos (remember those?), fuel dumps and etc. (whatever they are).

The screen view is looking down the length of the tunnel which is represented by two converging lines and a ragged tunnelish line which zooms out in four frames to convey movement. The various land-based objects (etc.) must be the purple pyramids) grow bigger as you fly over them. After a while the fighters come out and then a real protagonist with heat seeking missiles.

CRITICISM
'I can't understand how on earth C.R.L. can keep going up and down like this! Orpheus is simply terrible! It's unplayable and silly. Describing it as being in 3D is like trying to describe a side show as Star Wars. The graphics are pre-Spectrum, jerky, undetailed and the game is played on the most bizarre and difficult layout I have ever come across. With both bombed and laser fire, it seems pointless saying it can be played on cursor joysticks or interfaces. My programmable interface left me with a strange problem - dropping a bomb resulted in the fighter plunging to the base of the cavern and exploding. Awful.'

COMMENTs
Control keys: Get this - T=up, B=down, F=left, H=right, 5=bomb, U=fire laser. Despite cursor key joystick selection the cursors don't work as a key layout.

Joysticks: Kempston, ZX 2, AGF, Protek

Keyboards play: virtually impossible
Use of colour: fair
Graphics: extremely poor
Sound: fair
Skill levels:
Lives: 3
General rating: below average, not really worth the money.

Use of computer 35%
Graphics 30%
Playability 44%
Getting started 48%
Addictive qualities 32%
Value for money 28%
Overall 36%

CRASH June 1984 91
Pandemonia

Producer: CRL
Memory required: 48K
Retail price: £5.95
Language: machine code
Author: Paul Simmons

It is the year 2000 and the world has been overcome by a bunch of out-of-town aliens who have set up their HQ on top of the CRL skyscraper (bit of wishful thinking here). Your task is to climb the skyscraper (inside - this isn't a Kong game) and destroy their heavily fortified base atop it.

The CRL skyscraper is shown with an arrow pointing out where you are at present.

As soon as the game proper starts you realise that what we have here is a Panic' game where holes must be dug for monsters to fall into and where they can be banged on the head and sent to their death. Depending on the type of monster you must shove them through one, two or even three floors.

What makes this game different from most Panic' types, is that most of the ladders have a door at their top, and, while shut, these doors keep the monsters at bay or trapped between two levels of the six on each screen. Opening a door will reveal a monster ready to pounce down the ladder on to you. This means a strategy for killing them off has to be worked out before a door is opened.

Subsequent screens are varied, with ladder positions changing and the numbers of monsters increasing, their speed as well. More of them become white and then purple. Your man can dig holes and fill them, he may also jump down one level through a hole.

CRITICISM

'This is definitely a Panic' game, but with so many frills added that it becomes much more than a Panic' game, requiring forward planning to get through a screen. I notice that there is just enough oxygen to get through a screen, which makes timing exceptionally important.

Screen layout is very clear with large smooth moving characters. I like the way CRL have set the action inside a skyscraper where you must clear all the floors of aliens, as it does give you an incentive to get to the top. The various elements of this game combine to make it one of the most difficult Panic's ever. Colour and sound have been well used and it is a hard, addictive game to play.'

COMMENTS

Control keys: Z-V left, B-M right, second row for up and third row for down, also fill and dig respectively. The cursors may also be used.
Joystick: Kempston, ZX 2, Protek, AGF
Keyboard play: responsive and good key positions
Use of colour: good
Sound: good
Skill levels: 1 but progressive difficulty

Lives: 4
General rating: a good, hard Panic' with frills, addictive if you can cope with the speed and good value.

Use of computer 83%
Graphics 79%
Playability 72%
Getting started 70%
Addictive qualities 78%
Value for money 74%
Overall 76%

The alien office workers settle down for another typically quiet day's work in the CRL skyscraper.
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Kosmic Kanga runs on the 48K Spectrum and costs £5.95 – but it’s free to the first 100 correct entries drawn from the groaning CRASH competition bag. So get to grips with this tough bunch of questions and get those answers (on a postcard please, or the outside of a sealed envelope) to the Kosmic Kanga Competition, CRASH MAGAZINE, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB. All entries must be received by the last post, Friday, 29th June.

The answers to many of these questions may be found by looking through earlier editions of CRASH.

1. In the game Tutankhamun, what part do you play?
2. What’s so special about the loading screen of Pengy?
3. In Pengy, what is it that the last bee on the screen does?
4. In Tutankhamun, what do you need to get from one tomb to another?
5. Again, in Tutankhamun your laser can leave you vulnerable under certain circumstances. Why?
6. Name two games by Micromania (other than Tutankhamun or Pengy).
7. Give the answer to this: multiply the number of screens in Kosmic Kanga by the game’s retail price and then divide this total by the RAM needed for the computer to run the program.
8. With the information given you on this page, what’s the distance between earth and ‘moon’? (We’ll accept answers to the nearest millimetre – hint.)
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**Disco Dan**

**Producer:** Gem Software  
**Memory required:** 48K  
**Retail price:** £4.95  
**Language:** machine code

Disco Dan might be described as a ‘Q-Bert’ style game with a few differences, which makes playing it quite a change from others of a similar ilk. For a start off, it is a two-screen game. The scenario makes you wonder what the title has to do with the game since it says you are Dan, sent into reactors in space which have gone unstable. In the first screen you must dance your way along a 3D corridor, avoiding hazards to reach the reactor room. Once there the ‘Q-Bert’ bit takes over. The reference to disco only bears examination in that the roundels which must be jumped on look like pools of coloured disco lights. Still, who cares? The game is fun.

In screen 1 the 3D corridor is effected by rectangles of mauve moving outwards from the dark centre. Disco Dan stands at the bottom of the screen and may move left or right to dodge the various hazards like potholes, which drain his energy, mutant pacman which swerve after him and kill, and dotted force lines, which also kill. These last two hazards can be jumped.

Energy loss is shown as a falling multi-coloured bar at the base of the display area. Surviving the corridor for a sufficiently long time results in reaching the core of the reactor and the screen cuts to a new scene.

Here there are five rows of staggered roundels (seen in perspective) with five roundels in each row. These represent the unstable rods of fuel. They have eight states before they explode, designated by colour and a number. Safe is green (0), and then variously cyan, blue, mauve, yellow, white and red (6). When a red 6 starts flashing it is about to explode and the flashing 6 vanishes when the rod has gone.

Disco Dan is lowered into the reactor on a tractor beam and he must then jump about from disc to disc, changing their colours with each jump. The aim is to get them all to green, in which state they remain stable. Unfortunately all the discs (unless they’re green) are quite rapidly changing.

**CRITICISM**

The first screen is relatively simple to get through, although on the higher levels you are jumping about all over the place to avoid the pacman. But the second screen is quite hard and requires good co-ordination because the rotation aspect of control is tricky. It’s also important to keep the red discs from exploding since you can quite easily get trapped in a corner, surrounded by reds and unable to get to any of the other discs. I thought the graphics were rather good, the sound is excellent, especially the tune, and the game is a tough, addictive one to play.

The first screen seems pretty easy at first, just jumping over obstacles as they come towards you. But as the game progresses it gets harder and there are more pacmen, which are the most difficult objects to avoid as they swerve towards you.

The second screen is a very high-speed and updated ‘Q-Bert’ type game. I like the idea of the atoms changing the colours of your reactor discs, and the whole thing is against the clock. What confuses the whole issue, though, is the way you rotate to face the way.

Arriving by teleport, Disco Dan prepares to get down and boogie.

Hopping from rod to rod is a frenzied business, especially with two vagrant atoms changing all the colours back again—two sixes are about to start flashing.
Worm Attack

Producer: Pulsonic
Memory required: 48K
Retail price: £2.99
Language: BASIC
Authors: Makinson & Sulson

This is a 'Bozy Boa cum Snake' game, where you are the snake in a garden. The object is to wander round, eating the fruit in the garden but avoiding the rocks. With each screen cleared you get longer. Hitting a rock, the edge of the garden or reversing direction on yourself, or hitting your own tail means a loss of life.

CRITICISM

This is a very out-of-date game now, and most of the existing versions are much better done. The graphics are extremely simple, the fruit being white crosses, the rocks are dark blobs and the snake is a series of blue circles with dots in them and a drawn head. Including the green background, this means only four colours have been used. The BASIC makes everything quite slow.

A snake, eating and getting longer game. Not a very unreasonable version but the graphics are not exactly what I would call stunning. Cursor keys for control are poor too.

This is a very nice version of a game that is practically an antique now.

The game idea (very old now) is quite playable, and I have played versions which, because of their graphics, have been very addictive. This one has no graphics to speak of, and so despite the low price is hardly worth it, unless it's to introduce a young player to the computer.

COMMENTS

Control keys: Bottom row=-fire, P=jump, Q/W rotate
Joystick: Kempston, AGF, Protek
Keyboard play: very responsive, although tricky to get the hang of the rotation
Use of colour: good
Graphics: good to very good
Skill levels: progressive
difficulty
Lives: 5
Screen: 2
General rating: Different, difficult, good addictivity and very good value
Use of computer 78%
Graphics 81%
Playability 84%
Getting started 90%
Addictive qualities 86%
Value for money 90%
Overall 85%

Dreadnoughts

Producer: MC Lothorian
Memory required: 48K
Retail price: £5.95
Language: BASIC

It is a winter's day in late 1914; the 'Great War' is four months old, and in the North Sea two battle fleets are set on a collision course. The composition of the fleets is identical: four battle cruisers, four light cruisers and 12 destroyers. With six hours of daylight remaining, the two commanders sight each other's smoke. This battle is about to commence.

This is the latest in the Lothorian Warmaster series of battle strategy games, and their first sea-based one. The game is played between two people, and like the time-honoured Battleships game played on paper, each player should have private and secret access to his information, which is done via a secret three-letter code inputed at the start. The game is played out in 24 moves, a move simulating 15 minutes of real time, and on four levels, representing the number of enemy Dreadnoughts which must be destroyed to win. There are three phases to play. First each player in turn goes through his Decision Phase and then there is an Action Execution phase. Accessed by the player code, a menu of options is presented which allows the player to list the names and defence strengths of each unit, view the situation (a graphic report of your positions), see the combat reports of each unit, change course and heading for each unit, allocate gunnery targets, set up torpedoes and secondary batteries, a key for all actions completed (end of phase) and a report on visibility. Changing course and speed is done with cursor keys 4 and 7.

The combat reports enable you to see what damage has happened after the action phase, and what your ships under fire are observing of the enemy's position. Gunnery results are affected by factors like range to target, whether the gunners are under fire themselves, and the number of other units firing at you. Lothorian claim the performance of the ships is based on the original vessels.

The screen display is largely text menus, but in viewing the situation or in action phase once the combatants are entangled, the units are represented by character blocks with the unit number in them, and a tiny symbolic representation of the unit itself. The blocks are coloured Green for the British and Yellow for the German fleet. Behind each unit a short black line represents the 'wake' and so gives an indication of heading and speed.

Primitive graphics in the garden—Worm Attack.
CRITICISM

'This strategy simulation is really a long extended computer version of Battleships except that there are a number of elements to be taken into account, such as the performance of the various units, their strengths and armament. This means you must use each type of ship to its own advantage. The Battleships element is that of player secrecy, each seeing only his own information, so you're never sure quite how the other player is handling his forces. This I have seen from Lothlorien. The option menus are well laid out, etc.

Vegetable Crash

Producer: Kuma
Computers
Memory required: 48K
Retail price: £6.95
Language: machine code
Author: Hudsonsoft

Vegetable Crash has a rather novel scenario – vegetables at war. Actually it is a legumarian Galactician game with various vegetables dive bombing your laser base instead of the usual aliens. Hudsonsoft is a Japanese company with whom Kuma have a licence to retail their products here in the UK.

The game follows the conventional 'Galaxian' themes, with the vegetable gathering in serried ranks at the top of the screen. There are tomatoes, carrots, potatoes (or perhaps they're aubergines, all of which fire explosive seeds downwards at you. Some of them become so enraged that they turn over and go into a dive-bombing routine – Kamikaze Carrots are a truly terrifying thing!

Your laser base may move to the left or right and there is continuous fire although only one missile is allowed on the screen at a time. In keeping with the culinary theme of the game, your missiles are actually small forks.

CRITICISM

'You certainly won't get into a stew with this game! Vegetable Crash follows a rather sedate path, hardly a frenzied shoot 'em up, nevertheless it has a charm of its own and is helped by the accuracy of the graphics – there's none of that poor in action, but slow action phases. Overall though good value for those who like the type.

Use of computer 72%
Graphics 55%
Playability 52%
Getting started 78%
Addictive qualities 56%
Value for money 66%
Overall 65%
COMMENTS

Control keys: A/D left/right and CAPS to fire (left side of keyboard), or J/L and SPACE (right side of keyboard)

Joystick: doesn’t really need one

Keyboard play: responsive

Use of colour: very good

Graphics: good, decent detail, reasonably smooth and medium fast

Sound: typical ‘Galaxian’ sound

Skill levels: 1

Lives: 3

General rating: an oddball version of an old game, well implemented but perhaps a bit slow and repetitive for the experienced shoot ‘em up addict.

Use of computer 73%

Graphics 64%

Playability 69%

Getting started 64%

Addictive qualities 60%

Value for money 49%

Overall 63%

Ashes

Producer: Pulsonic

Memory required: 48K

Retail price: £2.99

Language: BASIC

Author: C.J. Dunn

The last of the Pulsonic collection is a sports simulation based on England’s noble game of cricket. One thing to be said for these eight games is that they have spread the subject matter pretty wide. It’s as if some marketing person has carefully thought out a strategy for saturating the Spectrum market and yet knew almost nothing about it. Over half the job of a marketing company in conjuring up ideas is to ensure a reasonable level of quality control and Pulsonic (Warwick Leisure) have failed miserably in this aspect.

Ashes, however, isn’t too bad at all, so it comes as no surprise to see a copyright warning from C.S.S. (Cases Computer Simulations) when loading is complete. Nevertheless, this must be one of their earlier programs either not marketed by themselves, or now forgotten and reawakened by Pulsonic.

There are 10 venues at which to play Test matches, five in England and five in Australia. Each pitch has its own characteristics and suits different types of play. The teams are made up of six Batsmen, one all-rounder, a wicketkeeper and four bowlers. Three types of bowling are permitted: fast, seam/swing and spin. Teams may be named as you wish, although the computer holds names of teams already — famous ones.

The toss takes the form of alternating the names England and Australia. The computer displays the '88 world cup' map and asks you to name the eight Englishmen. The first pitch is then shown and, if one of the batsmen is out, the computer asks you to name another. The process is repeated until all 11 team members are appointed. Of course, the idea being to say yes or no to each in turn until all 11 team members are appointed. There are more than you have in your team of course, the idea being to say yes or no to each in turn until all 11 team members are appointed. Of course, the idea being to say yes or no to each in turn until all 11 team members are appointed. The name of each player is then shown as you wish on the inlay card.

The field placement is done by pressing a key after a ball has been bowled. The bowler is seen as an alter-egomannom in the inlay card) and entered as a two-digit number. The batsman has seven types of stroke from defensive through to off-drive. A stroke is played by pressing the appropriate key for the type of play desired while the ball is bowled. The path of the ball from bowler to batsman is shown so that the batsman has a few seconds to decide what shot to play, and then the path of the ball after batting is also shown.

A captain may declare if he wishes. Weather may interfere with play, and rain is likely to alter the characteristics of the pitch.

CRITICISM

‘Ashes is a reasonable simulation of the limitations of the computer. The graphics are very small stickmen on a green background, and there is no animation of any kind. The batsman is shown as an alternating L-shaped block, which does give the suggestion of running up. I suppose. But everything happens fairly fast and it maintained my interest for a while. In the main it suffers from the usual limitations of armchair sport, plus a little bit more since it does look rather an old-fashioned program now.’

‘Not a bad cricket game, using the names of real persons and places. It took me a while to realise that the batting keys had to be pressed. Not pressing a key after a ball has been bowled means the stroke was not taken. I was waiting for a screen prompt. I bowled England out in two overs, leaving Knott not out! After I got the game sorted out I found it not too bad. I’m sure that cricket fanatics will enjoy it, but it’s debatable whether the average Spectrum owner will (if there is such a thing as an average Spectrum owner)!

‘Sports simulations tend to leave me a bit cold, and one on cricket is certain to! If there had been some real action it might have been more fun. As it is this game boils down to the reactions of bowler and batsman and then pressing the ENTER key endlessly.’

COMMENTS

Control keys: mostly the numerics

Keyboard play: reasonable

Use of colour: simple, but reasonable

Graphics: small, simple and unanimated

Sound: poor

General rating: rather an odd-ball simulation, but for those who enjoy cricket it may prove to be fun.

Use of computer 50%

Graphics 52%

Playability 50%

Getting started 45%

Addictive qualities 40%

Value for money 58%

Overall 49%

Defusion/Worms

Producer: K-Tel

Memory required: 48K

Retail price: £6.95

Language: machine code

Defusion is the 'Gridtrap' game of moving over squares to defuse time-bombs, collecting flags and avoiding the skulls and ramptant boots. As you move the squares stepped on are deleted, making it harder for you to move about, and making it impossible for the boots to move around as well. Squares may be scrolled left or right where they exist to make movement freely available again. The screen wraps around left/right and up/down. The boots are quite intelligent, and will start homing in on you soon after the commencement of each game. Flags give bonus points, skulls and boots kill, the time bombs have a time limit which starts ticking.

CRASH June 1984 101
Another K-Tel double-sider, this one, Defusion, is a simple looking version of Grid Trap. Away as soon as they appear. When one has been defused by running over it, another appears somewhere else on the screen. An undefused bomb explodes colourfully all over the screen.

Worms is a snake-in-the-garden game where you must avoid hitting your own tail, rocks, edges of the garden and reversing on your track. What makes this version rather more interesting than most is that it has seven different screens on the same theme. This worm, too, starts at a point and continues growing until it fills the screen. In the first screen there are no hazards but the worm sometimes grows a black segment over which you may cross its body, and then a bluebottle lands on a segment and this may be eaten to get to the next screen. Screen two is more traditional, eat the flowers and avoid the rocks. Screen three is a maze where you must get through; eating all the flowers on the way. Screen four is a tunnel – don’t hit the sides; five has an elusive blue flower and rocks. Six screens you must guide the worm downwards through an upward scrolling passageway and in the final screen it’s the bottomless pit.

**CRITICISM**

When you start, only the worm’s head is visible, turning through four directions until you press a direction key. Worms has quite a lively selection of games within the theme. Defusion is a simple looking version of the GridTrap game. Neither game has particularly good graphics, they are simple and not very detailed. The keys are sensibly placed but the responses are not wonderful, especially in Worms, which is written in BASIC. I think this tape is better than any of the first K-Tel releases, but there’s certainly nothing new here.

I can only comment on screen one of Worms and this was pretty boring and out of date. It was also hard because of the terrible response to the control keys. Before I could become proficient enough to get to another level, Worms made me squirm! Defusion was slightly better, more imagination has been used with the graphics, although they were not very strong. I can’t really see K-Tel getting anywhere in the software business unless they realise that TV ads and flashy covers do not make a good game. Good games sell themselves! And I’m surprised to see Home Computing Weekly giving it five stars and calling it professional programming.

Defusion is a rather aggressive Chuckman style game. It is quite a playable game although the choice of screen colours could have been much better. Keyboard response is not over-reactive but the keys have been placed quite well. Worms is quite a simple game to play and is not very fast at all. The reaction of the key responses don’t match up to my own at all! A point that must be made, is that on screen 6, where you are descending to the secret depths of the earth, attempting to avoid the walls and rocks on the way is made very difficult because rocks nearly always block the path.

**COMMENTS**

Control keys: A/Z up/down, N/M left/right and J/K scroll left/right (Defusion) Joystick: Kempston Keyboard play: not very responsive Use of colour: poor Graphics: average Sound: average Skill levels: 1 Lives: 3 Screens: 1 (Defusion) 7 (Worms) General rating: both games together represent a reasonable value for money, but neither is original, or exceptionally implemented.

Use of computer 55% Graphics 41% Playability 55% Getting started 69% Addictive qualities 50% Value for money 42% Overall 52%
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Armed with little more than a trusty spade, nimble fingers and wilting joystick, our two arcade playing reviewers, CHRIS PASSEY and MATTHEW UFFINDELL, enter the dusty platforms in search of monsters... 'Panic' games involve climbing ladders to various levels within the screen, digging holes in the floors and letting the monsters fall into them. When you trap a monster in this manner, there is usually a short time in which to reach it, bang it on the head so that it falls through to its death, filling in the hole as it goes. Failure to kill it in time will result in the beast escaping and becoming a super monster. The more super a monster becomes, the more holes it must fall through in one go, which means digging holes in a vertical line. You have an ever-diminishing supply of oxygen, so speed is important. This selection contains some close copies and some slight variations on the theme.

Sheer Panic

Visions

This is a reasonable version of 'Panic'. It contains the features such as the limited oxygen supply and the increasing strength of any monster that is not buried in time when in a hole. The graphics are quite good with character movement being used but working quite well. Colour content is about right but I think the sound is limited. The major drawback to this version is the key layout, the top row being used in a straight line (6 to 9). Digging and filling is done with the up/down keys, which does reduce the number needed to play the game. On the subject of control I found it one of the worst games for moving off ladders on to levels, all in all, a decent and fliry addictive game, especially when played with a Kempston.

CP

This version has four well drawn platforms, connected with varying lengths of ladders. All movement is by blocks - although this doesn't spoil the playability of the game. The monsters have a low intelligence level so you don't have to wait around for a monster to fall into a quickly dug hole - good! Your man is nicely animated and moves quickly. Different coloured monsters, as usual have to be knocked down on equivalent number of platforms before they are killed. Sound and colour are put to good use and it's well worth considering. There is, however, an oddity involved. The game is the same as Microgen's Panic.

MU
All my comments on Sheer Panic by Visions apply to Mikrogen's Panic, because unless I'm grossly mistaken, this is the same program. Well, there are a few differences and one big one. The big difference is that this version offers the player user definable keys. The small ones are a few peripheral frills like text characters. In all other respects it is identical. How come?

Monsters in Hell

Softer

Monsters in Hell is a slight variation with you having to destroy demons and vampires using the same digging techniques. A problem I found was that once dug, holes could not be filled in, hence one can become trapped above the flames of hell. The oxygen has been replaced by holy power, and this can be replenished by picking up a cross. Despite these changes it is still a 'Panic'. It isn't a very good one either. The graphics are rather small and jerky, and generally everything is second rate. I didn't find it very playable or addictive. The controls are okay, having a 'dig' key.

CP

Digger Dan

Ocean

This game has wandered off the 'Panic' theme to some degree. You play the part of a small, jerk-moving man who is equipped with a pick for digging holes. Six platforms give the game quite a height and these are connected by various lengths of thin ladders. Monsters (vampire types) are tiny, but they do home in on you very quickly - good job you've got nine lives! There is no monster bashing in this game (boring) the monsters being killed merely by their falling through a hole (or holes) in the platform - although this doesn't always kill them. The game is easy to play and gives the impression of being out of date (it is one of the earliest), with its small, jerky character graphics. There is also a lack of sound and not much use of colour. One thing is the keys, which have good positions and good response. Overall, not recommended.

MU

Super Digger

Abacus

This is the only game here that is written in BASIC. The key layout is poor (cursors). Digging is achieved by using the down key and the up key is used for jumping holes and monsters (as well as climbing ladders). You die if you fall into one of your own holes. Colour and graphics are limited due to the BASIC language used. Hence movement is jerky and the characters are small. Five 'mazes' and three speeds are four monster types, and separate keys for dig and fill, which are well laid out. Digger Dan is enjoyable and addictive, and one of the best 'Panes' here.

CP

This version has now been available for quite a while, yet it shows hardly any signs of age. The game takes place on five very solid looking platforms connected by several well-drawn ladders. It starts off as the simplest of the bunch but gets progressively more difficult by adding one monster for every two screens completed - unique. The monsters are well drawn and move smoothly, although they are not all intelligent. Your man is nicely animated and moves with reasonable speed. The keyboard positions could have been better, but nothing too much to complain about. It is slightly lacking in the sound department, but colour has been well used. Good.

MU
which is innovative, and overall I liked the jumping idea, unplayable and not addictive at all. I think Abacus may have been able to produce a better game in machine code. CP

The first thing you notice about this game is the offer of five different mazes and three speeds. Although there is a choice of speeds, the game runs slowly even on the fastest one. Screen layout is almost primitive by today's standards, with uninteresting platforms and no frills. Ladders, monsters and your man are not very detailed, and move by block. Once a hole is dug, you can't fill it in (like Monsters in Hell), but you can jump over it (unlike Monsters in Hell). The screen is quite a bore because nothing much happens. Not a very good game at all and cursor key layout makes things worse.

Pandemonia
CRL
This game gives a wide choice of keys and joystick options. It is a slight variation on the original Panic with you having to open doors and get up to the top of a skyscraper. The graphics are excellent, the best of the bunch in fact. But the game lacked playability, and it is certainly the hardest game of the lot. Hardness is not a bad thing, but I really found it difficult to get anywhere. A sort of strategy is required before 'opening' a door. The oxygen feature is also included. A reasonable game that would be far better if it were just a little easier.

CP

Pandemonia is quite unlike all other Panic games due to all the features which have been added. For instance, the entire game takes place in the CRL skyscraper, object being to get to the top and destroy the alien HQ. Some of the ladders, which connect five platform levels, have doors placed above them. Opening one reveals a hungry looking monster. Several different screens add variety to the game. Your characteristic man moves and digs very well and he is controlled by a responsive, well laid out keyboard. The monsters are also drawn very nicely with three or more different types on screen at once - luck has it that they are not too intelligent. The ladders are large and easy to move up or down. Colour and sound has been put to good use. Overall the best Panic here where forward thinking is essential and this game should take some time to master.

MU

Sam Spade
Silversoft
In my opinion, this was the best game. It was just 'better than Ocean'. The key layout was all right with one key for dig and fill. The graphics are very good, being large, smooth and reasonably coloured, although there are a few attribute problems as monsters climb the ladders, but this was nothing to complain about. The sound is not very good probably the best on this comparison (all the games are poor and limited on the sound front). Sam Spade is very playable and addictive with three types of monster and a fixed amount of oxygen available. I like this one most of all out of the selection.

CP

Silversoft have produced a fairly standard Panic that has five platforms and a 'set' ladder layout (no random positioning). You take the place of a well-detailed and drawn man who moves smoothly and quickly. The same applies to the monsters, and the three different types (each stronger and more intelligent than the previous) keep you very active, especially when trying to dig holes for the strongest ones which need to fall through three platforms. Good, fast digging action and colourful, noisy, unintelligent monsters with the added bonus of responsive and well laid out keys make this an enjoyable game to play.

MU

Spectral Panic
Hewson Consultants
(We only have one reviewer on this game as Chris Passsey was unable to see the game at the time.) Five platforms, skinny ladders and poorly drawn moving characters make this game a bore to look at. But the key positions make it a tangle to play. They are placed in a joystick-like cross with dig and fill way over on the other side of the board - out of reach - just impossible. One screen gives the game poor playability. Knocking a monster through one of the platforms only causes another to appear at the bottom of the screen. Use of colour, sound and graphics is very poor and it is a badly thought out game. Some of Hewson's recent games have been very sophisticated and playable, so all I can say about this one is that it helped them get going (it is quite old now) and up to where they are now, then that's the best thing about it.

MU

PANIC GAMES COMPARISON TABLE

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Last month we brought you the winner and two of five runners-up in our Reviewers' Competition. Now we have the remaining three runners-up with their winning entries. The order in which these entries appear is not a reflection on their individual merit.

Steven Wetherill of Kexbоро, Barnsley, South Yorkshire, wrote about utilities, IS and FP Compilers by Softek, M-Coder by PSS and the OCP Editor/Assembler.

E. Musnslow, West Bromwich, West Midlands, wrote about Penetrator by Melbourne House, The Hobbit and Melbourne DRAW, also by Melbourne House.


STEVEN WETHERILL
SOFTEK 'IS' and 'FP' compilers

These are compilers for the 16K and 48K Spectrum — the 'IS' being an integer compiler and the 'FP' a floating point compiler. As these are similar in many ways, they will both be covered in this one review.

Each of the compilers contains 16K and 48K versions on the same tape and comes in a large video case. They are supplied with a short but informative instruction leaflet. While the packaging looks very game-like, any more than a cursory glance will show that they are in fact very comprehensive and useful utility programs.

To load the compiler you simply type LOAD "". The program loads in two parts, a BASIC loader then the compiler itself. When fully loaded you will be asked whether RAMTOP at 40000 is OK, and given the option to change this if necessary — your BASIC will be compiled immediately above RAMTOP.

Once RAMTOP is set, you are told that you can NEW and BASIC loader.

When the compiler is loaded, you can type in your BASIC program, or load it from tape or microcassette in the usual way. As you may expect, the "FP" version will handle more of the BASIC than the 'IS', and your BASIC program will have to be written in mind the list of allowed commands. Both compilers are quite comprehensive, in the string handling, for instance, strings are totally flexible and can be any length. String splitting is allowed as are LEN, STOS CODE CHR$ INKEY$ SCREEN "$"s (for concatenation). Strings can be compared as in BASIC. This is far more powerful than the string handling in the M-CODER compiler. When compiling BASIC programs from magazines and so on then obviously some modification is usually needed, but both compilers handle most BASIC commands and it is usually quite easy to make the required changes to programs.

When your BASIC is loaded and ready to be compiled you simply type RAND USR 59300 (26600 for 16K).

Various messages appear as the compiler passes twice through your BASIC — these are:

1. START ADDRESS. This is always one byte above RAMTOP.
2. END ADDRESS.
3. VARIABLES END. This message appears when your program contains string or arrays. These are stored immediately after your compiled BASIC.
4. FIRST PASS/SECOND PASS.
5. ERROR/NO ERRORS.

After a successful compilation the message NO ERRORS appears. If the compiler finds an error then the ERROR message will appear, compilation will stop and the offending line is displayed with a question mark after the error. If this occurs then pressing EDIT will bring down the erroneous line for correction.

If compilation is successful your program can be run using RAND USR START ADDRESS (given in above).

Error reports use standard Sinclair error codes.

Your BASIC program remains in memory after compilation. This allows modifications to be made if the machine code does not run as planned. If all is well your compiled program can be saved as CODE in the normal way. Note, however, that the compiler must be saved along with the compiled code as it contains several runtime routines needed for efficient programs. As with the M-CODER compiler, programs can be stacked in memory and used as subroutines; this is done by carefully setting and resetting RAMTOP.

Special Features

REM statements are used in both SOFTEK compilers to obtain facilities not available from BASIC. The syntax is:

'SIS Version
REM B - Checks to see if BRK is pressed
REM S,a.x,y - PRINTS a character (ASCII code a) on to the screen at PLOT position x, y.

'FP Version
REM O,a.n.n... - This simulates the BASIC function ON A GOTO n.
REM E,n - If an error occurs jump to line n.

In Use

Both compilers proved very easy to use and the speed improvements is immediately noticeable. There seemed to be some problem when trying to use READ and DATA statements within a program loop — the program in question worked under BASIC but gave an OUT OF DATA message when compiled. Also if a variable was assigned within a FOR-NEXT loop an OUT OF MEMORY error was sometimes encountered during compilation. This seemed to be intermittent and if it did occur, using CLEAR cured it. These minor irritations aside, both compilers worked OK.

Applications

Both compilers take up about 6K of RAM. The FP compiler is obviously capable of more accurate results in scientific and technical applications but also, as it uses time consuming (accurate) floating point notation, it is slower than the 'IS' version. The 'IS' compiler is more suitable for such things as games.

SOFTEK claim in their advertisement, 'Superfast games involving hi-res graphics and movement are now possible even if you are only knowledgeable in BASIC.' This is to some extent true, but the hi-res movement (using REM S) ranges from not particularly fast to downright slow. It is just not enough for fast-moving games. Both compilers would be ideal for use alongside other machine code utilities and can be used with, for example, an interrupt driven sprite-moving routine. This would obviously need some knowledge of machine code, but it wouldn't be quite fair to say that compilers are the complete alternative.

Conclusions

At £9.95 for the 'IS' compiler, and £19.95 for the 'FP' version these programs represent excellent value for money. If you are looking for a compiler these two are probably the best on the market at the moment. The 'IS' compiler is far superior to the two other compilers, however — that the use of SOFTEK'S compiler must be clearly acknowledged on packaging, advertisements etc.

M-CODER II by PSS

This is an integer compiler for the 48K Spectrum only. The program is supplied in a standard cassette tape box (instead of the overgrown video cassette ones) with an eight-page fold-out instruction leaflet, which is brief but to the point.

Loading the program is simplicity itself. Type LOAD '"' and there is a BASIC loader which tells you that the compiler is invoked by the RAND USR 60000 command, and that your BASIC is compiled to locations 40000 upwards. This is the default address, however, and may be changed using CLEAR n where n is the address at which your BASIC is compiled. This facilitates stacking of programs in memory, to the M-CODER from PSS, with the added bonus of (slow) mini-sprite graphics. Please note the different notice on the compilers, however — that the use of SOFTEK'S compiler must be clearly acknowledged on packaging, advertisements etc.

In use the compiler works fine but there is a noticeable difference in speed.

Some typical errors include:

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runs at about normal BASIC speed, but is very useful for debugging purposes. Option 1, is chosen by default, but this can be changed as often as you like. Options for programs by using the REM command. REM statement - REM # 0, REM # 1, or REM # 2 - corresponding to the options above. The compiled code may be saved from BASIC (SAVE is not compiled) using the usual SAVE command. However, as the MCODER contains certain runtime routines, it must be saved along with the compiled code.

Applications

Compiled BASIC is generally more efficient than interpreted basic, which means that it runs faster and is more compact. This is advantageous for games writing as games will run much faster. As this is a mainly gamesorientated program, some thought will be given to this. In general, arcade games written in BASIC are slow and jerky - slow because of inherent qualities of the interpreter, and jerky because of the whole character block steps used for movement. Using a compiler such as MCODER can more or less solve the problem of speed. However, the jerkiness is still there. The result is games, which instead of being slow and jerky, are now fast and jerky. The speed party compromises for this, but the results are never particularly realistic and in no way are they comparable to most commercially available games. Some people will accept this, but many I feel, will be disappointed.

Conclusions

MCODER II is easy to use, and if you can overcome the omission of some commands it could be quite useful. The speed improvement is significant, but the program is not really intended for beginners. Using a compiler is supposed to be an alternative to using machine code, but in reality some knowledge of machine code is needed to fully understand the operation. At £9.95 I cannot help feeling that it is overpriced, as the SOFTK compiler is three times more powerful, and this offers far superior (in theory) facilities. However, there seemed to be some anomalies in the operation of the SOFTK compiler, whereas the MCODER worked without fault, so this can only be in MCODER's favour.

Full Screen Editor/Assembler by OCP

This is a machine code Editor/Assembler for the 48K and 16K Spectrum. The cassette is supplied in a cardboard presentation box. The documentation is comprehensive and a complete list of the Spec manual, appendix B.

The editor uses line numbers and often results in a single key being pressed twice or more on the same depression. This is a small fault which spoils the program and increases wear on the keyboard as you have to look at the keys. The expression evaluator is useful for automatically generating such things as table lengths, string lengths, constants, address and other data. This take a lot of the tedium out of assembly level program making and is a useful programming aid.

The assembler makes two passes through the source code in the text buffer. The first pass checks the syntax of the source code and creates a user symbol table. The second pass converts the source code mnemonics into their object code equivalents. This is all displayed on screen during the second pass.

The assembly listing is displayed in three sections. The right hand part is a copy of the source code from the source buffer. The two columns on the left contain the location at which the object code will reside, followed by the object code itself, both in hexadecimal. Error messages are comprehensive and a complete list of errors and their causes, etc. is given in the manual. At the end of the assembly is given a count of the errors.

The assembler stores the code it produces in tape files from tape. An expression evaluator is useful for automatically generating such things as table lengths, string lengths, constants, address and other data. This take a lot of the tedium out of assembly level program making and is a useful programming aid.

Applications

To use an assembler you obviously need some knowledge of machine code, and you probably have your own ideas as regards applications. For the more adventurous or, indeed, if your writing games - non-serious - use of machine code the opposite of the above is also true - that is to use machine code you need an assembler, and this one. The OCP assembler program can be recommended to beginners to machine code as it is quite easy to use. The more experienced programmer, however, will probably require something a little more flexible. OCP's Editor/Assembler is quite adequate for general purposes machine code programming, offering powerful features at a reasonable price.
Conclusions

What's left to say? This assembler is a sober money at £9.95 and usually does as it is told. There is however one bug: instructions (X, X-d), sof B, (Y, Y-d) are not decoded properly - you have to get around this by using DEFB pseudo ops. This is a bug that I personally uncovered when using the program and it caused me hours of frustration.

After contacting OCP I received an apology along with a corrective 'patch' which involves loading the program and then entering a few words. Also, by way of recompense, OCP offered a 52 discount off any of their other programs. The 'patch' cannot be applied to the 16K versions, and OCP offer to replace the tape it needed. A corrected version should be available now.

If you are finally triumphant, or if you find the cave system just too difficult, the game boasts a unique customising option, which enables you to simply edit the landscape and bases to your own liking - as easy or as tough as you can manage, with as many or as few missile bases as needed. Once created, a landscape can be saved to tape, so in effect Penetrator consists of a series of Scramble-type games of differing degrees of difficulty at the player's whim.

One of the Spectrum classics and, hopefully, one of the first games to be upgraded for the QL!

cheap RAM. With available memory of the order of 40K in many micros, it is feasible to squeeze well over 200 locations into a game, producing a scenario which has possibilities to test the most seasoned adventurer.

The great attraction of the Hobbit lies not in its basic complexity, but in the novel (and very sophisticated) approach its writers have chosen with regard to its operation. To begin with, its recognition of input from the player is amazing, compared to all currently available adventures. Scoring the usual limitations of a two-word input, consisting of a verb-noun pair such as TAKE SWORD or GO EAST. The Hobbit can accept lengthy and quite complex sentences of up to 128 characters in length. It is a great annoyance to players to be given the response 'I can't do that' when a game lacks the vocabulary to carry out a simple instruction. The vocabulary of the Hobbit is high - three or four times that of the average, so the possibilities of action are correspondingly large. If the program does not recognise a word, it makes the fact clear, and differentiates between this and whether the desired action is possible. It is this quality of input analysis which explains the attraction of the game for first-timers; the Hobbit has been the first game played on a micro for many purchasers of the Spectrum, and very few will have been let down, as the game is so easy to get into, and enjoy, without being too easy.

There are two other great attractions of the Hobbit. Most obvious is that the game has popularised the use of graphic illustrations. Although not the first to use pictures of locations (the Apple has had several such adventures for some time) it was the first on a truly popular micro, and has generated a flock of imitators. In fact, there are less than 30 of the simplistic drawings, but they do add a certain something to the game, without wasting too much memory, and point to the future of Sinclair adventures, when a couple of hundred such pictures can be called from the Microdrive. Their only disadvantage in the Hobbit is that they cannot be turned off and when slowly drawn for the fiftieth time they can begin to grate on the patience.

E. MUNSLow

Penetrator
Melbourne House

One of the first games issued for the Spectrum, by Sinclair favour-ites, Melbourne House, Penetrator has stood the test of time very well. Despite the huge software base that now supports the Spectrum, Penetrator is still probably in the top ten or so of most playable and most addictive games.

The game is a fairly faithful "ideal" from the arcade favourite, Scramble and, despite the obvious limitations of the Spectrum, even using the full 48K, stands comparison very favourably with versions on dedicated games machines. The object of the game is to fly your fighter through a series of caverns, all stoutly defended by guided missiles and policed with radar bases and flares. As you start your mission, you are asked if you dare to move to the game proper. The trainer module is a welcome innovation - because of the complexity of the cavern system, it is very useful to be able to acquaint oneself with the layout whilst being able to squander an infinite number of lives. There are various tricks and techniques which need to be learned, in order to make progress and the trainer is ideal for this. There is a choice of practising on any of the four continuous stages of the game, and once a stage has been completed, you are automatically moved on to the next phase, and so on. Throughout your practice, a score is kept, depending on the number of missiles, radar bases and paratroopers destroyed, so you can check on how your skills are improving before you dare to move to the game proper.

The actual game is for one or two players and each one of the players' five lives starts by rousing battle stations. The use of sound, although fairly limited in nature (jet sounds and explosions), is good, particularly when amplified. The keyboard control layout is one of the now standard types, with Q/A for up and down, and P/O for throttle/brake, which are sensible for finding in a hurry. Your weapons systems comprise bombs (any key on the bottom row) and missiles (P again, when pressed rapidly, which is quite an annoyance when using a programmable joystick, since the stick has to be jerked rapidly to differentiate between fire and thrust). The use of a joystick does simplify movement tremendously, since the game requires a fair amount of dexterity on the keyboard. Unfortunately it is a programmable stick which is needed, since there is no option offered for any of the standard joysticks.

The graphics are fairly unsophisticated, compared to the best offered by Ultimate and Quicksilva and it would be interesting to see the quality of a 1984 version on this score.

Once you have negotiated all four phases, your task is to destroy the neutron-bomb store, and then return the way you came. Easily said, but it will take you many many hours of play on the trainer before you get anywhere near proficient enough to even reach the bomb store, much less destroy it and return to base. However, such is the addictive quality of Penetrator that you will keep trying, again and again, if only to better your top score. There is a high score table provided, of course.

The Hobbit
Melbourne House

The Hobbit has clocked up huge sales on the Spectrum and has been converted on to three other home micros, as the game has established itself in the affections of millions of computer owners as the most popular adventure game ever. Strange as it may seem, though, as adventure games go it is not nearly as good as it could have been. Certainly, to experienced micro-adventurers, it is fairly easily mapped and solved, since it only offers 60 or so locations to be visited, which is pretty small beer by today's standards of
The second novel feature is the application of a new concept (named animation by Melbourne) of the other characters in the game. Your co-adventurers, Thorin and Gandalf, as well as the elves, trolls, spiders and dragon encountered later, all seem to behave independently of you and each other, and so, if no entry is made from the keyboard, action will continue. Gandalf will fit in and out of the screen at will, random, decide to help or hinder your efforts to escape from dungsions, and other inhabitants which you can be sure their lives as the game progresses. The object of the game is to regain the treasure of Smaug, the dragon: but to do so you will need to explore and map the locations, collecting swords, keys and magic rings. Everything about the game exudes class, from the stunning loading screen to the thorough documentation provided.

For micro adventure games and software used to set or reset pixels with ink colour, or, indeed, to skip over pixels to enable rapid movement over the screen without leaving a trace. To aid the latter, the co-ordinates of the moving cursor are displayed in the information window.

Once basic shapes have been drawn on the screen, the colour attributes of the picture may be edited, by a simple switch into the Attributes mode. As a consequence of this, a single colour resolution is used, which can be changed at will from the keyboard. Movement of the cursor is by eight directional keys and can be used to set or reset pixels with ink colour, or, indeed, to skip over pixels to enable rapid movement over the screen without leaving a trace. To aid the latter, the co-ordinates of the moving cursor are displayed in the information window.

During these drawing operations, the input of text on the screen is not catered for, but this is easily remedied by a simple switch into the text mode. This mode is equally versatile, allowing characters to be stored in any of four fonts. Once selected, the font can be used to 'wash' over coloured shapes to fill them in with a new colour.

These are the major facilities provided by the program, but there are several other options which are very useful. For example, a 760 position grid can be generated on the screen and any of these character positions can be copied simply into the UDQ area, and, for reference, the eight bytes of the UDQ data are displayed in the information window as the graphic is stored. The screen can be scrolled, pixel by pixel, in any of eight directions and, handily, the information window can be removed, to enable drawing of the picture to be continued on to the bottom two lines of the screen.

The program itself is written in BASIC and filled with attractive routines for greater speed, particularly in the useful Paint commands which can create a screen shape with a given INK colour. Being rather short, the program loads very quickly and first offers a main menu which includes the option to edit (if an already drawn screen has been loaded). An essential adjunct to the program, because of the sheer complexity of the keyboard controls used - 70 all told, excluding the usual text keys, a bewildering number to remember without constant reference to the hand written manual. Overall then, a well thought out package, for the albeit rather limited area of Spectrum on-screen art, providing a few handy routines which are not readily available to the user who is drawing entirely from BASIC. Unfortunately, it does seem rather expensive for what is not a very involved piece of programming, and the basic plot of the classic arcade platform game, Donkey Kong.

Ocean's Kong for the 48K Spectrum is generally considered the best version of the theme around on the computer. This may well be true, but it only goes to show the lack of a really good Spectrum implementation on the software shelves.

The game does boast almost all the features of the original arcade game, including following the tracks, being varied, and Ocean should be able to produce some of the best games for the Spectrum on the market.

Anyway, back to the main menu. The in-lay gives an excellent account of the game and its controls. Kong loads reliably with a starting screen of Ocean's motif (how did they get those three different shades of blue?). When the program has loaded, a nice menu of control options is presented. Kong accepts a Kempston or Joystick input, or uses the efficient four buttons seen character etc. to Ocean - A, S, X and M. While these are simple enough to master, the gameplay is not the best design but to bad graphics and programming. You animated Mario charges unapologetically across the screen and perform the same motions each possible - making the hurling of barrels and other nasties difficult to get used to. Moreover, the enemies are so eager to hospitalise the hopeless hero that a man is lost even when some fireball or other was obvious 'millions of miles away'; and all too frequently the program kills you off most inac-

GARY BRADLEY
Ocean (Kong)
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CRASH June 1984 115
PRINT A PRINT

If you ever wanted a permanent record of listings or screen printouts, you may have considered a low-cost printer. Up until recently your choice would have been confined to the Sinclair ZX printer. At £39.95 it certainly proves to be the cheapest on the market, but unfortunately it has also received the longest list of not too kindly and often unprintable nicknames from its harassed users. Complaints on paper running askew, feed slippage, lack of print quality due to low-grade silver paper, etc., have not endeared it even to the most ardent Sinclair fans.

Rescue has come from DEAN Electronics, who introduced the ALPHACOM 32 printer for the ZX Spectrum (and the ZX81) in this country. This unit has been developed in the States as an alternative to the original Sinclair printer, which is not being marketed there. Anybody with a fondness for a Sinclair's silver paper may be pleased to note that the ALPHACOM 32 uses normal white thermal paper. The result is very readable.

The only problem encountered with the print quality is that photocopying is very difficult, as most photocopieters are insensitive to the blue printout.

GETTING STARTED

The unit comes in a rather large polystyrene box and includes the printer with its edge socket and cable, a hefty power supply, a roll of paper and an instruction sheet. With all power plugs removed, the printer's edge socket is connected to the Spectrum. The edge socket is a 23-way edge connector and will fit the ZX81 and Spectrum edge connection. An extension port is provided at the rear of this socket, which is suitable for the ZX81 add-ons, but not the Spectrum add-ons, since these use the 28-way edge connector. This means that the printer should be connected at the end of the line of add-ons and no problems will be encountered unless one of the add-ons does not have an extension port.

The printer receives its power from its own power source, which generates 24V AC. A line jack-plug connection is provided between the two units for powering up the printer. Once connected, pressing the ON/ADVANCE button will start up the printer ready for loading paper or printing. The ON/ADVANCE and OFF switches on the printer do not physically connect or disconnect the printer from the supply line and it is therefore necessary to disconnect the printer from the power supply with the jack-plug connectors for longer shut down periods.

LOADING PAPER

The printer uses standard thermographic printing paper of 4.25 x 1.9" diameter. The clear acrylic receptacle cover hinges open and the paper roll placed into the paper tray is fed with about six inches protruding from underneath the roll below the rubber platen while pressing the ON/ADVANCE button. The paper should feed automatically. It is best to have a clean-cut leading edge, so that the rubber platen can get a good grip. Pulling the leading edge towards the front, the cover may be closed. If ON/ADVANCE feeds the paper correctly, the printer is ready for action. The printing action may be checked with the in-built self-test mode, which prints a line of eights and a line of ones.

SILENT RUNNING

The printer operates with very little noise. Printing speed is similar to the ZX printer, possibly a fraction faster and definitely more regular, as the asthmatic ZX printer usually runs out of breath when negotiating long listings. The print quality is better than with the ZX printer. The horizontal dot positioning is far more accurate, as each thermal head only has to scan eight horizontal dots. The ZX printer on the other hand has a set of conductive stylus running along the entire width of the paper and their position is monitored by a signal generated from the stylus hitting the leading edge of the paper and from an optical encoder disc, so positioning errors may occur and accumulate over the 256 dot stretch of the print run. The paper feed works well; no paper running askew or slipping to create foreshortened characters. ADVANCE and OFF switches on the printer do not physically connect or disconnect the printer from the supply line and it is therefore necessary to disconnect the printer from the power supply with the jack-plug connectors for longer shut down periods.

APPLICATIONS

When buying a printer it is necessary to consider precisely what it is required to do. If you require word processing on the Spectrum, then obviously the ALPHACOM 32 is totally the Spectrum, then obviously the ALPHACOM 32 is totally unsuited for this application. Nothing less than an 80 character width daisy wheel printer and a proper typewriter-style keyboard should be considered and this means running up costs of over five times the value of the ALPHACOM 32. If, on the other hand, you require a machine capable of creating program listings, or making screen copies of title pictures or technical/financial graphs, then the ALPHACOM fits the bill. The listings are very legible and are a godsend for debugging long programs without TV eye strain. The screen copies are an added bonus, but it is a shame that the paper feed is just that little bit too fast and creates unnecessary white gaps between the screen plot lines and elongates the vertical dimension of the screen picture.

Many Spectrums find their way into development or test laboratories as cheap scientific calculators and a hard copy is always required. With very little extra hardware (PIO and A/D extension cards) the Spectrum can operate as an intelligent measuring device or datalogger and can even replace an expensive chart recorder.
CONCLUSION

The ALPHACOM 32 is an ideal and dependable printer for program listings, screen copies and any other applications not requiring large paper format. For those people who do not want to be bothered with the unorthodox silver paper and the dodgy feed of the ZX printer, it is well worth the extra cost of the ALPHACOM 32.

Franco Frey
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The CRASH Mail Order coupon is on page 81.
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Once you have visited the Attic your very presence will trigger a chain reaction in the Chapel. The four guardians from there will then go to the Kitchen, West of the Kitchen, Cuckoo's Nest and the East Wall Base making short cuts through them impossible as you will encounter instant death when entering the rooms.

In this game it is essential that you make a map and leave visiting the Attic until the last possible moment. Needless to say that from the Attic the only route left to you is the longest most torturous path back to the Bedroom.

Happy Adventuring.

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GET YOUR WINGS AND BOVVER BOOTS ON AND WIN A COPY OF WINGED WARLORDS AND TIMEBOMB!!

Fifty winning entries will each receive these two games from C.D.S. Microsystems. Both games received high ratings from CRASH in the April issue. Now is your opportunity to get to grips with the boots and bombs, lances and flying horses.

The two pictures below, depicting the covers of Winged Warlords and Timebomb, are identical - or are they? The entrants who can correctly identify the 10 differences between the two pictures will go into the bag. The first 50 drawn out will each receive a copy of both games. Entries, which should arrive at the CRASH offices by the last post Friday, 29th May, should be sent to the CRASH/C.D.S. Competition, PO Box 10, Ludlow, Shropshire SY8 1DB. Circle or cross the differences on one of the drawings. If you don't want to cut up your copy of the magazine, a photocopy will also be acceptable.
Jumping Jack

Imagine

"Jumping Jack is quick and bold, With skill his story will unfold ..." or so we are told between screens in Imagine's addictive best-seller Jumping Jack. It seems a millennium since Arcadia stormed across the Spectrum screens of Britain and set the scene for games to come. The company has released several notable programs since, and Jumping Jack is one of the best.

The basic theme is to guide your man, Jack, from the bottom to the top of the screen without falling through the multitude of moving holes, thrumming into girders or being flattened by the odd nasty on the way. It's a game which is addictive through its simplicity and will be played for years to come. Splendid, often hilarious graphics, 20 levels, fast-moving action and constant excitement all help maintain that 'just-one-more-go' quality.

Jack starts at the bottom of the screen and begins his ascent by moving across a dozen horizontal platforms - but the number of holes increases as you progress higher. What you have to do is jump up a level whenever a hole passes overhead, while avoiding plunging down a level through holes traveling on the platform beneath his feet. Each jump creates a new hole (there had to be a catch, didn't there?)? Holes travelling left to right move down the levels when they leave the screen; those right to left move up. The most efficient strategy is probably to try to follow one hole all the way to the top and jump up to the next screen. This is often hindered by the holes moving down and the sheer number of aliens (one being added each time you complete a screen). Double holes can be most frustrating!

If Jack falls, or is hit by a nasty, he squirms pathetically on his back seeing stars (literally), thus he is immobile and vulnerable to further holes approaching. Happily, a life is lost only when Jack falls all the way to the bottom line again.

Penetrator

Melbourne House

Melbourne House's Penetrator is a splendid version for the 48K Spectrum of the arcade favourite, Scramble. In case you don't know (where have you been for the last few millennia?!) Scramble is a game where your fighter soars across a horizontally scrolling landscape of caverns and narrow mazes, dodging ground-to-air missiles and flying saucers. You can bomb the buildings on the precepts below. Almost all the features of the original are included in Penetrator, and there are a few extra ones besides.

Due to your ship's ability to fire at airborne aliens or missiles and bomb the radar installations on the ground, Penetrator has six control keys. Fortunately they are distributed sensibly around the keyboard and the P key has been ingeniously programmed to thrust and fire depending on how long you keep it pressed - making life a lot easier! Penetrator has five phases of action, ranging from open-air ground attacks to edge-of-the-seat maneuvering along narrow corridors redolent with missile towers. A delicate operation, but it can be pulled off if you stay as far forward as possible at all times.

While the arcade version has a fuel gauge to keep your eye on, this has been replaced in Penetrator by a 'danger level' indicator; if too many radar bases are missed, this counter increases dramatically and the enemies become more intelligent - if the level reaches RED ALERT, then look out! You must now avoid guided missiles and crafty aliens who hide behind rocks away from your line of fire and swoop down on you when it's too late to hit them.

The graphics incorporated into the game need only one word of introduction - all hi-res, and so well animated that the rotating radar bases almost slip into three dimensions as they spin on their turrets. The explosions are satisfying and your ship's laser blaster can keep up easily with your twitchy finger even if you are the fastest arcade gunner in the West! Unfortunately, you are limited to two bombs at a time - which is a pity as there's so much to hit. The sound, too, is excellent, especially the sirens, explosions and game tune.

The sound and graphics add to Penetrator's addictive qualities, but the actual game is very challenging and difficult, which can only be a good thing. The changing phases maintain interest, as does the incorporation of a mission which must be carried out rather than just blasting aliens all day. This task confronts you in the fifth phase, when you have one chance to bomb an alien base down a narrow chasm - miss and your ship obliterates colourfully on the end wall of the caves. If, on the other hand, you manage to hit the thing, you are rewarded with thousands and thousands of points and a lengthy fireworks display which is pretty at first but becomes more boring the longer the fun's not over! Now you have to get all the way back to your own base by negotiating all four phases in the opposite direction.

Penetrator, though lengthy, is a first-class loader and boasts an excellent starting picture just like the drawing on the cassette inlay. A nice menu is printed and then you're into the actual battle. If you should find all the missiles are too much, then there's an excellent training mode where any phase except the final bombing run can be practised with infinite lives at your disposal (must cost the train- ing centre a fortune in ships and parachutes!).

Of all Penetrator's first-class features, the most outstanding is the reddefining command. If you ever master Penetrator (can I have your autograph?) the addiction isn't lost; with this feature you can change the landscape (floor and roof!) and the position and numbers of both missiles and radar installations in the ground. Each new landscape can be SAVED on tape and then LOADED back at any time. Thus, you can have hundreds of different versions of the game in your collection and make it as easy or difficult as you like. One point to note, however, is that accurate positioning of the missiles is imperative, as any uneven surface below their foundations causes them to explode automatically during the game and creates errors in future explosions.

There are a few criticisms to be made about Penetrator. If you're an arcade addict, then Melbourne House have a real winner for you here. As the caption on the inlay says, 'If you have a 48K Spectrum, then you must have Penetrator!'
CRITICISM

'Meta-Galactic Llamas is fast and quite enjoyable for a while until you get the hang of hitting things on the ground by using the ricochet effect. I thought I "died" unfairly on a number of occasions when I hadn't actually been touched by anything. There are a lot of skill levels, but they only cause the spiders to appear more frequently, and on the higher ones it is unplayably difficult. The sound, too, is somewhat poorer than it need have been. The result, as far as I am concerned, is an original idea which just hasn't gone far enough, and which has sub-standard graphics by today's expectations.'

COMMENTS

Control keys: Q/W left/right, O/K up/down, SPACE or CAPS SHIFT to fire. Keys are user-definable as well.

Joystick: almost any via UDK

Keyboard play: very responsive

Use of colour: good

Graphics: small, undetailed, overall below average

Skill levels: 99, of which the first 32 are selectable

Lives: 3

General rating: a fast game, but lacking enough content to be more than average.

Use of computer: 78%

Graphics: 51%

Playability: 52%

Getting started: 63%

Addictive qualities: 43%

Value for money: 37%

Overall: 54%

When I first saw the cassette of Meta-Galactic Llamas, I thought it was going to be a first-rate shoot 'em up along the lines of Mutant Camels, but I was wrong. The graphics are small and very undetailed, and the screen looks unattractive although the colours (used fairly well) are bright. Shooting the spiders has to be very accurate, though quite often your laser spits straight through them. The option of user definable keys is very good and the responses are excellent. The idea of the game, however, is rather primitive although original. This is a well-packed game, but certainly not one I would buy.'

I was really disappointed with this game. One has come to expect things of the great Jeff Minter, and perhaps it isn't fair to compare anything on the Spectrum with similar games on the Commodore, but I really would have thought the graphics could have been much better than they are here. They're small and there is no real animation with even the wriggling snakes looking primitive. It spoils what is otherwise a fast game with the potential to be enjoyable. But the real trouble with it is that nothing much happens beyond shooting dangling spiders and wriggling snakes. When you've done this for a short while it begins to get boring.'

CRASH June 1984 125
Tasword Two
The Word Processor

Producer: Tasman Software
Memory required: 48K
Retail price: £13.90
Language: BASIC + Machine Code

Have you ever tried to write a letter, or prepare an article using your Spectrum? If so, you'll know the sort of problems you come up against: 'How do I enter text?', 'How do I format the text?', 'How do I get a decent printout?', etc. etc. Well, if you happened to know that this amazing utility solves all of the above problems, and does much, much more besides.

What it does, basically, is to turn your Spectrum into a very sophisticated form of electronic typewriter. Central to the program is an ingenious routine which can display 64 characters per line on screen, totally legibly, and which also allows you to dump 64 cpi to the ZX printer. After using the program, you can save it and then go back to BASIC for some reason, the normal Spectrum characters seem absolutely GROSS!

My particular copy came in a plastic presentation case, but I have seen it supplied in a cardboard box. The instructions are very explicit, and take you step by step through the various stages to get you started off. Supplied with TASWORD is a demonstration text file, and it is suggested that you practise the commands and functions on this. Once you have become accustomed to the various modes of operation you are ready to start word processing.

TASWORD operates on a text file which contains whatever you type in from the keyboard. This text file can be up to 320 lines long. The TV display is a window which shows you 22 lines of the text file. Certain control keys are used to manipulate the text file: on of the shift keys must be pressed to obtain a control key action. A very useful control key is EDIT (CAPS SHIFT 1), which displays a 'help page' on the screen. The help page gives a brief description of each control key action. While the help page is showing, a further extended mode help page can be obtained by holding down both shift keys: to perform certain operations you have to put TASWORD into extended mode by pressing both shift keys simultaneously.

The extended mode help page shows the effect of each key within this mode.

There really are too many commands available than there is room here to go into fully, but briefly:

Normal Mode

Commands include: CAPS LOCK, CURSOR TO WORD LEFT/RIGHT, MOVELINE LEFT/RIGHT, CENTRE LINE, INSERT/DELETE LINE/CHARACTER, GOTO START/END OF TEXT, LOAD/SAVE/PRINT TEXT, REFORM TO END OF PARA., SCROLL UP DOWN, and START OF NEXT LINE.

Most of the above are self-explanatory, but CENTRE LINE and REFORM are two of the most useful: CENTRE LINE will centre titles and headings automatically, REFORM will reform the text from the line containing the cursor to the end of the paragraph so that text in which you have made insertions or deletions is tidied up.

Extended Mode

FAST SCROLL UP/DOWN, CHANGE TEXT WINDOW, CLEAR TEXT FILE, FIND/REPLACE TEXT, INSERT MODE ON/OFF, RIGHT JUSTIFY/UNJUSTIFY ON/OFF, WORD WRAP ON/OFF, JUSTIFY/UNJUSTIFY LINE SET/RESET LEFT/RIGHT MARGINS; plus commands to set start/finish markers for block MOVE and COPY.

TASWORD is compatible with both the ZX printer and via a suitable interface, full size printers. Different printer control codes (for such things as carriage return, etc.) and they use them in different ways. In TASWORD the Spectrum block graphics characters are not sent to full size printers, but are interpreted as a sequence of printer control codes. You can, for example, define a particular printer character into your text and printing is required on a new page. TASWORD comes with the graphic characters defined for the Epson FX-80 printers, to define your own you simply use the 'define graphics/printer' option. Information is supplied for using TASWORD with a wide variety of printer interfaces.

If your last word on a text line does not quite fit, then TASWORD 'word-wraps'; this means that the whole word is moved on to the next line. As well as word-wrapping, TASWORD will justify the line that has just been finished; the words in the line are spaced out by inserting spaces between them so as to dispose of ragged right-hand margins. Both these features can be turned off by the user, but are very useful in most circumstances.

You can SAVE any text that you have typed as a text file. Choosing the SAVE text file option results in TASWORD asking for a file name, then saving your text file. When it has finished it asks you if you wish to verify. To LOAD a text file from tape you simply select the LOAD text file option. TASWORD also has a MERGE option, but this should more accurately be called append, as the merged file is placed into the text buffer after any existing text.

In Use

Armed with TASWORD TWO plus a decent printer, you can do almost any small word processing task that you care to mention. The control key system takes very little getting used to, and with the help pages only a key or two away, you can soon dispense with the manual. The on-screen 64 cpi can be dumped straight on to the ZX printer, and although this is hardly letter perfect, it is legible. The program is fast to respond, the only possible exception being the find/replace commands, which were slightly lardy. Included with the package is a leaflet with Microdrive modifications to the program. I have not been able to test this, but obviously the speed improvement on SAVE and LOAD should be very useful.

Conclusions

Overall then, an excellent program which shows just what the Spectrum is capable of doing. If you have been looking for a word processor, then look no further.

Comments

Control keys: Normal and Extended command modes; help page
Features: 21-page booklet; tutorial text file; 64 cpi both on-screen and ZX printer
Generally: excellent.
There are more than 40 rooms in the maze-like Tower of Evil. Throughout the Tower is scattered the stolen treasure of King Salimos, which Andros must retrieve and place in the sacred chest at the top of the Tower.

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