ATARI 400/800/XL/XE

# EXCEL

COLOURFUL, NOISY AND FUN - 44 PAGES OF ATARI 8-BIT GOODNESS

ATARI 8BIT VERSION OF
The Great Escape
DENTON DESIGNS ©1986 ocean

SPACE HARRIER
SEGA

SCORE 004544 HIGH 001000 SCREEN 09 LIVES 03

COMMODORE 64
CONVERSIONS
THE GREAT ESCAPE
BOBBY BEARING
SABOTEUR

BBC MICRO
CONVERSIONS
PERPLEXITY
HOBGOBLIN
RANSACK
PLAN B
E-TYPE

EXPANDED
MEMORY GAMES
DEATHCHASE XE
SPACE HARRIER
AMAUROTE 128
COMMANDO+

HIGH SCORE: 000000

PLAYER 1   PLAYER 2

# EXCEL
## CONTENTS

Well, here we are with the second issue of Excel, the biggest and most colourful Atari 8-bit mag in the known universe. A big thank you to all those who bought the first issue and also for all the nice comments about the quality of the magazine. My personal favourite was a review I stumbled upon on Fandal's website blog, who said (and please bear in mind that this is translated from the Czech by Google...) "The magazine is just the bomb !! Not exactly twice as cheap, it's true, but in my five pounds you get to hand the extraordinary product. Just the process. More than forty pages of glossy A4 speaks for itself. Besides looks something like this for quarterly (c) Atari as a poor cousin of Third World countries." That made my day!

I had originally hoped to review the VBXE graphics board this issue but I still haven't got my upgraded 800XL back so that's out the window... and the Treasure Island Dizzy map is not yet complete so that will also be in a future edition. The main reason for this was my sudden compulsion (just after releasing the first issue) to write a game for the Abbuc software competition. This has also delayed work on my Sabre Wulf and Atic Atac projects but I will get back to them asap.

"Name This Game" is the first Atari game I've written for almost 25 years and I'm fairly pleased with it. I was inspired by "Four Pics, One Word", which my partner was playing on the iPad one night. I said, "I could do a game like that for the Atari." She said, "Do it, then", so I did... lol...! It's written in standard Atari Basic with some machine language routines and has brilliant music (contributed by Miker), which made me very happy. There are many games (not just on the Atari!) where the music is better than the game itself and this is probably one of them... but I had great fun writing it, so there!

I also got a nice review of issue one of Excel from Sascha Kriegel from Abbuc, who asked me to  print full details of this year's entries for the software contest in English to compliment the German version in the Abbuc magazine, but unfortunately Sascha has been rather ill lately and had to abandon writing up the details of the competition entries for the Abbuc magazine, but hopefully that will be in the next issue also. Get well soon, Sascha! Speaking of Abbuc, in this issue we will also be examining the recent "Abbuc in a Box" DVD which contains ATR files of all the Abbuc disc magazines released over the last 20 years. What a collection of software - and what a price! It was worth joining Abbuc just for the chance to buy this.

Now all I have to do is learn German so that I can read my forthcoming Abbuc magazines - not to mention the instructions for a lot of the software on the DVD! I've already received my first issue, complete with floppy disk - and I don't even have an Atari disk drive... lol...

Game reviews this issue include some truly excellent Atari games converted from the BBC/Electron machines by Fandal, Xuel and XXL together with brilliant Atari versions of several Commodore 64 games ported by Mariusz

Wojcieszek, who is also interviewed in this issue by Giann Velasquez from Peru. Giann will be a regular contributor to Excel, starting this month with his interview and reviews of some top notch games which require an expanded memory Atari (or an emulator). Check out his reviews of Space Harrier, Death Chase and Amaurote 128. I will be looking at one of my personal favourites: Commando+.

Another regular contributor starting this issue is Robin Edwards from Edinburgh (also known as Electrotrains on Atari Age) with his hardware projects, beginning with how to build an SIO-2-Arduino card reader for your Atari for the princely sum of £15! Robin (and a few others) suggested we include type-in programs which I was initially against but he mentioned his young son was learning to program his Atari - and then I remembered how I learned to program mine back in the day... what do you think of this idea?

It was nice to get praise for Excel even from Atari users who don't play games, but it has to be said, this magazine is very games-centric. I was always a bit jealous of those lovely magazines my friends bought back in the 80s; Crash, ZZap64! and Amstrad Action - big, colourful mags packed with games reviews, maps, hints & tips and interviews with the programmers. I always wished we could have had an Atari mag along those lines but there just weren't enough Atari owners in the UK to support one and not enough decent games coming out anyway. Well, there are now! I got my wish - it's a lot of work putting this together, but I'm loving every minute of it. Ironically, I had originally hoped to get this issue out a bit early but now it turns out to be a full month late. But never mind - that means there will only be a month to wait for issue #3.

I now have distributors for the magazine in several countries, so they will be sent in bulk and then re-mailed on from there, which means that the postage for overseas orders is now down to only £2 per issue. Even if I end up sending bigger bulk orders to these distributors, the rate at which the prices go up according to the shipment weight means that this is as low as the shipping can get. There are also a few overseas customers who are outside both Europe and the US but just to be fair, they are still only being charged £2 shipping, which is less than half the cost of the actual postage.

In case anyone hasn't noticed, 6-issue subscriptions are now available on the website (buy 5 issues and get the 6th free) plus £2 shipping per issue. I have provisional content plans for the next few issues already worked out - issue #3 will be out on October 1st and will include (among other things) a very in-depth look at the legendary games from Lucasfilm and also our first ever brand new game reviews - including the incredible new shoot 'em up "Atari Blast" and another new game which has came right out of the blue and hopefully will be a bit of a scoop for us!

Go softly on!

*Robert*

The Great Escape is of course based on the very famous film starring Steve McQueen and Richard Attenborough in which you are an allied pilot who has been captured and imprisoned in a northern German prison camp in 1942. The camp itself is a small castle surrounded on three sides by cliffs and the sea. The only way in and out is by a narrow road through the gatehouse and anyone wishing to pass through must be in possession of official papers permitting them to do so. Other than this path, the entire camp is fenced or walled in, with patrolling dogs and guards in observation towers watching out for any escape attempts. Beneath the camp there is a maze of underground tunnels and drains, although these are dangerous to enter without a torch.
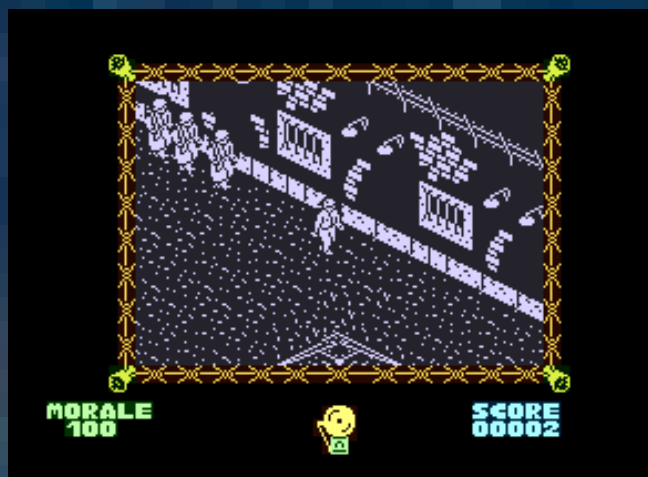


The game is displayed in isometric pseudo-3D and uses an unusual but sensible way of displaying the game world. A scrolling window allows you to explore the prison compound outdoors, but switches to single screens when you enter a building with enclosed rooms. A message window below the playing area updates you on events and a bell sounds to announce particular events such as meal or exercise times. On either side of the bell icon is your score and your morale rating, which starts at 100 at goes up or down depending on the circumstances you find yourself in. The playing area may seem strangely offset to the right side of the screen and the reason for this is that in the original Spectrum game there was a flag pole running the height of the screen on the left which graphically displayed your morale. This was omitted in the C64 version, which is where this game was ported from so it does look a little odd. Also missing from the
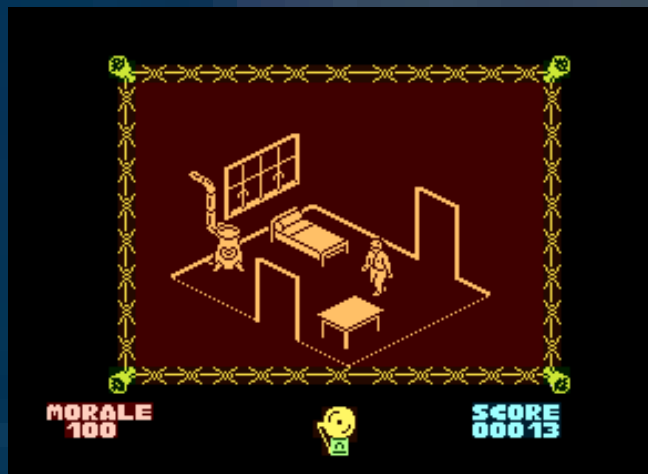
C64 (and also the Atari) version are the night-time searchlights from the Spectrum original.

If a parcel from the Red Cross arrives or your character picks up or uses a useful item, his morale improves, whereas being searched or arrested will lower the rating. If your moral drops too low, your man loses the will to escape and dutifully follows the day-to-day routines with the other prisoners and the game ends.

When playing for the first time it's a good idea to leave the controls alone and let your character join in the daily routines with the other prisoners so you can get a feel for how the system works. The game starts in the morning with your prisoner character in bed. You and the other prisoners have a daily routine which includes roll call, exercise periods, mealtimes and bedtime. The other prisoners always follow this routine and if you don't actively control your character for a short period of time, he will join in following the routine with the others. If, on the other hand, any guards see you doing something outside of your normal duties, they will attack you.

Once you've established how the camp works you can get on with the serious business of planning your escape. Two items at a time can be hidden inside your man's greatcoat although you can hide objects elsewhere - but if the guards find them, they will confiscate them and, rather stupidly, return them to their original location! The guards also maintain a strict routine - once they are assigned a patrol route by the Kommandant, they will follow it regularly and can be timed, which is very helpful for you! As long as you don't actually cross their line of sight they won't see you, but they are also afraid of the Kommandant who patrols the camp, making regular inspections of his staff. Security is lax at first, but the Kommandant will take extra security measures if our hero is caught out of bounds and then avoiding the guards then becomes more a bit more problematic.

Points are scored for attempting to escape and for collecting and using objects. There is more than one way out of the prison: by tunnel, by cutting through the wire fence or by bluffing your way past the sentries at the compound gates. If you do manage to get outside the camp, you will need a compass and some identification papers or you will not get far.

Useful objects you can find include a German uniform with which you can disguise yourself to trick the guards but be careful; the camp Kommandant is not so easily fooled. There is also food to be found and three handy keys which are scattered around the camp, one of which is hidden under the watchtower and the other two are inside buildings. There is a lockpick, a map, bogus identification papers, poison (which can be added to food that you can then feed to the guard dogs), a radio (for listening to the forbidden news), a shovel and a torch. Red Cross parcels arrive at the prison camp on a daily basis and these can be found inside the buildings. They will always contain useful and necessary objects to assist your escape, including a bag, shears, chocolate, and a compass.

The ZX Spectrum version of The Great Escape was a hugely popular game when released in late 1986. The game was programmed for Ocean Software by Denton Designs who had previously developed Shadowfire, Enigma Force and Frankie Goes to Hollywood, amongst other games. Denton Designs emerged from the former programming staff of Imagine Software when they went bankrupt and ironically started producing games for Ocean, who later bought the Imagine name. The Great Escape won a host of magazine awards and was highly rated on both the Spectrum and the Commodore 64. The Amstrad conversion, however, was very slow and did not make such a good impression. The game is certainly not short on atmosphere, which is made all the more impressive as none of these versions had any music.



9/10

The Atari version arrived in late October 2015 and was ported by Mariusz Wojcieszek with help from:
Jose Pereira: loading screen & PMG overlays
Philsan: title screen
Poison: title screen music (from "The Great Escape" film, and supports Atari machines with stereo sound)
Wieczór: sound effects.
Mariusz has optimised the code for the Atari and the result is a version that runs three times faster than on the Commodore 64 where the program originated.

## PLAYING GUIDE

**DAY ONE:** Collect the key from under the watchtower and open the door where the tool kit is found. Drop the key on the floor and pick up the tool kit. Open the door where the spade is found. Collect the torch and the papers and take them to the room where the spade is and drop them down the tunnel. Return to normal duties.

**DAY TWO:** Open the red cross parcel and drop the contents onto the floor. Return to normal duties.

**DAY THREE:** Do the same as day two.

**DAY FOUR:** The wire cutters should be in the red cross parcel. Take them to the room where the spade is and drop them down the tunnel. Return to normal duties.

**DAY FIVE:** Open the red cross parcel and drop the chocolate on the floor. Return to normal duties.

**DAY SIX:** The compass should be in the red cross parcel. Take it to the room where the spade is and go down the tunnel. Pick up the torch and take the compass to the other end of the tunnel. Drop the compass and return for the wirecutters. Go back to where you dropped the compass and drop the torch. Pick up the compass and wait a few seconds. Now run up to the wire and cut it. Drop the compass outside, then return to the tunnel. Drop the wirecutters and pick up the torch. Now go and get the papers and take them to where you dropped the wirecutters. Drop the torch and pick up the cutters. Wait down the tunnel until next morning.

**DAY SEVEN:** Wait until you hear the alarm for role call. Run up to the wire and cut it. Drop the cutters and pick up the compass, then run off the screen and you've escaped from the prison!
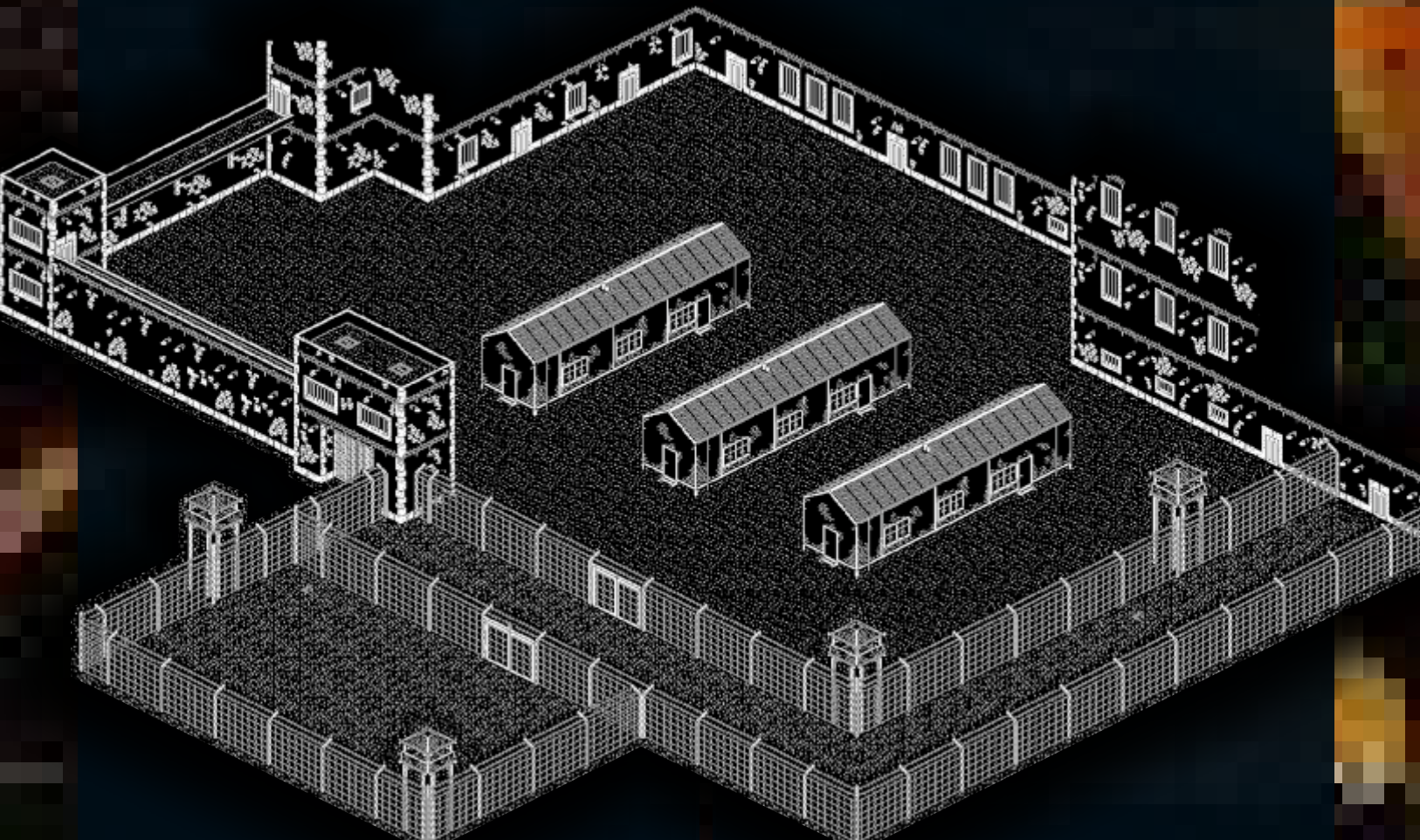
Durell Software is a company from Taunton, Somerset which provides back office administration and accounting software to Independent Financial Advisers, Mortgage and General Insurance Brokers. However, before they got involved in such interesting-sounding work, they were developers of home computer games, producing over 20 titles between 1983 and 1989, initially for the Oric/Atmos (6502 machines) but they quickly abandoned those and switched to the big three, namely the Spectrum, Commodore 64 and Amstrad CPC, presumably to try and make some actual money for their endevours. They also released a couple of games for the BBC/Electron and one for the Commodore +4, which was, incidentally, Saboteur! There was also a simplified version of Saboteur! for the Commodore 16 which was a very poor effort indeed, but all the other versions were straight ports of the Spectrum original and are virtually indistinguishable from each other. Other notable games they produced were Scuba Dive and Critical Mass but their biggest success was Harrier Attack, which some critics suggest was marketed on the back of the Falklands War. It went on to sell 250,000 copies. Most of their output was of a good standard and their games were in general highly praised by the magazine reviewers of the day.

The scenario for Saboteur sees you in charge of a sabotaging ninja, complete with an Atari logo on his chest on the title page, creeping around (literally) an enemy base which I have decided is the evil lair of Commodore HQ. Your mission is to steal a floppy disk which contains information about rebel leaders from one of the many computer terminals. You also have to plant a time-bomb to destroy the place after you leave so you have to be even more careful getting back out.
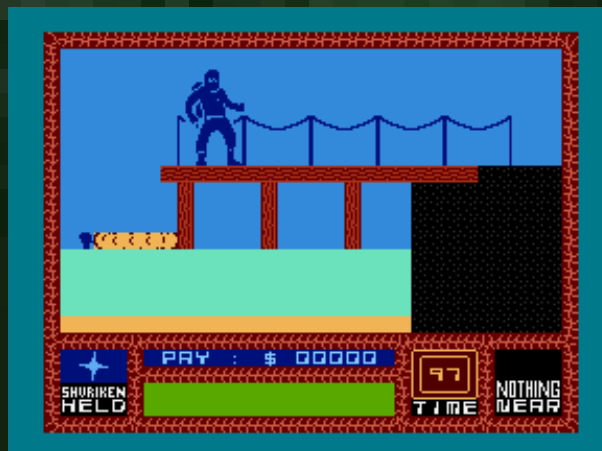


The game comprises 146 screens; the warehouse, a computer command centre and two layers of sewers which are easy to get lost in without a map. Extra weapons (i.e. bricks and metal pipes) can be found throughout your exploration of the installation, but you can only carry one of these at a time and once you've used it you have to search for a replacement. You can kill the guards using these weapons or by employing your ninja skills to beat them to death, but the real enemy is time, i.e. finding the elusive floppy disk and escaping the complex before the bomb detonates.

There are a very generous 9 levels of difficulty (ranging from 1: Extremely Easy to 9: Extremely Hard and everything in between) so you can start on the easy peasy level to familiarise yourself with your surroundings and get the hang of the game before attempting the difficult higher levels. The difficulty level determines the number of guards, how much time you have to complete the mission and how many locked security doors are on the way to your handy escape helicopter which is perched on the roof.
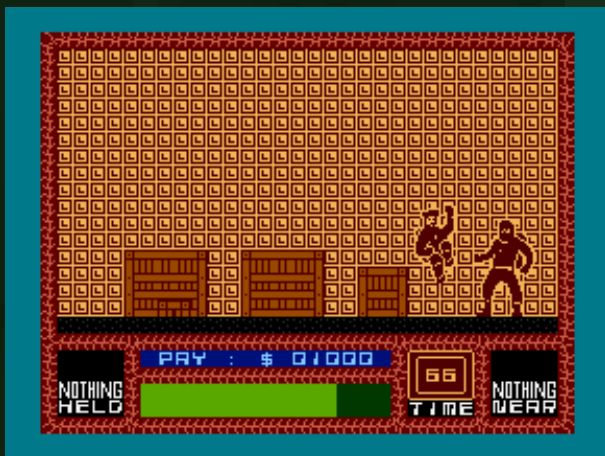
An onscreen energy bar is drained by falling too far, crouching under water or being attacked by guards and if this runs out then it's game over, but helpfully, your energy can be replenished by standing still and resting in a safe area before resuming your ninja duties. The saboteur can run (well, scuttle), crouch down, climb ladders and attack the guards using weedily thrown punches or rather more impressive flying kicks. Your ninja arsenal at the start of the game is pretty poor inventory for this mission - a single shuriken! You must also avoid the many security systems of the base, which includes automatic gun emplacements. The guards will fight back of course and unlike the ninja, they are sensibly armed with actual guns - it may be a stealth mission but has this ninja's boss ever heard of a gun with a silencer? There are marauding guard dogs which will chase you and a nice graphical touch are the little CCTV cameras which follow you as you move around. In the sewer levels you can travel quickly through several screens on underground trains.



Once again, Mariusz Wojcieszek is the man behind the Atari version, who started work on porting the code from the C64 in November 2015. He initially had the game running well in black and white but was shortly thereafter joined by Tezz who used his expertise of using expanded sprites to simulate the colour RAM memory map from the Spectrum/C64. Although ported directly from the C64, Tezz oversaw the implementation of several features from the Spectrum original which were not included in the C64 version - i.e. the bannister railings on the stairs. The fonts used were also based on the Spectrum original rather than the C64, except the barrels, which looked better in that version. Tezz also found (to his surprise) that certain rooms changed depending on the difficulty level chosen at the start of the game.

To complete this production, the superb music by Miker was also based on the C64 tune and some nifty graphical intro screens were added. Saboteur! was released to the Atari community on New Year's day 2016 to great acclaim, followed a few months later by Tezz's port of Manic Miner. Who knows what his next Atari project will be? Whatever it is, it will be superb, I have no doubt about that! The sheer effort and attention to detail in getting this game running on the Atari is commendable, not to mention inspiring.

There have been very few games like this for the Atari, using high resolution graphics with expanded sprites simulating the Spectrum / C64 colour memory map, but this shows they can be done and done very well. The main ninja character and the enemy guards are huge compared to the little hardware sprites we are so used to on the Atari, which, together with some nice animation and a challenging scenario has produced a very, very good game. If an Atari conversion of Saboteur! had taken place back in the 80s, it would probably have resembled something like Bruce Lee or Zorro, with chunky playfield graphics, small sprite characters and tiny little chihuahua guard dogs snapping at your ninja's heels. But that's not a big criticism - they were great games!

Saboteur! is great fun to play and presents a puzzling challenge whilst also including some fighting action to liven things up a bit. As one reviewer commented on the Spectrum version many years ago, this game is "384% more absorbing than a J-cloth", but I would suggest it's way, way more absorbing than that. It is yet another classic 8-bit golden oldie game from the 1980s that has hit the Atari like an underground train - let's hope they keep coming!

9/10
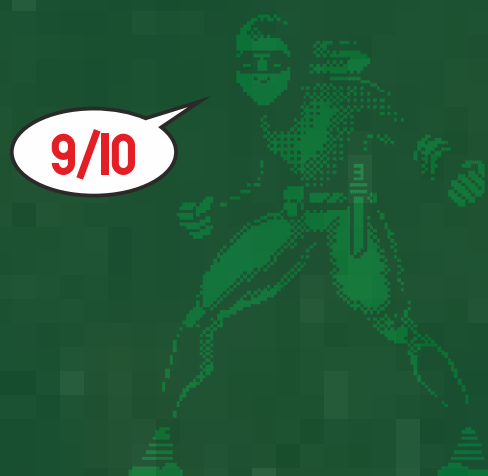
In the land of Technofear, mothers tell their children scary tales about the Metaplanes - forbidden places from where monsters come and can take the little Bearings away while they sleep. Young Bearings are scared by these stories and do what their parents say, but occasionally a rebellious little Bearing decides to go exploring. Bobby Bearing and his four younger brothers (Barnaby, Boogle, Bungo and Bert) were always very obedient little Bearings - until their naughty cousin came to stay. He convinced the younger Bearing brothers that the Metaplanes were harmless and suggested going on a little adventure. However, the stories about the Metaplanes were not just stories and the Bearing brothers, together with their cousin, disappeared... so, Bobby must now venture into the Metaplanes and try to rescue them.
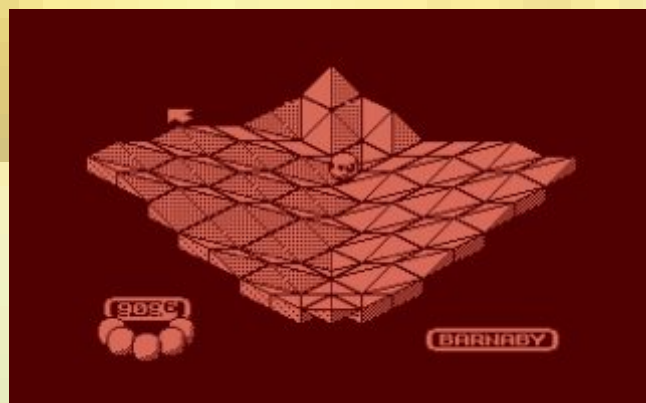


The Metaplanes are inhabited by mutant bearings - nasty black balls with big teeth. As Bobby explores the metallic 3D maze which comprise the Metaplanes, the Black Bearings may jump out from their hiding places and stun our hero, who goes a bit cross-eyed when this happens. Somewhere in the Metaplanes, Bobby's brothers and cousin lie comatose. Bobby must locate them and propel them along back through the maze, finally pushing them through the tunnel that leads to home. The tunnel can only remain open for a limited time, though, so as if things weren't difficult enough, you are working against the clock, which counts down from 9999 when you start a new game.

This is no simple task, as the maze is large and it is easy to get lost or in fact wander into an area from which there is way back. Bobby rolls around the maze following the arrows that point to the exits from the current section. Air holes can push him up on a

current of warm air and these can be used as lifts to get him up and across to inaccessible areas. Switches in the ground turn on magnets and activate blocks which can be used as elevators.

Apart from the evil Black Bearings, there are other dangers in the Metaplanes. Metal slabs can come crashing down to the ground and getting caught under one of these understandably stuns the little fellow. When Bobby is stunned a little question mark appears above his head and his eyes roll in confusion. Whenever Bobby falls off a ledge or gets squashed by a flying slab he is incapable of moving for a few seconds - when this happens the clock counter speeds up, removing vital seconds from the time limit during which the missing Bearings have to be rescued. Your mission will end if the time runs out. If Bobby is trapped and unable to leave a screen, pressing 'Q' will let you re-enter the screen but at a cost - the countdown timer flies down by 200... rels - or whatever they are...
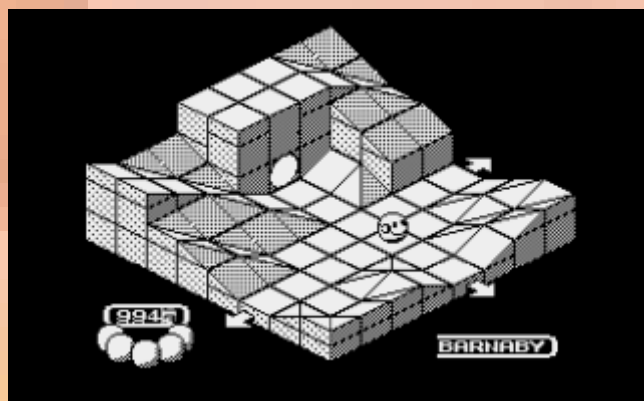


The game was first released for the ZX Spectrum in 1986 by software house The Edge, who proclaimed on the cassette box: "Introducing Curvispace 3D. Experience the 3D arcade game you've all been waiting for from the producers of the award winning Fairlight". The game was programmed by Robert and Trevor Figgins, who were, a year later, rather miffed at the constant comparisons to the hit games Marble Madness and Spindizzy: "*It's hard to believe now so many months after the project began, but Bobby Bearing began life as an arcade-style game inspired by Q-Bert! In fact originally it wasn't intended for commercial sale at all. Even though the game didn't have much resemblance to Q-Bert, we were really pleased with the final result. The funny thing is, though, that there was no sense in which Bobby was based on Marble Madness, or any home micro game such as Gyroscope and especially not Spindizzy! Bobby was more than 50% finished and looking very much as it does in the final commercial version almost a year ago now, and was around 18 months in the making. In fact we hadn't heard of Marble Madness and Spindizzy until we spoke to The Edge. In fact, acknowledgements for inspiration are really due to Knight Lore by Ultimate.*"

Despite its massive success and great reviews (for all versions of the game), the Figgins duo never created any further games. They did, however, program a chess game which appeared on the Spectrum Tape Magazine 16/48 prior to Bobby Bearing's development. Hot on the heels of the Spectrum game came the by now customary conversions for the Amstrad CPC and Commodore 64. The Amstrad game used the same high resolution graphics as the Spectrum but in four colours, so is very, very pretty to look at but not quite as fast, although like the Spectrum game, had no music and had to make do with simple sound effects.

The Commodore 64 game used very similar graphics to the Spectrum and programmer Trevor Inns seems to have had no difficulty getting this isometric game running quite speedily on this machine, which more than a few programmers have failed to do on the C64. This version also had the bonus of a superb and very jolly tune by Ben Daglish which really suited the game. This is the version which has been ported across to the Atari by Mariusz Wojcieszek, which has a completely different, but equally brilliant tune by Atari music maestro Poison.  It also supports machines with stereo sound if you have it. The Atari game uses the high resolution graphics ported directly from the C64 and the title screen from the Amstrad version which has been faithfully re-created for the Atari by Jose Pereira - using sprites for extra colour and no display list interrupts whatsoever!



The game is very easy to get into and I am happy to say, is as fast as the original Spectrum version. The movement of the little Bearings is smooth and cartoonish - the way Bobby rolls up and down the ramps and bounces off objects is very naturalistic. The physics of the characters' movements has been implemented very well indeed by the programmer. Bobby is rather an endearing little character - the way he is drawn constantly makes me wonder if he's wearing headphones. There are 243 screens in total but many of them are very similar. The colouring of the individual screens helps you in this regard, which cannot be said for certain games where the same colours are used for every single screen which makes finding your way around a complete nightmare.
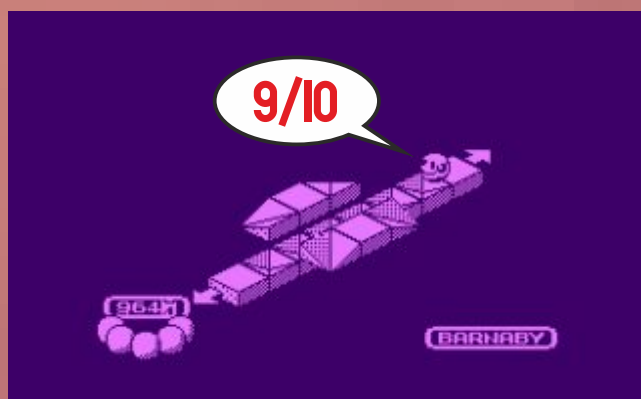
Some of the pathways you travel along are narrow but don't worry, Bobby can't fall off the sides - maybe he's magnetic? There also appear to be several ways out of many screens but you can only exit the screens at the points indicated by the arrows, so movement around the maze is in fact somewhat more restricted than you may think.
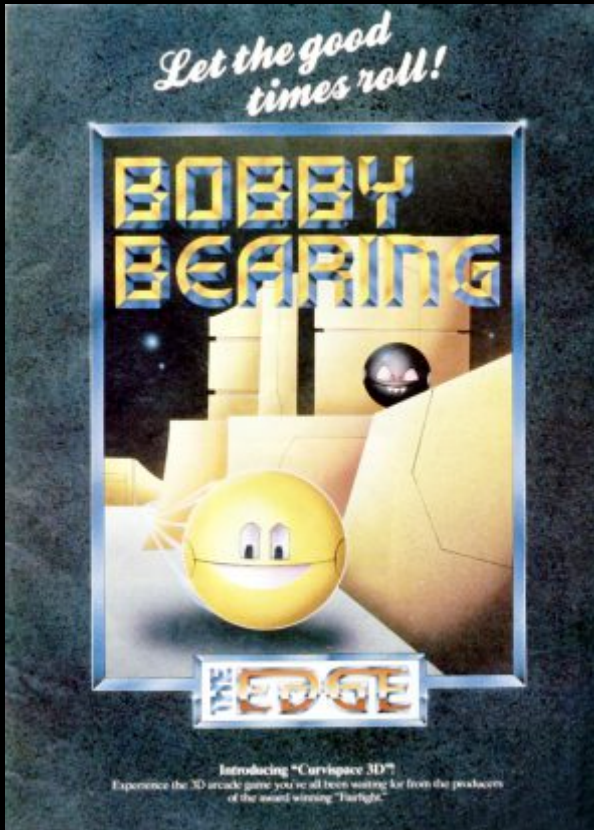
The game starts immediately once loaded - none of that press-fire-to-start nonsense! The clock starts ticking down from 9999 and off you go looking for the first of those naughty little brothers - Barnaby. He is quite near the start and doesn't take long to find, but getting him back home is another matter entirely! You have to push him along and sometimes you wish Bobby had feet so that you can kick the little brother's backside. Moving back through the maze with the troublemaker is more difficult than it sounds. It can be very tricky - narrow paths which only have room for one ball bearing are straightforward enough, but when you have to change direction, say, at a t-junction... you have to push him as far as he'll go against the wall and then you can't manoeuvre into a position to push him to one side... which means you have to circle around several screens and come into the room from another side and push him from there. Grrr... the first time I pushed him under a block and he got flattened, I actually thought - "Ha - serves you right, you little bugger!" Once you finally get Barnaby back to the tunnel and push him through, it's time to look for brother no. 2 - Bert, which is a much more difficult task as he is much further away from the start. Each brother gets progressively more difficult to find and return home and no, the counter does not reset to 9999 each time you rescue one of them!

I have seen this game described as "amazingly playable", "a lot of fun", "totally original", "amazingly addictive", "stupidly difficult" and "very nearly perfect". The truth is that it is a combination of all of the above. Full marks to Mariusz for a brilliant conversion of a brilliant and original game. If you've never played it, try it - it's brilliant!

# BOBBY



Let the good times roll!

BOBBY BEARING

THE EDGE

Introducing "Curvispace 3D"
Experience the 3D arcade game you've all been waiting for from the producers of the award winning "Fairlight".

START
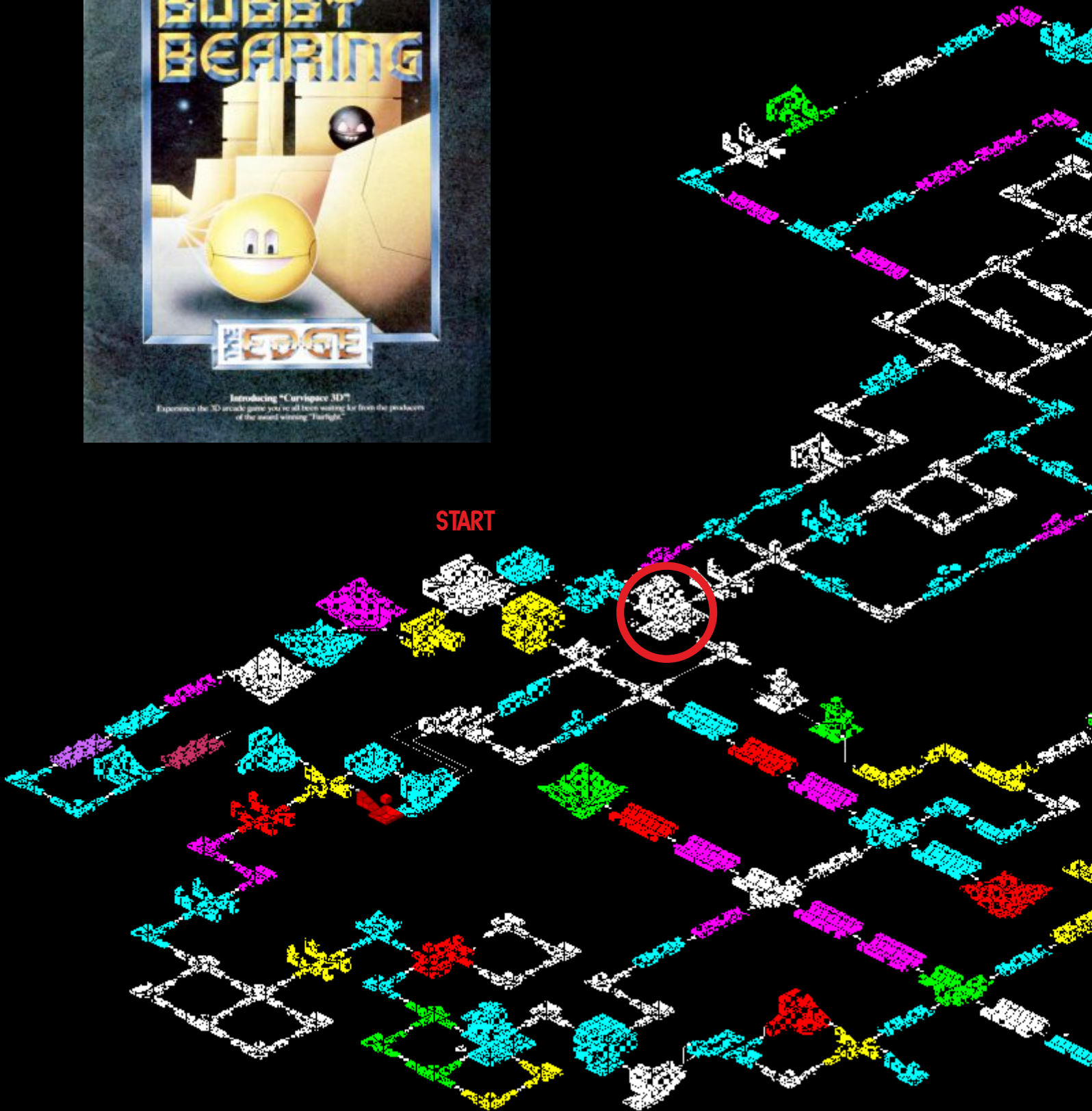
*Let the good times roll...*

# BEARING
## THE MAP

THIS ROOM IS A TRAP
WHEN YOU EXIT THIS SCREEN
YOU WILL DROP INTO
A RANDOM ROOM

EXITING HERE TAKES
YOU BACK TO THIS ROOM
NEAR THE START

## BOBBY
## BEARING

THE EDGE
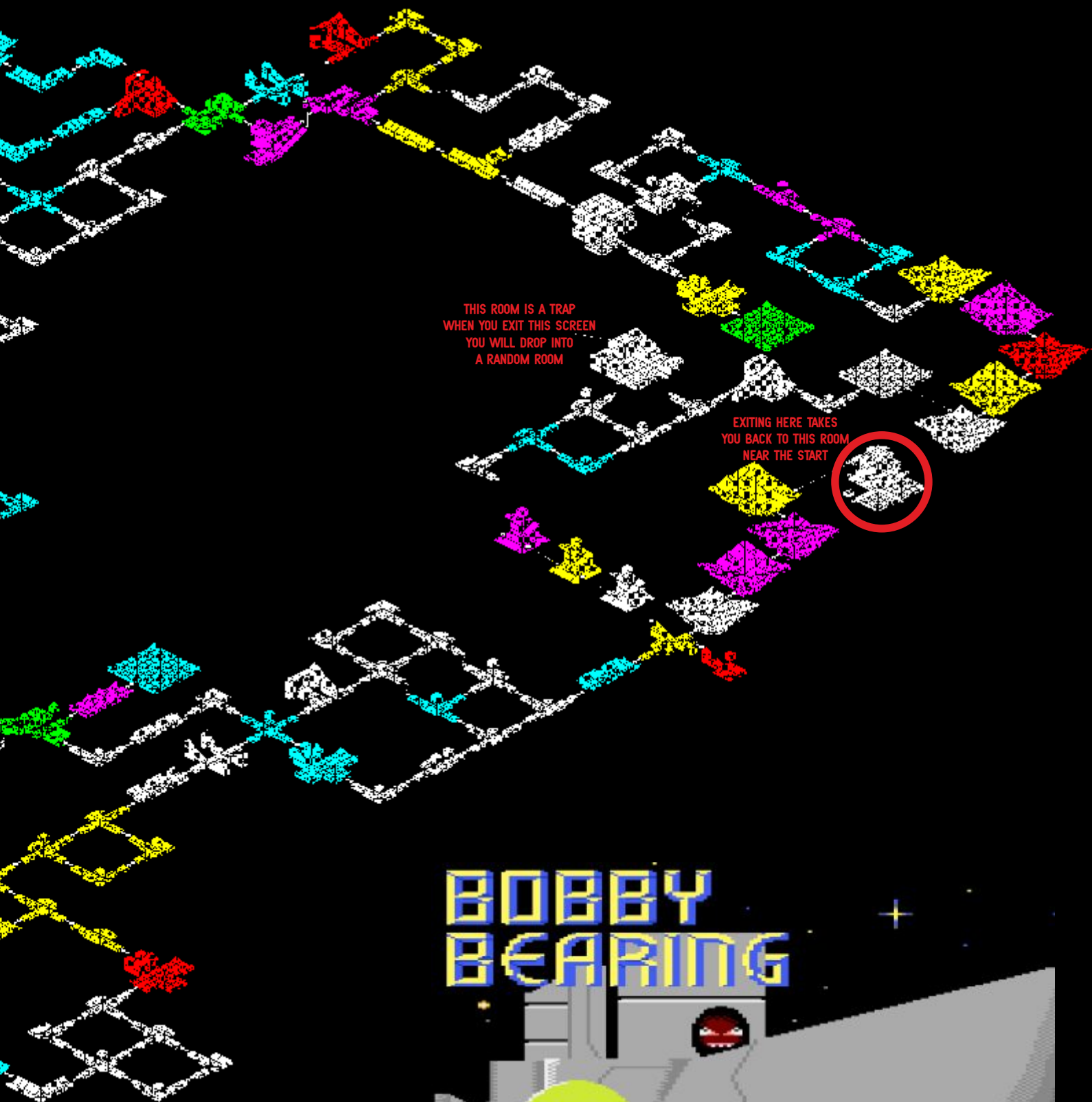
The Atari Bit Byter User Club began in Germany in 1985 - the same year I got my first Atari - and have produced a regular printed magazine with an accompanying floppy disk ever since. Released on DVD earlier this year, this collection celebrates 30 years of the club and comprises every issue of the disk magazine from #1 up to #123 (almost all of which came on a double-sided floppy disk) in ATR format. In addition to the regular disk magazine there are the special edition disks, PDF files of the printed magazines (plus software and hardware manuals), bitmaps images of the all disk labels, photos and video files from games conventions, high quality photos of every official and homebrewed piece of Atari hardware ever built and all the available emulator files to run all this juicy software on your modern PC. All this data consumes almost 3 Gigabytes containing nearly 7,000 files and comes on a single

professionally mastered shiny 5" silver disc in a standard DVD box which is also professionally designed and printed - and all for 15 Euros, plus shipping. This superb DVD is only available for sale to Abbuc members so when I heard about it, I had to join the club. I duly paid my membership fee via Paypal, got my Abbuc password and promptly logged in to the website at abbuc.de and ordered my copy, which I received only a few days later.

Unfortunately, I don't speak or read German (yet) which is a little bit of a hindrance, but Google translator came in handy here! To get 30 years worth of quality software for this price has got to be an absolute bargain - there are countless games, graphics & music demos, alternative Disc Operating Systems and application software (such as word processing and graphics software) on the ATR files. And the PDF files are very interesting too - I was pleasantly surprised to find a review of my old Excel disk magazine in Abbuc #35 from 1993. It's highly interesting (even if you can't read them!) just looking through the PDF files to see how the look of the magazine has evolved and changed in style throughout the years, from the early days of issue 20's 4-page black & white photocopied pamphlet to the modern colour, glossy 32-page editions. The magazine PDFs start with issue# 20 - I don't know why the first 19 issues are not included - maybe nobody has existing copies any more?
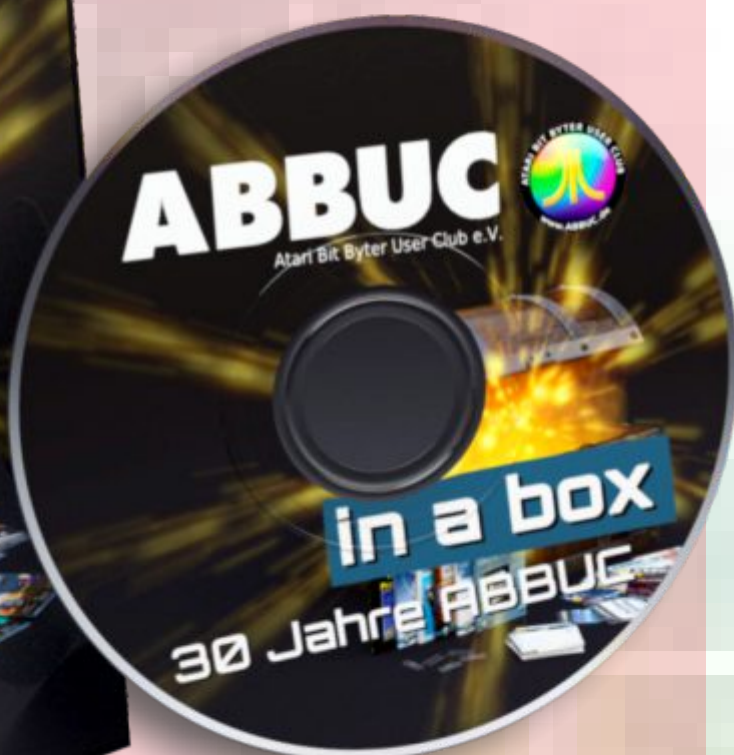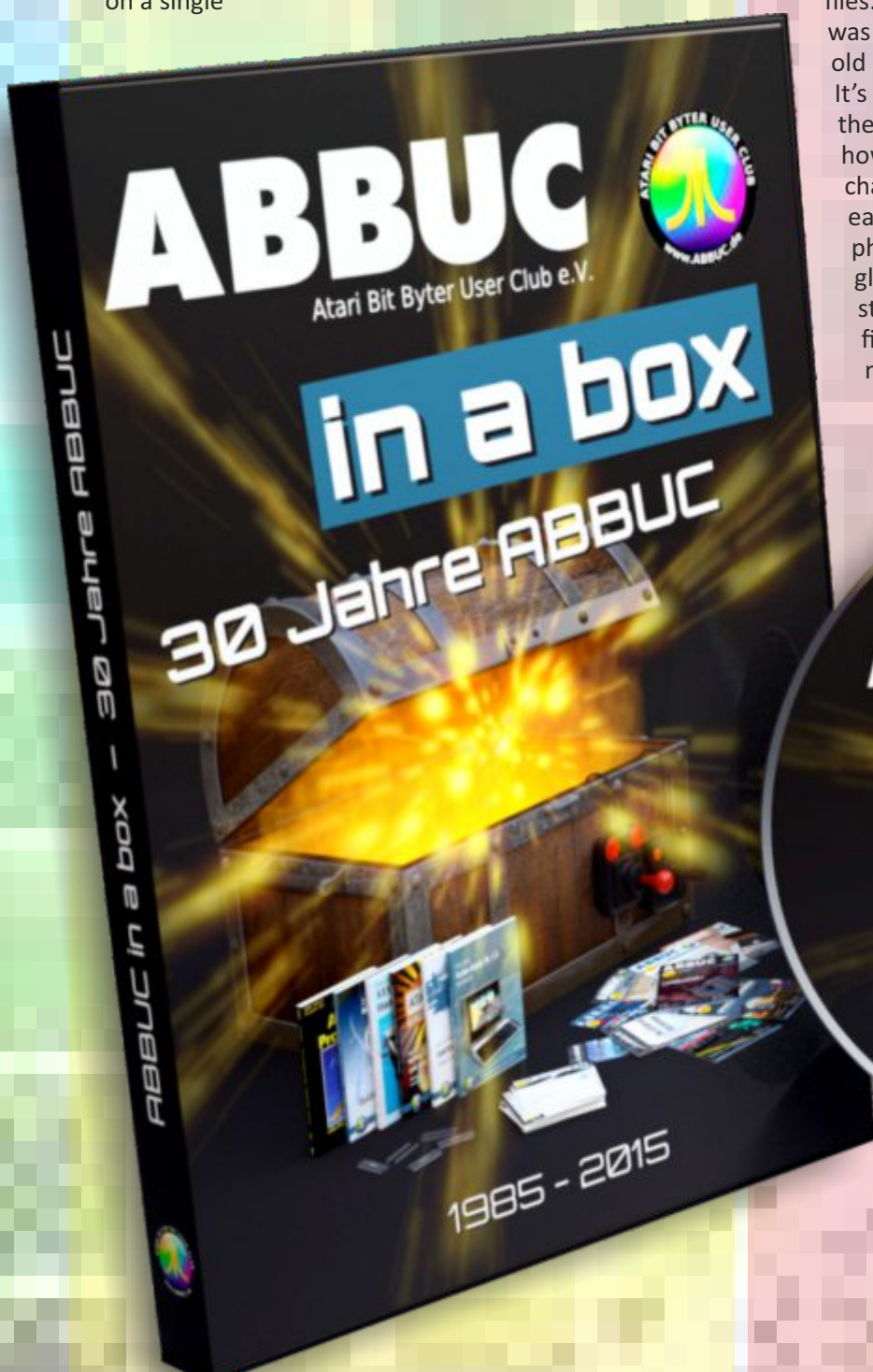
Of course the stars of the show are the disk magazine ATR files which you can sift through at great speed on an emulator. I have spent hours just happily browsing through the ATR files in Altirra. Many of the magazine disks have specially written and highly impressive graphical intros often with great original music and a few old, familiar tunes too. You will no doubt find not only loads of games you've seen and played before, including all the great games from the Abbuc software competitions over the years, but also little gems you might never even have been aware of.  Some of the disk files, mainly the earlier editions, have to be booted with Basic and there are some which boot up in Turbo Basic to run games written in that language but the majority are written in machine code.

As well as plenty of new games there are many previously available commercial titles as well as hacked and improved versions of golden oldies. Browsing through the ATR files is like having stumbled upon a treasure chest full of random mysterious delights - you don't know what's coming next. I cannot recommend this DVD highly enough. If you're an Abbuc member, there is no reason on earth not to buy it, and if you're not an Abbuc member, you should sign up straight away and then buy it! These guys deserve all the support the Atari community can muster - after all, it's the Abbuc software competition which practically guarantees a decent supply of good quality new games for us Atari users every year - which is very welcome when we go through a quiet spot when not a lot is going on in the homebrew Atari scene. Get yourself onto abbuc.de and sign up now - as I said in my editorial, it's worth joining the club just to get the chance to buy this.
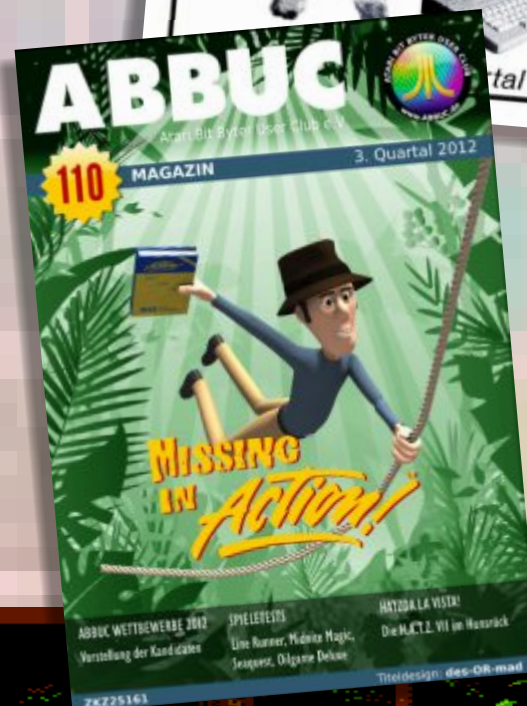
## HE WROTE ONE...

*THE AMERICANS must be feeling pretty sick. In rock music, films, TV and now computer gaming, the spirit of True Brit is showing. Now Atari has chosen a BritProg for its first international release. Big K managed too track down the history-making Briton . . .*

JUSTIN WHITTAKER is a tall, bespectacled 18 year-old from Staplehurst in Kent. He exhibits a calm self-assurance ("I decided that I'd write a hit game") and realistic attitude ("I wouldn't recommend that anyone else leaves school at 16 and starts writing software, they could be very disappointed") towards his work. All this is reflected in *The Lone Raider*, Justin's first game; a skilful blend of action, excitement and good play values, utilising the excellent sound and graphics capabilities of the Atari Home Computer.

Justin's computer interest began at school with computer studies, a subject he didn't feel he was doing as well as he should in. So he went out and bought a ZX81 to help. Through this he learnt programming and began writing his own programs straight away. He left school when he was 16 with a career as a programmer firmly in his sights. But it wasn't that easy. A long round of fruitless interviews left him with a lot of spare time on his hands and, by this time, an Atari 800 to play with. It was then he decided to write his "hit game".

### THE THEME'S THE THING

Weeks were spent thinking up ideas. "Eventually I came up with the idea of — instead of just having a game, which is pretty meaningless — to actually provide a theme. I chose raiding a factory. So I designed the first screen of the game around getting into the factory, the middle screen doing the raiding and the last screen getting out again. I built the game round that."

Four or five months of off and on work passed before the game was complete. Justin then wrote to Atari's U.K. HQ telling them about the game and asking if he could show it to them.

Why Atari and not some British software house? "Because I had an Atari computer," was the simple reply. Oh.

# A BRIT TAKES ON THE YANKS' GAME

**THE LONE RAIDER**
A CASSETTE GAME PROGRAM
FOR ATARI HOME COMPUTING

ATARI
HOME COMPUTERS

Atari agreed to see the game and Justin journeyed up to their Slough offices to show it to them. "They were struck by it the moment they saw it," he says modestly. "Almost on the first day they said the would release it." At that time, like many others writing independently for the Atari, all Justin could hope for was his game to be put out by the APX (Atari Program Exchange), a service available only to Atari owners. Then a few weeks later came the surprising news that *The Lone Raider* was going out 'mainline' with the rest of Atari's catalogue.

"I was dumbfounded," says Justin. "It was fantastic because, up to then, everything was so select with all the mainline stuff being written in America. Everybody says that the Americans are best and all that but I'm sure the British can do just as well."

Atari agreed to pay Justin a royalty on each copy sold in return for holding copyright and *The Lone Raider* was launched with great ceremony at the end of October, 1983. Initially the game is only on sale throughout Europe through Atari International, but hopes are high for an eventual U.S. release.

### THE GAME'S THE THING

*The Lone Raider* is a three-stage game. On the first screen the Raider is beamed down from his mothership and must destroy all the robot guards to enter the power factory.

There are ten ranks to work through. The first five can be selected but the last five must be taken in sequence. Unlike some games *Raider* isn't endless. If you can beat the tenth rank ("almost impossible" says Justin) there is a special message and tune waiting. But nobody has done it yet, including Justin, who claims only to have cracked it ". . . by cheating"!

### THE SOUND'S THE THING

*The Lone Raider* is an immensely 'playable' game involving the need for good tactics as well as reflexes. Sound is remarkable though the graphics are surprisingly simple for such a machine. "Some people write a game round a graphic technique," Justin explained. "They don't care about the play value. That isn't the way to do it. Sound is one of the most important things in games because it affects your subconscious as opposed to anything else. You can't ignore it. In the second level of my game the droning sound really gets you sweating!"

As is fairly clear by now, Justin is a big fan of Atari computers. "They're fantastic," he says. "You can never really master an Atari because there are lots of little things hidden inside. You can get 255 colours on the screen at once — what other micro can do that? There's just so much potential that's not realised."

Okay, so how about a few tips for Big K readers, Justin? "Get a book called *De Re Atari* by Chris Crawford. If you've got an Atari micro you think you've just got a basic micro. When you read that book your mind will be blown when you realise what you've really got your hands on!"

Justin was 17 when *The Lone Raider* was released last year. He's now 18 and a freelance programmer working on converting some of Atari's most popular games to other home micros for the new Atarisoft range. When Big K spoke to him he was working on *Dig Dug* for the BBC and Electron.

But what about a follow-up to *Raider*? That'll be in the works very soon and Justin is saying nothing about it other than it will be an arcade-style game. Fine. When you're a 'lone raider' taking on the awesome task of cracking the American grip on software, you're entitled to a few secrets!

BIG K's US report from MIKE GOLD . . .

# ZIP CODE

## How Hawkeye fixed Atari's liver...

Photo: 20th Century Fox

WERE IT not for the Korean War, Atari might be out of business today.

Follow closely: because of his involvement as a front-line medic, a doctor wrote a fictionalized accout of his Korean experiences. Whereas his book wasn't exactly a blockbuster, it did become a very, very successful movie.

In turn, the movie begat an even more successful television series.

The series was M*A*S*H, and it turned Alan Alda into America's biggest and most trusted star.

Throughout M*A*S*H's eleven year run, Alan decided to exploit his trust by succumbing to product endorsements, other than for his own motion pictures. But about a nanosecond after abandoning M*A*S*H — i.e. last summer — Alda signed a lucrative contract, selling his considerable credibility to Warner Communications for use in saving Atari's skin.

### DETERIORATION

For Atari was in deep trouble. The company lost $539 million and laid off over 2,500 employees last year. Then they managed to pull off the near impossible: they actually lost a fortune on merchandising items based upon the movies *E.T.* and *Raiders of the Lost Ark*. Of course, they were losing money on lots of other game carts as well.

Faced with competition from Coleco, sales of the 2600 were in a deep slump

and retailers were closing out units at about $50.00 (£35.00). Their all-new Atari 5200 proved to be an initial disappointment — it had a tough joystick, a limited software catalogue, and its games were no better than those made for the Atari 400. But the 400 was also in the bargain-basement bins, selling for about one hundred dollars less than the 5200. With Commodore selling their 64s by the truckload and Coleco's forthcoming Adam looking like the Volksmicro, Atari had to find the future — and then find a way to sell that future to a doubtful public.

### TRANSFUSION

Hence Alan Alda. Mr. Credibility, Mr. Honesty. And, as far as television was concerned, a commercial virgin. Atari dumped its fledgling line of new computers (the 1200, the 1400, and the 1450) and concentrated on two new machines: the 600 and a new 800. These micros were everything the previous Atari machines were not: they were well designed, very family oriented, extremely useful, and played games like nobody's business. Most important, they used the software already written for the 400 and the 800. And with Alda's clever commercials behind them, they quickly became the computers for families that couldn't afford Apples or IBMs. Most families, in other words.

Atari also cleaned house.

They hired a new boss, James Morgan, who made a lot of extremely smart moves.

After straightening the company's chaotic management structure, Morgan put a lid on new product announcements. Henceforth, Atari was no longer in the business of getting gamers excited about stuff they would never see.

That's smart, because as a gamer/reporter, I myself am *still* waiting on Atari's 3-D game system and on their wireless 2600. I played prototypes of both, of course; but it is much easier to make a prototype of something than it is to make a marketable production model. Just ask Coleco.

### POST OP

Atari's got something between seven and ten million 2600s still operating in American homes, so there will be a market for their game software for quite some time. The 5200 has finally taken off with a great deal of top-notch software support: Atari has taken a lot of Intellivision and Coleco gamers and brought them back into the Atari fold.

Their future lies in the success of the new micros — if Atari blows it, they won't get

a second chance. The field is simply too competitive.

Atari isn't out of the water yet, but at least they can sight land.

## STATESIDE CHATTER...

★ Commodore's alleged 264 and 364 might not make it — the former was unveiled at the Winter Consumer Electronics Show to a lot of head-scratching and general befuddlement; many folks think it is inferior to the original Commodore 64. As of this writing, retailers have seen neither hide nor hair of the 364. If Commodore is going to stay in the low-end micro market, they're going to have to come up with something, and it better play games, and it better be good.

★ Coleco announced an Adam disc drive — now we'll have to see if they can deliver. Of course, they just laid off 1,300 workers after posting a $35 million loss for the last three months of 1983. Someday they'll learn the lesson: you can't produce an adequate number of good games for several semi-compatible systems (the Coleco, the driving module, the sports module, the roller controller, and the Adam).

More next month.

1983 was an eventful year for Atari. After more or less dominating the video console market for several years with the VCS (later renamed the 2600 when the 5200 console was released in 1982), rival companies were starting to eat into Atari's monopoly. By the end of 1982, Intellivision had sold two million consoles and Colecovision shifted five hundred thousand. On the home computer front, Texas Instruments and Commodore had both released 64k Ram machines (TI with the first home computer with a 16-bit CPU) with high resolution colour graphics and lots of sprites. Like their once all-conquering games console, the Atari home computers were starting to look a little underpowered and therefore out-of-date.

Atari's response was short-sighted to say the least. Their latest console, the successor to the VCS introduced in 1982, was the 5200 Super System which was of course basically an Atari 400 with no keyboard. The 1200XL was introduced at the start of 1983 at a horrendously high price ($899 - while the Atari 800 was selling for under $200) but was taken off the market in 1983 in favour of the cheaper 600XL and 800XL models. The 800XL is reportedly Atari's best selling computer ever, but the machine was introduced a little too late in 1983 to compete with the Commodore 64 which was outselling the Atari machine at a rate of over 3:1.

What else could Atari have done to compete and possibly re-gain the dominant position in both the games console and home computer markets? Almost everyone agrees that the 5200 console was a mistake - the technology was already three years old and looked dated compared to Colecovision's console which had higher resolution colour modes and 32 hardware sprites. The Commodore 64 also had a nice sprite system and colour memory mapped text modes which made the very expensive 1200XL look positively prehistoric with it's 4-colour modes and five tiny sprites. Atari would begin developing the 7800 games console around this time, which compared very favourably with the C64 graphically but unfortunately ended up with the same sound chip as the old 2600, which was another of Atari's strange decisions. This was done mainly to ensure compatibility with the 2600 whose games could run on the new machine. The 7800 should have been the Super System, but was shelved by Jack Tramiel when he bought Atari in 1984 only to finally see the light of day in 1986 when once again Atari's competitors had not only caught up but surpassed its technology.

Had the 7800 been released in 1984 as it was, it might have done very well, but by 1986 the Nintendo Entertainment System (introduced at the end of 1985) was the dominant machine and is generally credited with revitalising the games console market in the US after the so-called video games crash of 1983. Of course, we have the benefit of hindsight, but in 1983 Atari really should have made a bigger effort considering the competition they were facing. The easiest (and cheapest) way to compete would have been to develop a new home computer based on the existing 400/800 hardware but upgraded with some new graphic modes and more sprites - and release the same machine without the keyboard as a games console. The 7800 had a vastly improved sprite system over the 400/800 which perhaps could have been implemented into the home computers or maybe an upgraded Antic/GTIA combo. The sound chip in the 400/800 models was fine and readily available, so doubling up the Pokey (nice, though not essential) to give eight 8-bit or four 16-bit sound channels would have been a relatively cheap and very impressive upgrade.

The existing Atari 8-bit machines already had fine vertical and horizontal scrolling and a good palette of 256 colours which few of the competing machines had. The existing I/O ports provided fast disk access and they already had the then industry-standard joystick controller ports. Their new "could've been" home computer (which I've called the 1600XL) could have had essentially the same case as the 1200XL, which despite everything else wrong with it, certainly looked the part. A faster CPU and ROM based DOS as well as BASIC would have been very welcome (but again, not essential) but the icing on the cake would have been the introduction of a higher resolution mode for 80-column text which would have enabled the machine to compete with the Apple computers for business applications such as word processing and spreadsheets. The Amstrad CPC which was soon to be introduced in the UK had a hi-res 80-column text mode and even the BBC Micro, which had been around since 1981 could do the same and it only had 32k of Ram.

It would have been reasonable to have expected a machine like this to sell at a higher price but it would have had the potential to blow Commodore, Apple and all other rivals out of the water at the time. A games console version of the same machine might have re-gained a good foothold in the console market before Nintendo got in on the act. Of course by the time the Nintendo Entertainment System appeared on the market, Atari had the ST computers available, which addressed many of the above problems but also at around this time, Commodore had the Amiga (pinched from under Atari's noses) just around the corner. Atari knew that a great computer with excellent graphics and sound capabilities would make an excellent games console - they tried this with the 5200, yet they later attempted to battle with their rivals on two fronts with the ST and the 7800 - two different products when one killer machine could have cleaned up in both the computer and games console markets. The fantasy machines shown here would have been perfect in 1983/84 and logically would have been replaced in 1985/86 with the ST computer and an ST-based games console, whose specs would have annihilated the Nintendo. Just saying...



PRINCE OF PERSIA



THE LAST NINJA

GAMES LIKE THESE WOULD EASILY HAVE BEEN POSSIBLE WITH MORE SPRITES AND A BIGGER CHARACTER SET.

# NEW FROM ATARI
## FOR 1983

## Atari 1600XL Home Computer

## Atari Super System Games Console

### FULL SPECIFICATIONS FOR BOTH MACHINES

**2 MHz CPU**
128k Ram Memory / 32k Rom
Antic 2 / Super GTIA / Dual Pokey
Built-In Basic XL and Atari DOS 2.5
Programmable Function Keys
Start / Option / Select / Help Keys

**I/O Ports**
Serial Disk Drive / Cassette Port
Parallel Bus Interface
Cartridge Slot
RF and Monitor Sockets
Stereo Sound Output Jack
4 Joystick Controller Ports

**Sound**
8 x 8-Bit Sound Channels or
4 x 16-bit Sound Channels

**256-Colour Palette**
256-Glyph Character Set
16 Hardware Sprites: 16 x 32 Pixels
Horizontal Hardware Scrolling
Vertical Hardware Scrolling

**Graphics Modes**
80 x 192 Pixels: Lo-Res: 256 Colours
160 x 192 Pixels: Med-Res: 16 Colours
320 x 192 Pixels: Hi-Res: 4 Colours
640 x 192 Pixels: Super Hi-Res: 2 Colours

**Text Modes**
20 x 12 Chars: Med Res: 256 Colours
20 x 24 Chars: Med Res: 256 Colours
40 x 24 Chars: Med-Res: 16 Colours
40 x 24 Chars: Hi-Res: 4 Colours
80 x 24 Chars: Super Hi-Res: 2 Colours

# RANSACK!

Ransack was originally written by Peter Scott, one of the best and most prolific programmers on the BBC / Electron machines. He produced over 20 games between 1985 and 1991, including many original titles and also conversions of some very, very famous games like Barbarian 1 & 2, Ballistix, The Last Ninja 1 & 2 and incredibly (for a machine with so little RAM) Sim City. And if that isn't impressive enough, he also wrote a word processing program in BASIC, whilst still at school, which the local county bought for unlimited use in every school in Northumberland. His main memory of this event can be summed up with these three words: "*We wuz robbed!*" After producing many type-in games for various different computers and magazines, Peter finally settled on the Acorn Electron as his computer of choice, for the simple reason that he couldn't afford a BBC Micro.

1987 was the year of Irem's smash hit arcade shoot 'em up R-Type, with smooth scrolling graphics, enemies galore and the ability to use a multitude of different weapons against them using collectable power-ups. This game spawned a zillion clones on every machine under the sun and Ransack is one of them, although scrolling shoot 'em ups of this sort were a rare event on the BBC / Electron computers. These machines were ill-suited to this genre as they had no hardware scrolling or sprites and the poorest colour palette next to the ZX Spectrum. But these facts didn't deter Peter Scott, who once again produced a top quality game which, on the title page, promised "832 screens of high speed slaughter". The game has eight levels but Peter admits, "*Ransack was supposed to have a load more levels... but I ran out of time.*"

Fast forward to 2014 and the Abbuc Software contest, which saw the game "ported and enhanced" for the Atari by Lyren "Xuel" Brown and Jose Pereira. Lyren Brown explains: "*All credit for the the game play must go to Peter Scott since this A8 version uses the exact same 6502 code for the game play as his BBC Micro version. That being said, there are some*

*subtle timing differences. The drawing code on the Beeb mostly attains 50 frames per second but slows down when there are lots of enemies on screen and in the bonus stage. I optimized the code a lot to get a consistent 50 frames per second on the A8 so the game is actually a little faster in some spots.*"

Jose Pereira elaborates: "*The BBC / Electron version was all done in bitmap mode but we decided that to do the A8 justice we should use character mode Antic 4 with 5 colours, DLIs and PMGs so we had to:*

- *Port the BBC Micro 6502 code for the game and the sound routines to the A8*
- *Create a new status bar*
- *Redesign some enemy pixels and changes their bit-pairs so that they look different and coloured differently from each other*
- *Use different colours to distinguish the terrain from the buildings*
- *Add new multi-coloured text to high score screen and the loading progress bar*

Once the title page appears (playing a nice, but very repetitive snatch of Kraftwerk music), pressing fire to start brings up the message "let's be careful out there" and you certainly have to be...

In the game, you control AL (Artificial Lifeform), a spherical robot who has been sent on a revenge mission. Apparently, the eight planets of the Ryvian System haven't been paying their share towards the Democratic Council of Planets and so a 'Ransack' clause has been invoked. A council representative is eaten after being sent to negotiate with the planets, so a battle fleet was planned to be sent, but due to budget cuts, AL ends up being sent on a solo mission to completely destroy all eight planets. As you do...

AL, unfortunately, has a faulty stabilisation system; he bounces up and down constantly, which makes him resemble a robotic space hopper on a pogo stick. What this means for the player controlling him is that you have no control over AL's vertical movement - so you can only move (bounce) freely to the left and right. This adds a novel twist to the shoot 'em up and although it may sound restrictive, it can often help you avoid enemy vessels by bouncing over them as they kamikaze towards you.

AL is armed with a laser gun but other weapons can be collected, including smart bombs which are released by pressing the space bar. The other weapons, or power ups, include a two-way gun, four-way gun and double and triple shot guns. However, if you are happily blasting away with one of these and then pick up a single shot weapon, you are powered down to a single shot weapon... which is a bit of a pain. My strategy therefore goes something like this: pick up a double or triple shot gun and try to hold onto it by exterminating everything that moves, including extra "power-ups". And they certainly can move! The game is played at a frightening pace, with wave after wave of ships swarming toward you, hell-bent on smashing you to pieces. Well, you probably would too, if a mad bouncing robotic space hopper showed up one day to obliterate your entire world.

Beware electrified sections of the ground which will drain your energy if you land on them. Collisions with the enemy ships also drain your power level, which is displayed in the panel below the playing area with your remaining lives and bomb status. You get five lives to start with and you'll probably need them. There are very short bonus levels between the eight worlds, which seem to consist of a solitary attack wave and a moving platform which you can bounce on as it moves left and right. If you successfully destroy the attacker(s) and avoid falling off the platform, you can happily proceed toward annihilating your next planet.

The background graphics are nice and colourful although not as detailed as they could be, but they scroll past at such speed while you are engaged in the slaughtering that you don't really get to look at them for long. The main sprite and enemies are also nice and colourful and strangely, the Commodore 64 version actually looks more Atari-esque with it's single colour shaded sprites and background scenery.



BBC / Electron Version



Commodore 64 Version

The enemy ships, being character based, move whole character cells at a time, so they don't move particularly smoothly, and occasionally blank each other out slightly if they overlap, but as with the scrolling, the speed of the movement is so quick that the effect is minimised quite effectively.

This game is a lot of fun - pure unadulterated shoot 'em up action, played at a frantic pace with nice graphics, great sound effects and a barrel load of addictiveness. The words "just one more shot..." will undoubtedly be heard many times while playing Ransack. This is yet another superb Atari 8-bit game conversion which improves on the original.









8/10

# PERPLEXITY

Perplexity is an isometric maze game which bears more than a passing resemblance to the 1987 arcade game Pac-Mania but that is where the similarity ends. While it does look superficially similar, it is more like a 3D version of Soko Ban than Pac Man. There are sixteen mazes containing diamonds which must be collected and some rather cute monsters to be avoided. The mazes each contain several doors which are opened by pushing keys (which must be facing the right way) into them which allows you further access to other areas of the maze. There are other items that can be pushed around including boulders that create diamonds when smashed together and black boulders which don't do anything but get in your way. You have to be careful with these, as pushing one into a certain position may block your way around the maze later. If this happens, you can self destruct your current life and start the level afresh, or... use the remaining time wisely to explore the maze layout as much as possible before you snuff it and begin your next attempt. As the items can only be pushed and not pulled, strategy comes into play as pushing a certain item against a wall or in front of another object means that item can no longer be moved and the level becomes impossible to finish.

The game was developed by Ian Collinson in 1989 and released for the Acorn Electron and BBC Micro in 1990 by Superior Software, who were noted at the time as one of the few companies capable of producing quality software for those machines. However, it was also one of a number of  games which used part of the screen display to store game data in an effort to conserve memory, resulting in a mass of multicoloured pixels using up a fair portion at the top the screen - see the screenshot below - yuk! This is what happens when you only have 32k of RAM available to write a decent game. Mr. Collinson himself popped up on the AtariAge forum to express his delight and appreciation of the great job Fandal and Irgendwer did on this Atari version, although he did concede in an interview that he could have added a lot more levels if he had known more about data compression at the time he wrote the game.

There are sixteen levels to negotiate and you have a time limit of 500 seconds to solve each maze but if you pick up an hourglass you are awarded additional time. Other useful items to collect are bottles of magic

potion, four of which will grant you an extra life. Your remaining time, number of lives, boulders and jewels together with the number of magic potions collected are displayed to the right of the playing area and above this is a map of the level. This is constantly updated to show your current position and also where the remaining boulders are situated. The map is very useful in helping you to try and plot a strategy to complete each level. A password is given for each level so you don't have to begin at the first maze again every time you get killed off. The graphics are essentially identical to the original came, complete with somewhat jerky scrolling, but of course the Atari conversion has a much nicer set of colours for the different levels than the BBC or Electron computers could muster. The music which accompanies the action suits the type of game well, but can be switched off in favour of sound effects if you prefer. I must confess that before Fandal and Irgendwer ported Perplexity to the Atari, I was only vaguely aware of the game and had never actually played it before, but it turns out to be an extremely  well designed and addictive game which not only looks good, but provides a challenge for those who like a good puzzle to solve. This is a very good conversion of a very good game.







BBC MICRO VERSION



8/10

Plan A - to bomb the rogue central computer of the Trogrian computer complex - has failed. Plan B is this 1986 game from Bug Byte in which you control a war drone which has been teleported inside the complex. Your mission is to find and destroy all the computers before getting back out, while constantly fighting off armies of security robots. There are 54 screens in all, which were depicted on the BBC/Electron in a high resolution black and white mode. Fandal, with some help from PG, converted the game to the Atari in 2012, keeping the game in high resolution (apart from the player sprite) but has added a nice dash of colour. Miker, yet again, supplies the superb music, composed in Raster Music Tracker.

Ten keys must be found to get out through the main door once you have destroyed all the computers and other keys must be collected to gain access to the many locked rooms. The display panel at the bottom of the screen shows your score, energy level, quantity and type of keys collected, amount of rockets you have left and the number of computers still active - you have 100 to destroy at the start of the game. Extra rockets can be picked up as well as oil cans and spanners which replenish your drone's energy. You must be careful not to shoot these as they are very easy to accidentally destroy whilst spraying rockets at the oncoming robots. These are both relentless and plentiful - sometimes you may find yourself surrounded by 20 of them at once; the more you destroy, the more reinforcements teleport in to attack you. Oh, for some smart bombs! The game is efficiently programmed - there is no slow-down of the action no matter how many robots are menacing you.

Some parts of the scenery can be shot away to allow passage, to destroy computers or gain access to items, although it is not always immediately obvious which sections can be destroyed and some of these also require very precise blasting from very precise positions. There are other surprises distributed throughout the game - one screen is called "The Dark Room" in which all the walls are invisible. This is one of my few complaints about the game - this screen would have worked much better if the background in the room had been black. There are also a couple of rooms which are easy to get trapped in and the only way out is self-destruction... i.e. by pressing Escape. And then there is the mysterious "Secret Room"...

Plan B was originally sold for £2.99 yet is demonstrably superior to many, many full-price games. The action is totally frantic - you won't complete "Plan B" after two or three goes; it is very, very, VERY difficult. The sheer number of robots attacking you brings Robotron to mind (thankfully, they don't actually shoot at you here - but they do ram into you, depleting your energy with every collision) and even with unlimited firepower the game would be hard to complete, so having to constantly find fresh supplies of rockets (50 a time, though - handy!) makes it murderously hard. It doesn't help that your drone can only fire left and right, so when you find yourself having to negotiate a narrow vertical shaft with robots materialising around you and there is no room to outmaneuvre them... well, that is bad news. There is good news though - Fandal has sensibly included a cheat mode which gives you unlimited firepower and energy, (which many a game gives you anyway)... but the game is still extremely difficult to complete - even when cheating! If you don't want to see the words "You appear to have snuffed it. Oh well, such is life." every few minutes, just type the word "allmighty" on the title page and prepare to give those robots hell. The only other thing you probably need is a nice full colour map of the computer complex to find your way around...

BBC MICRO

8/10
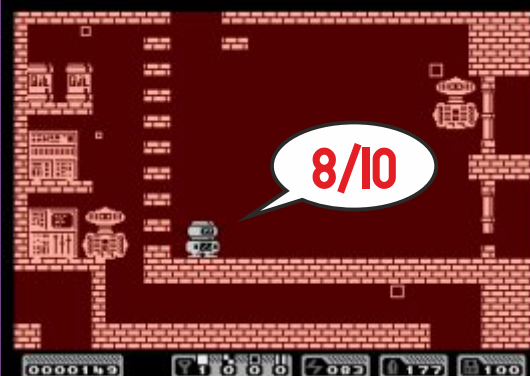
Leave the first screen (called Plan B) by the right exit and on the next screen (with the 'Out' sign) drop down. Collect the key at the bottom of the screen. Now go back up into the screen with the 'Out' sign and collect another key. Destroy the two computers. Go up and you will be on a screen called In The Tower. Go to the door at the top of this screen and open it. Go up into the Top of The Tower screen. Collect the two keys there and drop down through the In The Tower screen to the room with the 'Out' sign. Go right to the Crossroads and then up to The Helipad. Destroy the computers then go down to The Crossroads. Go left into the room with the 'Out' sign and down. Go left into The Terminal Room. Collect all the ammo and energy that you need and shoot any and all computers you see en route. Now go right to leave The Terminal Room and right again into what appears to be a dead end. Go to the top left of this screen and shoot at the wall to the right. It will disintegrate and allow you to destroy two computers. Now go back left, up, right (into Crossroads) and down into the area where the two computers were. You can now blast a wall to your left to destroy two more computers. Return up, left, down and right and destroy a wall to your right and two more computers. Finally go left, up, right and down again and collect the two keys and all the ammo and energy.

Go back up into Crossroads, left and down and down again. The vertical pipes which seem to bar your way to the right disintegrate when shot.

next room (Up In The Roof) at the top. Destroy the two computers then proceed left, open the door, go into the antechamber and destroy the four computers. Go down into a room where you can blast away a small vertical wall and gain access to a small area with a computer and two keys. Get the keys and kill the computer. Don't worry about the smaller room toward the bottom of the screen. Go back up, then right, through The Dark Room then drop down one screen and go left into The Storeroom where you'll need to probably collect everything to replenish your supplies. Continue left and go up one screen to find two computers barring the way to some ammo. Destroy the computers then drop down again and go left around the outside area along the bottom of the screen. Destroy any computers in the way and find your way to the centre where the key is. When you come up on the right hand side of it, blast away the dividing wall. Collect the key then open the door underneath it. Although this looks as if it leads to nothing, if you drop into it then hover up from the screen beneath you will be transported to a secret room.

In the secret room, collect all the keys, open the necessary doors and blast away all the computers. To exit the room move to the bottom left where the wall can be blasted away. Passing through it sends you back to just left of The Storeroom so do an about face and move right through The Storeroom again. On the next screen is a door leading to
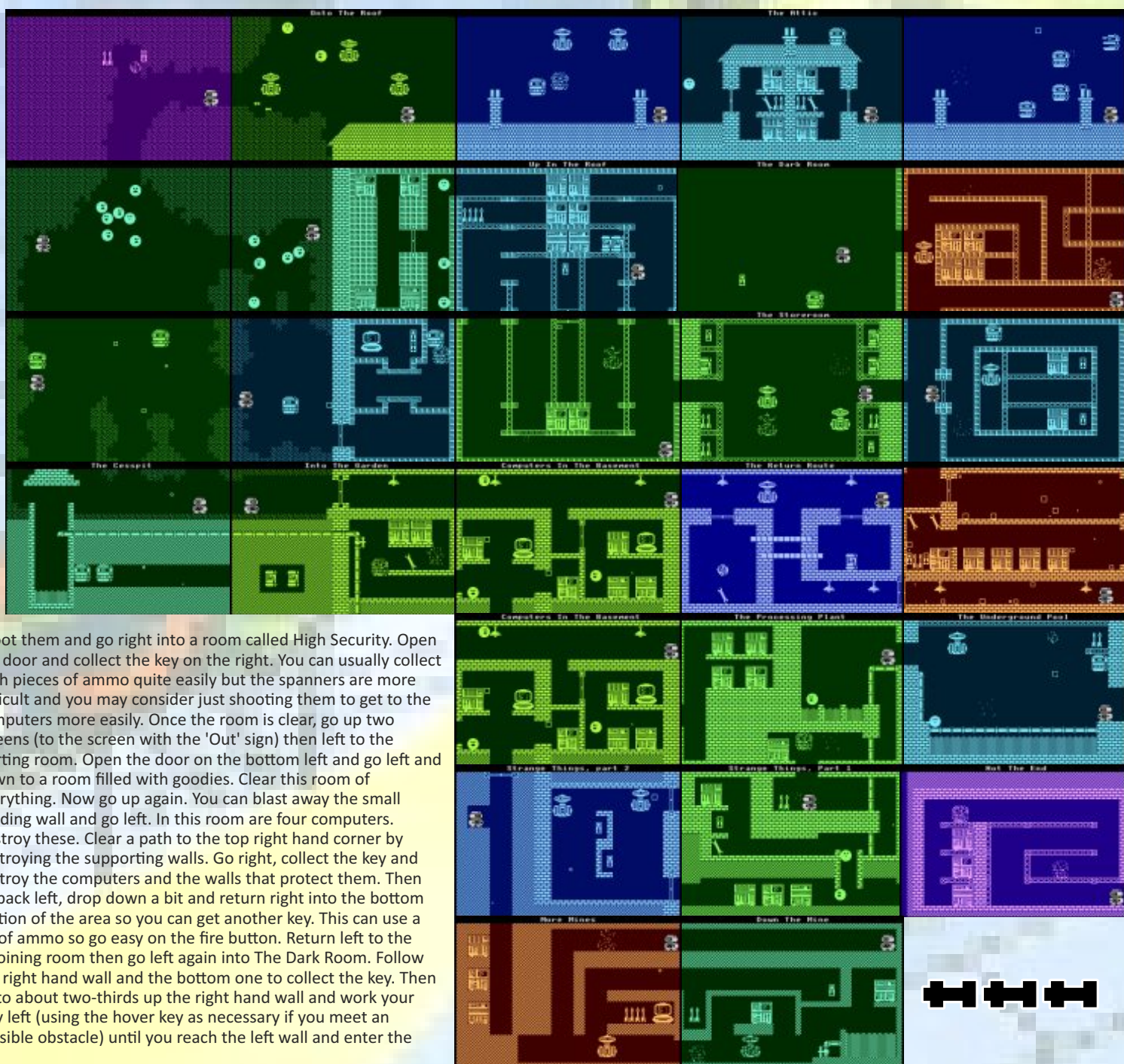


Shoot them and go right into a room called High Security. Open the door and collect the key on the right. You can usually collect both pieces of ammo quite easily but the spanners are more difficult and you may consider just shooting them to get to the computers more easily. Once the room is clear, go up two screens (to the screen with the 'Out' sign) then left to the starting room. Open the door on the bottom left and go left and down to a room filled with goodies. Clear this room of everything. Now go up again. You can blast away the small dividing wall and go left. In this room are four computers. Destroy these. Clear a path to the top right hand corner by destroying the supporting walls. Go right, collect the key and destroy the computers and the walls that protect them. Then go back left, drop down a bit and return right into the bottom section of the area so you can get another key. This can use a lot of ammo so go easy on the fire button. Return left to the adjoining room then go left again into The Dark Room. Follow the right hand wall and the bottom one to collect the key. Then go to about two-thirds up the right hand wall and work your way left (using the hover key as necessary if you meet an invisible obstacle) until you reach the left wall and enter the

two computers and two keys. Go back through the same door then drop down and left into a particularly difficult screen called The Return Route. On this screen you need to drop into the small areas on both sides of the screen and shoot away the barriers that block the middle passage. This involves a bit of luck as a few badly placed baddies here can drain your energy very quickly. Try and get right up close to the wall you want to destroy. This will keep the aliens at arms' length and reduce the number of bullets you waste. Make sure you don't blast the spanner and oil can accidentally as these are extremely useful. Battle it out and escape down the middle passage and to the right.

You pass under three screens, blasting the lights away on each one and then drop into The Basement. Towards the bottom of the screen is a walled compartment filled with ammo. Blast it until you can get the ammo then blast the wall behind the ammo. You can then go through the wall into another screen. From The Cellar, go down two screens into The Underground Computer Room. Here there are numerous doors to open and computers to destroy. Go back up to The Cellar and this time go left and take the top left exit into The Underground Pool. Grab the ammo and go left. There are some computers on the left of the screen that appear inaccessible. However, carefully placed shots through the wall can destroy these. Blast away the pipe to the right, drop down, blasting another obstruction, into Strange Things Part 1.

Pool, go right and this time leave the room you come to by the bottom exit. You will find a room called Not The End, which, by blasting the bottom left area of the wall near the third computer from the top, can be exited. But remember to destroy the computers first.

You will now be in the Down The Mines room which is right at the bottom of the map. These rooms are quieter than most and will give you time for a breather and also to replenish your ammunition. You will find some computers to destroy and a key to collect in this room and in the adjoining More Mines. When the area is clear, blast away at the bottom left hand wall to create a passage adjoining the vertical one you can see. Go up, kill the three computers on the way and blast through the right hand wall to get the keys in Strange Things Part 2. Don't bother with the two doors on the right hand side of the screen as they merely teleport you one-to-the-other. Instead, go back through your makeshift entrance and up through the door. In Back Up Again, collect the key and continue upwards to reach Computers in the Basement. Open the door to your left, collect the spanner and blast the two computers. Return right, shoot out the horizontal wall dividing the small left section from the rest of the room and go up and right to another door. This is the hardest part of the game, with hordes of deadly square attacking aliens. You have to cross three screens from left to right - along the top, drop down through three doors then cross the same three screens from right to left along the bottom. You also need to blast five computers near the final stretch. If you make it, there are two spanners to replenish your energy supply so you can fight your way back again. Now go left, across The Return Route, Computers in the Basement and Into The Garden.
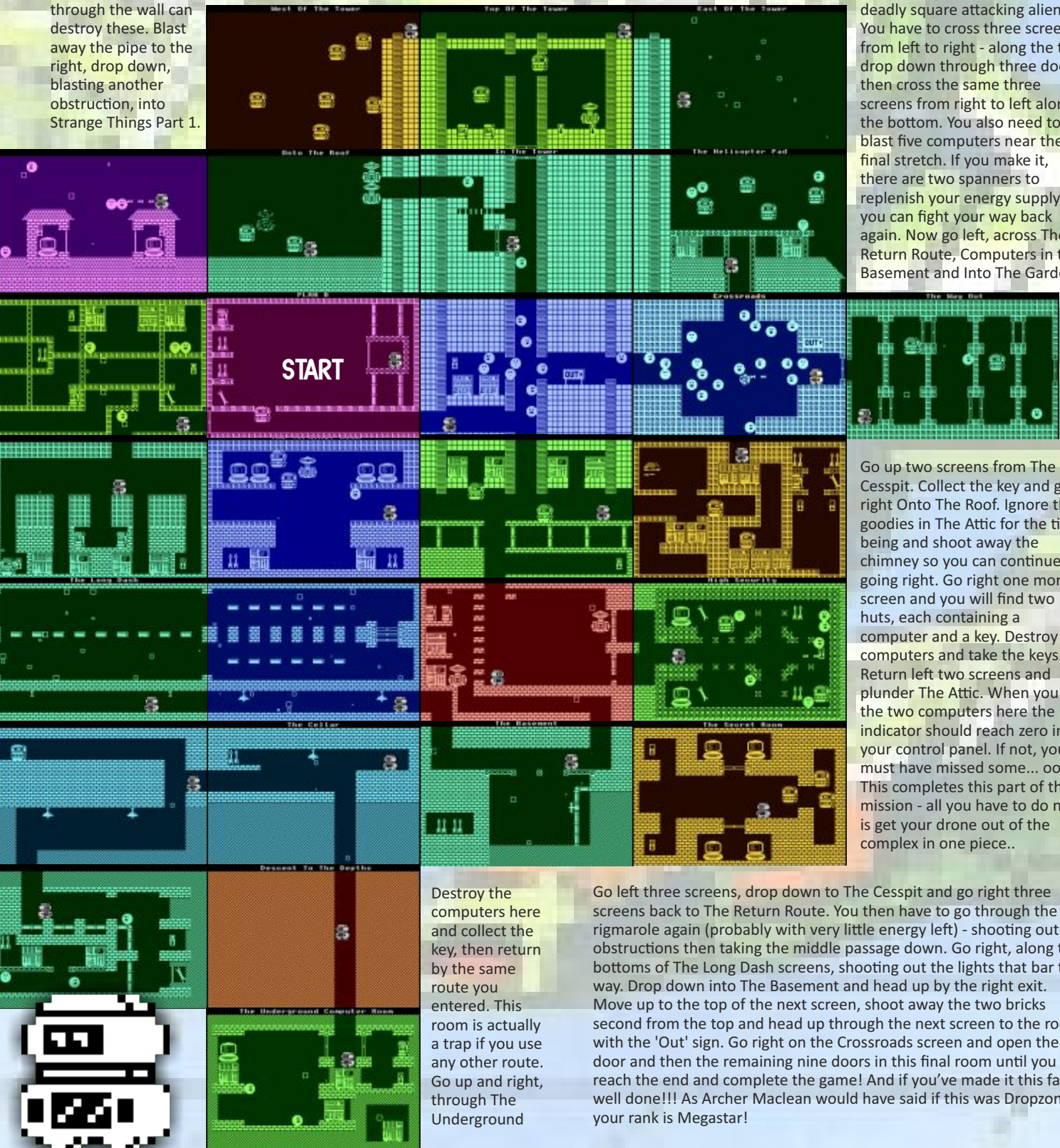


Go up two screens from The Cesspit. Collect the key and go right Onto The Roof. Ignore the goodies in The Attic for the time being and shoot away the chimney so you can continue going right. Go right one more screen and you will find two huts, each containing a computer and a key. Destroy the computers and take the keys. Return left two screens and plunder The Attic. When you zap the two computers here the indicator should reach zero in your control panel. If not, you must have missed some... oops! This completes this part of the mission - all you have to do now is get your drone out of the complex in one piece..

Destroy the computers here and collect the key, then return by the same route you entered. This room is actually a trap if you use any other route. Go up and right, through The Underground

Go left three screens, drop down to The Cesspit and go right three screens back to The Return Route. You then have to go through the rigmarole again (probably with very little energy left) - shooting out the obstructions then taking the middle passage down. Go right, along the bottoms of The Long Dash screens, shooting out the lights that bar the way. Drop down into The Basement and head up by the right exit. Move up to the top of the next screen, shoot away the two bricks second from the top and head up through the next screen to the room with the 'Out' sign. Go right on the Crossroads screen and open the door and then the remaining nine doors in this final room until you reach the end and complete the game! And if you've made it this far, well done!!! As Archer Maclean would have said if this was Dropzone, your rank is Megastar!

Hobgoblin is set in the world of Altoris. The land is surrounded by dense woods and foul smelling swamps. It is home to a peaceful race of people ruled by the good King Garath. It is also under constant attack by vicious, devilish hobgoblins and ghosts from the Swampland kingdom, but fortunately, the power of the Golden Orb kept the people safe with its protective aura. Then, catastrophe strikes - the Golden Orb is stolen, and with it goes its protective power. Doom and gloom descend on the land of Altoris. King Garath summons his son, Zanok, a great warrior, and instructs him to recover the Orb in order to restore peace and tranquillity to the land. You take on this role and throughout your quest you must battle demons, ghosts, hobgoblins, skeletons and phantom bowmen armed with countless arrows.

Hobgoblin was a 1990 attempt at a Ghosts 'n' Goblins clone, which was never going to be easy on the BBC Micro / Electron - particularly creating a spooky looking game with creatures of the night using that awful colour palette. The machines also had no hardware scrolling or sprites, but coder David Parsons still somehow managed to create a really good game:

"*OK, so you might be thinking this was inspired by Ghosts 'n' Goblins. And you'd be right. There was nothing like it on the Electron, and to be fair, Hobgoblin wasn't a patch on Ghosts 'n' Goblins. But I only had 20k (yes, 20 kilobytes - that's really not very much) and three colours to play with, and I was, like, 17 or something.*

*Hard? Some have said this game is hard. This is true. It is rather difficult, and there are many places where you can't really react quickly enough unless you know what's coming. But in my defence, it was my first published game, and I hadn't really realised that I'd become rather good at the game I was myself making. Sorry! (but not very - difficult was the style at the time, and it wasn't that bad). Yes, that's an enormous logo. Not because the*

*game was so full of itself or important, but rather because I was only able to use a small window for the game in order to keep it flicker-free, and running fast enough. There were so many games afflicted with nasty flickering graphics.*"

As usual, the game was ported to the Spectrum, Amstrad and C64 but the Atari had to wait until 2008 for a home-brewed version which, thanks to the amazing work of Krzysztof "XXL" Dudek, Kaz and String, is the best version yet of this game. The Spectrum version is woeful and the Amstrad is too garishly coloured and has terribly tinny sound. The C64 conversion is well done and is very fast, but the Atari conversion is more atmospheric with very well chosen colours and is brilliantly presented. XXL even asked David Parsons for permission to port the game and he duly sent the original programmer a cartridge copy of the finished Atari version, which David described as "a great job".

You can see from the screenshots that the Atari port looks much better than the original version. The presentation (especially for such a small game) is exceptional - the opening title screen is superb, as are the rather grisly "you're dead" screen and the final "game completed" screen. They are superbly drawn with lovely use of colour. There is no smooth scrolling though - the playing area scrolls coarsely to the left when you reach the right

hand side, as in the original, but the characters are nicely drawn and look much better using the Atari palette of colours. There is no music, as per the BBC game, but the sound effects, like the graphics, are superior to the original.

This is not a huge game - if you get particularly good at it, it takes all of about six minutes to complete.. but in the playability stakes the Atari version is almost identical to the BBC original, which means it's pretty difficult. Six minutes may not sound like much but in reality it is very easy to lose a life about every six seconds. Precision jumping is a skill which must be mastered quickly in this game or the result will be the gory decapitation shown above. The cheats (and rubbish players) among you will appreciate the extra lives feature - press P to Pause the game and then press Ctrl-L to bag yourself some extra lives.

However, it's not all doom and gloom... your firepower can be increased by collecting a glowing dagger or five treasures such as jewels, coins or treasure chests and your weapon's range can be increased by collecting a glowing arrow. If you manage to collect three glowing skulls, you will be awarded an extra life. The only thing I can really find fault with in this game (maybe apart from the slight jerkiness inherited from the BBC...) is that there is only one level -  a great shame, since it all looks so lovely! However, the good news is that the sequel Hobgoblin 2 is also coming soon to the Atari from XXL, who promises a whole new game engine. Can't wait!

The original Hobgoblin from Atlantis Software was one of the first few games ever written by David Parsons and was the first game he ever had published. He went on to program games for the Atari ST, Amiga and the PC. David's main memory of the game is rather amusing: "*The BBC Micro and Electron versions were on either side of the same cassette tape, and in a hilarious twist of fate they were mislabelled. The results of this were that on the BBC Micro (running the Electron version), everything went all pink, and on the Electron (running the BBC version) the pink in the title was lost and was shown in green. Some BBC games reviewers seemed to notice the strange pinkness and didn't much care for it! But, if you'd loaded the 'wrong' side of the tape for your computer (i.e. the right side!), both versions would have looked like the screenshot below...*"



8/10



'PROPER' BBC MICRO AND ELECTRON VERSION

# E_TYPE

E-Type was an attempt to clone Sega's incredibly popular 1986 arcade driving game Out Run to the BBC Micro & Acorn Electron and was later enhanced for the Acorn Archimedes, all published by The Fourth Dimension in 1989. The game features a Jaguar E-type car instead of the arcade machine's Ferrari.

Programmer Gordon J. Key admitted in a recent interview: "*E-Type was wanted by my publisher in a rush; in fact they advertised the game's release date before I even started to work on it! It took a little over two weeks to write and at the last minute I realised there was no way to refuel and also no more memory to add the necessary graphics. This was only realised at around 11pm on the night before the program was to be officially released! The only thing to be done was to give some fuel for hitting an object already in the program, so I opted for the policemen as they already appeared on every track. This may not have been the best decision I have ever made but it involved the least work and no redesigning of the tracks.*" This brought the game to the attention of the Police Federation who voiced their concerns over the game in Micro User magazine. God only knows what they would have made of Grand Theft Auto!

The basic idea of E-Type is to cover as much distance as possible in the given time limit over various stages, avoiding obstacles such as roadworks, oil slicks, trees and postboxes. If the car hits such an object, the driver and his female passenger are bounced up and down in their seats. Other vehicles also need to be avoided as colliding with them also damages your car. On parts of some tracks, the road is surrounded by water and if you venture into it your car will sink and the game is over. The player can earn extra time for a stage by driving under a Time Bonus banner (to the
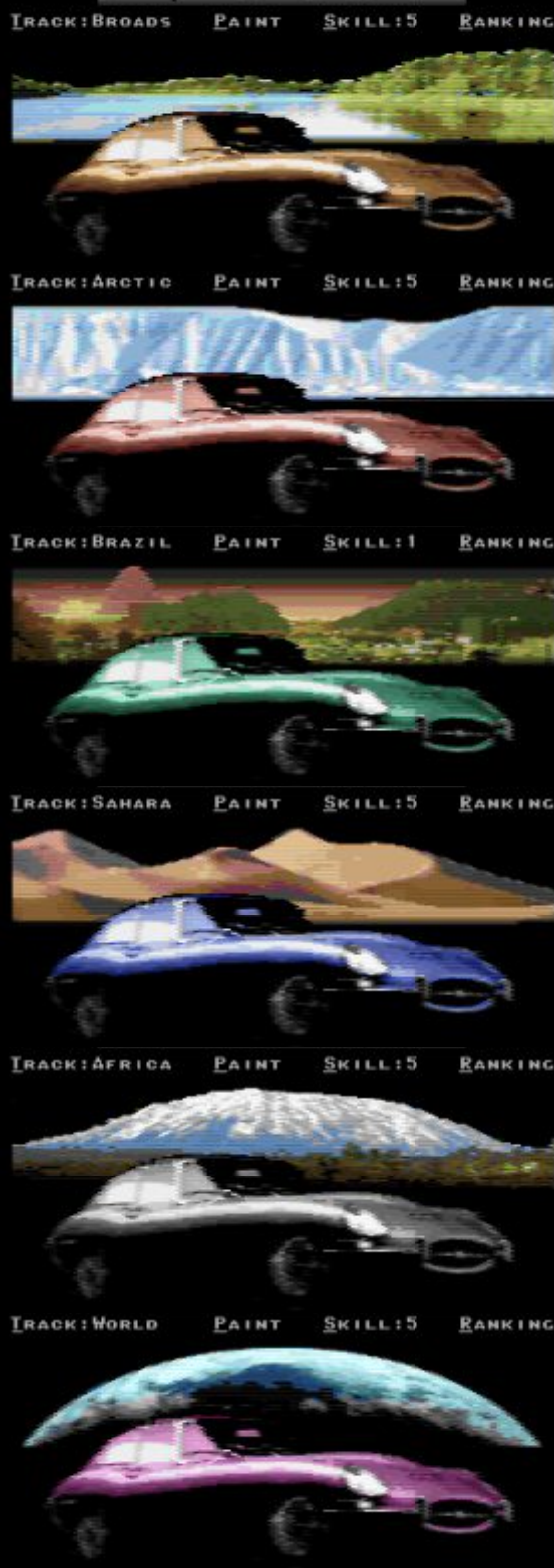
sound of a bell) or by "collecting" policeman, i.e. running them over. Each stage can be played individually or as a set, with the player needing to complete a stage in order to progress to the next area. Players who cover the most distance can enter their names into the Hall of Fame high score table.

"Our" version was released to the Atari community as a surprise Christmas present in December 2015 by Fandal, complete with a very nice and colourful GTIA-mode title page by Christian Krüger and screeching tyre sound effects. From the title screen, you can select different tracks (including the Arctic!) and choose a colour for your car, as you can see on the adjacent screenshots. The BBC game had a very, very dull black and white text-only screen for this. Other Atari enhancements over the BBC version include vastly better dashboard graphics and all the tracks being in memory at the same time, eliminating disk loading during the game. The extra memory required does mean that the game requires a 130XE which is no problem at all if you play the game on an emulator. The BBC/Electron game loaded the tracks from disk as those machines only had 32k of RAM available.

Perhaps the most impressive addition to the Atari version is the "1st person view" mode which addresses the problem of the large car sprite obscuring your view of the track - a common complaint about the original version. Starting the game by pressing "Select" instead of "Start" begins the game in this mode, which was suggested by Irgendwer and this feature alone vastly improves on the original. Pressing the joystick trigger starts the game in the previously selected mode. Needless to say, but the whole game looks much better in the Atari palette and the banging soundtrack also comes courtesy of Irgendwer who composed the music on the legendary Raster Music Tracker.

The BBC/Electron game used six redefined keys for the car controls (gear up and down, move left and right, brake and throttle), which Fandal has again



TRACK:BROADS    PAINT    SKILL:5    RANKING

TRACK:ARCTIC    PAINT    SKILL:5    RANKING

TRACK:BRAZIL    PAINT    SKILL:1    RANKING

TRACK:SAHARA    PAINT    SKILL:5    RANKING

TRACK:AFRICA    PAINT    SKILL:5    RANKING

TRACK:WORLD    PAINT    SKILL:5    RANKING

improved upon by adapting the gear shift to holding down the joystick fire button and moving the stick up or down to cycle through the five gears. The button itself provides throttle and moving down on the joystick puts the brakes on.

The various different tracks available and lengths of the tracks are as follows:

- Broads: 6.3 miles
- Arctic: 9.5 miles
- Sahara: 12.7 miles
- Africa: 15.9 miles
- Brazil: 19.1 miles

Two minutes are allocated to play each track and "bonus time" is available if you last long enough to complete the required number of miles. If you had selected the "world" option when starting the game, you advance to the next track upon reaching your mileage target. There are 9 skill levels to choose from, with more points being given out during the game at higher levels. Irgendwer himself has some gameplaying advice: "*Don't play this as a race and try to be the fastest - 'collecting' policemen to extend time and avoiding collisions is much more important to get miles*

*and points!*" One thing you may notice when playing E Type is that the road level rises and falls as you hurtle round the track, which is in fact the first time such a feature has appeared in any Atari racing game.

I have personally never been a big fan of driving games and I am in fact one of about six people in the UK who can't drive (there's a medical name for it - cowardice!) but did quite enjoy E Type. There is not exactly an overabundance of good driving games available for our favourite machine. The sound effects and graphics are good, but not exceptional, being directly ported from the BBC original, but with all the enhancements made to the game by Fandal and Irgendwer, it is now one of the best Atari driving games and from a technical viewpoint, one of the best conversion jobs on the Atari. I would recommend giving it a go. I wouldn't say it's a classic game, but it's still a pretty worthwhile addition to the Atari games library.

Finally, if you are embarrassed by your high score compared to your colleagues, pressing CLR on the Atari keyboard (or HOME on the Altirra emulator) will wipe out the entires in the high score table...

7/10
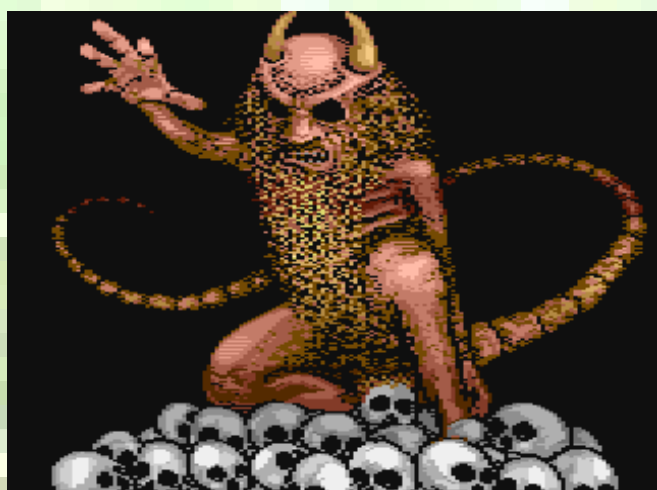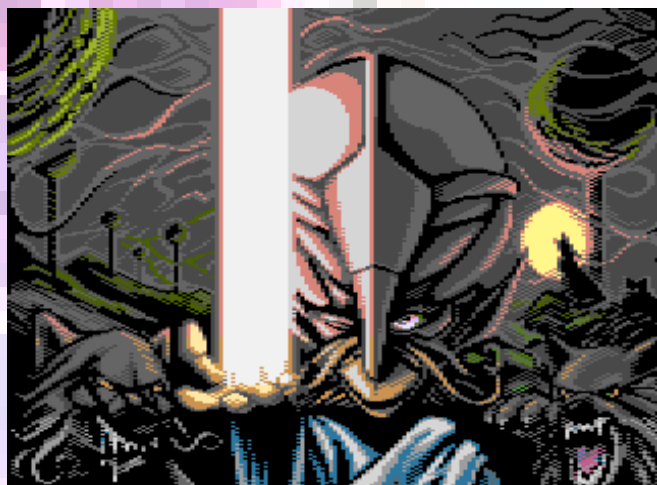
BY ROBERT STUART

BY STEPHEN LOGIE

This is the first of a semi-regular series of articles exploring the world of DIY hardware projects for the Atari 8-bit. I'll be focussing mainly on open-source projects that you can build yourself, even if you only have a basic knowledge of electronics.

SIO2Arduino - **link (1)** was the project that got me back into using my Atari 8-bit, so it seems like an appropriate way to begin this series of articles. This device provides a modern replacement for an Atari 1050 disk drive, using an SD card to store virtual Atari disks and the best news is it can be built for about £15 in parts.

Before discovering SIO2Arduino, my 65XE had been sitting in a box for some 25 years - I had a couple of game cartridges and a joystick but I'd long since sold my main Atari system that included a 1050 disk drive and a tape deck. I'd started to think about how to teach my son to program without the complexity that surrounds modern programming and somebody had suggested that they were planning to use their old 8-bit home computer. I remembered my old 65XE, so I got it out, plugged it in and was pleased to discover that it still worked. Unfortunately, without some means of saving programs, it wasn't going to be much good as a learning tool...

I took to the Internet, and quickly found SIO2SD (reviewed in issue #1) and then a similar open-source project called SIO2Arduino which was well documented, looked easy to build and, even better, seemed to involve parts that I already had in my collection of electronics bits. Half an hour later I'd assembled it and was merrily booting Atari disk images that I'd downloaded from the internet and listening to the Rob Hubbard music from Jet Set Willy with a big grin on my face. Now I was no longer stuck with the same couple of cartridges - all the classics I'd had on disk and tape were freely available on the internet, as well as a heap of new titles written in the last few years - the first new Atari 8-bit software that me and my old 65XE had seen for a quarter of a century!

As I mentioned, SIO2Arduino is already well documented, so this article is going to provide a few tips about building and using the device that you won't find on the project website. Once you've built the basic version of the project, there are several ways to expand it to make it even better. You can add an LCD screen and buttons to change the mounted disk and you can explore other branches of the code that add further features.



**What you need**

• Arduino Uno (or a clone). If you are in the UK, I'd recommend the Hobby Components one, available from their website or eBay. They cost £10 or less. If you pay a bit more, you can get one with a mini-breadboard that you will find useful for this or future projects.

• An SD card breakout board (with 5v to 3.3v logic level conversion). The SIO2Arduino website has a link to one made by Adafruit which can be found easily in the UK. A suitable (and cheaper) one is sold by Hobbytronics in the UK. Cost: £5.

• Male jumper wires. You'll need about 10, ideally in a variety of colours.

• Male to Female jumper wires. You'll need at least 4 to connect the Arduino to the SIO port on the Atari, unless you have a spare SIO cable that you don't mind butchering.

• You'll also need a Micro SD card. Make sure this is formatted as FAT or FAT32, since the Arduino SDFat library doesn't support the exFAT format that is starting to become more commonplace.

**Building the Arduino firmware**

At the time of writing, the current version of the SIO2Arduino code does not compile cleanly with the current Arduino IDE.

This is the easiest way I've found to get things working:
1) Use the older Arduino 1.6.5 IDE available from **link (2).**
2) Download the **abcbarryn** branch of SIO2Arduino **link (3)** and unzip to your Arduino sketches folder. The directory should be named **SIO2Arduino**.
3) Download **SdFat** from **link (4)** and unzip it. Copy the inner SdFat directory (which contains SdFat.h and other files) to your Arduino Libraries folder. You should now be able to start the Arduino IDE, open the sketch and build it without errors.

SIO2Arduino's config.h file controls which features get compiled into the firmware. We'll build the minimal hardware version here - make sure ARDUINO_UNO is defined, and that LCD_DISPLAY, SELECTOR_BUTTON and RESET_BUTTON are all commented out, then rebuild and upload the firmware onto your Arduino.

**Assembly and connecting to the Atari**

With that done, you can now proceed to wire up the SD Card reader and the SIO port connection as described on the project website. The female ends of the male-female jumper cables can be pushed carefully onto the pins to your Atari's SIO port (you can refer to the
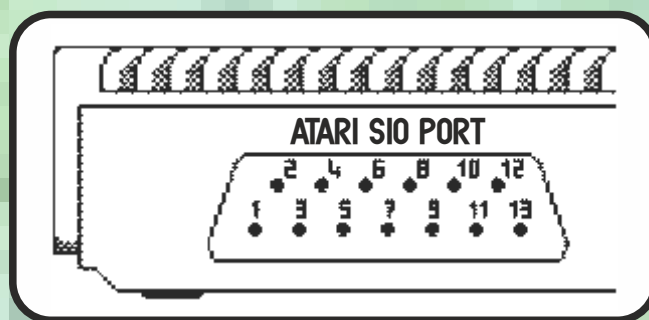
diagram at the bottom of the previous page for the pin numbers). The photograph below shows the finished version.

You'll also need to download the SDRIVE software (linked from the project website), rename it to AUTORUN.ATR and copy it onto the SD Card. This is the only file that is required on the SD card, but you'll also want to copy some other ATR files (Atari floppy disk images) and XEX files (Atari executables) to play with.

The project website doesn't discuss powering the device - the options are using the Arduino USB connection for power, a 9V battery (or other power supply) into the Arduino's power jack connector (which is what I did), or alternatively you can power the Arduino from +5V available from pin 10 on the Atari's SIO port (which I've also tested).

With everything hooked up and SD card inserted you should be able to power the Arduino and see the LED on the SD Card board light briefly as it reads the SD card. You can then power up the Atari and it should boot to the SDrive software. If you've powered the Arduino from SIO +5V you may get a few BOOT ERROR messages until the Arduino has started up and mounted the AUTORUN.ATR file.

The Atari's cursor keys and return can be used to mount a disk image or XEX file on D1: and then you can either reset the Atari or press INV VIDEO to reboot. Note that SIO2Arduino only supports a single drive (D1:). You will only see short (8.3) filenames, since the software doesn't currently support long file names. However

you can use directories on the SD card to organize your Atari software. In SDRIVE you can use the ESC key if you need to go back a directory (though this seemed very slow when I tried it).
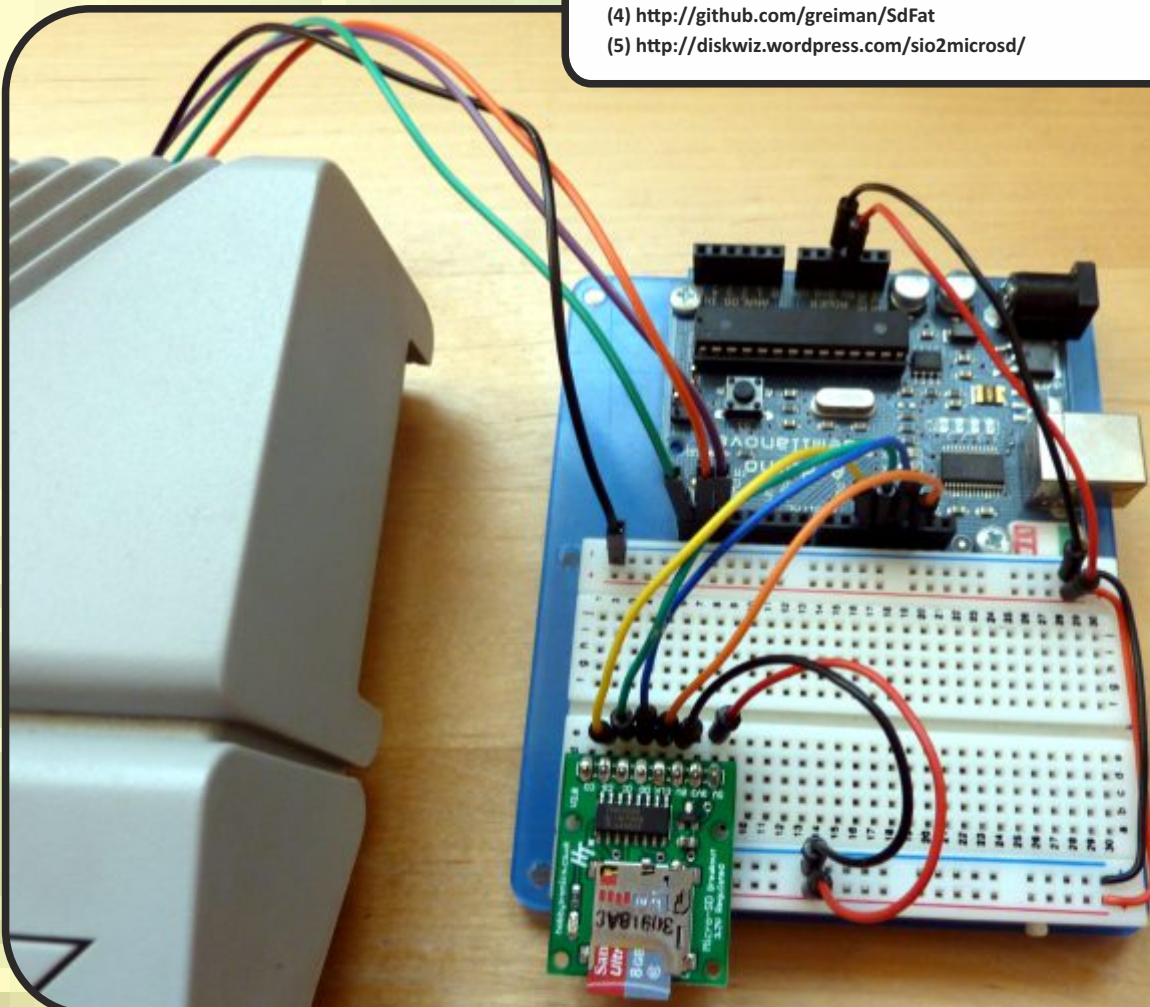
Its also worth knowing that the Arduino will automatically mount AUTORUN.ATR on power up, and then whatever you select in SDRIVE will remain mounted as D1: until you power cycle or reset the Arduino. You can press the Arduino hardware reset button if you want to return to SDRIVE when you reboot the Atari.

I hope this article has sparked your interest in SIO2Arduino. Once you've played with it for a bit, you will become aware of the limitations of the basic SDRIVE mode, and its well worth adding buttons and the LCD screen so you can swap disks and play some of the amazing multi-disk games like Alternate Reality. It's also worth mentioning the more fully featured (though not open-source) project SIO2MicroSD (5) that you can build yourself with the same components as SIO2Arduino and supports D1: - D4:.
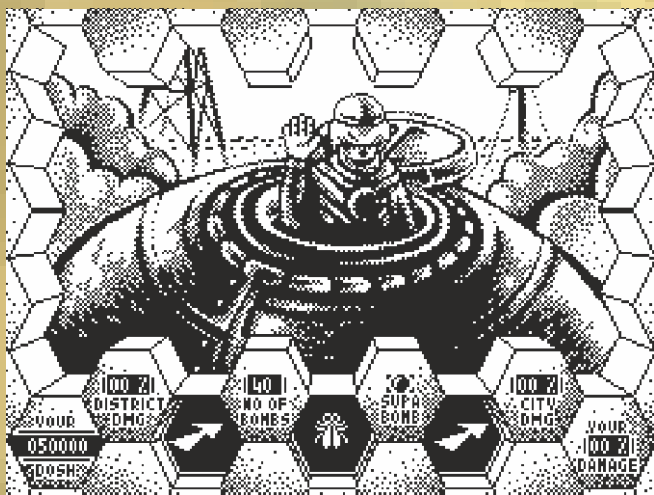
Next time we'll look at building an even cheaper SIO2PC/SIO2USB device using a low-cost FTDI breakout board. This uses software on your laptop or PC to provide more flexible disk emulation (and a lot of other features) for your Atari, but with the downside of having to keep your Atari tethered to a PC.

## Links

(1) http://whizzosoftware.com/sio2arduino/
(2) http://www.arduino.cc/en/Main/OldSoftwareReleases
(3) http://github.com/whizzosoftware/SIO2Arduino/tree/abcbarryn-master
(4) http://github.com/greiman/SdFat
(5) http://diskwiz.wordpress.com/sio2microsd/

Amaurote from Mastertronic in 1987 always had the necessary elements to become an instant classic for Atari computers; an isometric perspective game with an elaborate plot, unusual and detailed monochrome graphics and atmospheric music that altogether meshed perfectly with the futuristic apocalyptic world where the game took place. For many years, Amaurote was a topic of discussion in forums; most praised the work of brothers John and Steve Pickford (coder and artist of the original, respectively, and of course, the music of the famous David Whittaker, responsible for brilliant compositions like Panther, BMX Simulator and Storm. However, despite its obvious virtues, the gameplay was sluggish. Some simply considered it a very boring game.



As the only unharmed officer of the Royal Navy of Amaurote, you have been assigned the mission to clean up the 25 districts of this futuristic city which has been invaded by giant insects. To do this, you will use the Arachnus 4 - a spider-like vehicle that moves on all fours. It is equipped with radio communication, radar and 40 of the newly developed "bouncing bombs". And given how important your work is, you have also received 50,000 "dosh" (the currency in the game) should you need to acquire more bombs or pay for repairs to your vehicle. If your launched bomb misses its target (which happens quite a lot as they are murder to control), you have to wait till it explodes before firing another. You should also consider the possibility of rebound and check your distance before firing a bomb, to avoid damaging your own craft.

There are three types of enemy insect: Scouts, which fly over the city in search of food and potential intruders, Drones, whose task is to collect food for the queen and defend the colony and the Queen, the most important and powerful and should be your priority target. Once an insect Queen has been located, the player can radio for a "supa-bomb" which must be used to destroy her as she is absolutely gigantic! Pressing the Option key brings up the communications menu from where you can order more bombs, a supa-bomb, repairs or rescue if you want to be pulled out of the district. Your radar shows arrows which point to the nearest insect, Queen, supa bomb or something that has been dispatched from your base. Pressing Select changes the radar's target. You start each game with 50,000 dosh. This figure will vary according to how you invest in: bombs (450), supa bombs (450), rescue (300) or repairs. The cost of repair work will vary from 1600-6976 dosh - depending on your Arachnus damage percentage (10% - 99%).



It requires a lot of skill to finish even one level; particularly with the unpredictable behaviour of the strange bouncing bombs, which often go bouncing over their intended target. Moving fluidly between the buildings is a task that demands patience - doing it all over 25 levels can be too tedious for the average player.

Even by Atari standards, the original game sold poorly (despite being a £2.99 cassette-only game) - the development team at the time (Binary Design) estimated that it sold only 2,500 copies, whereas the Spectrum,
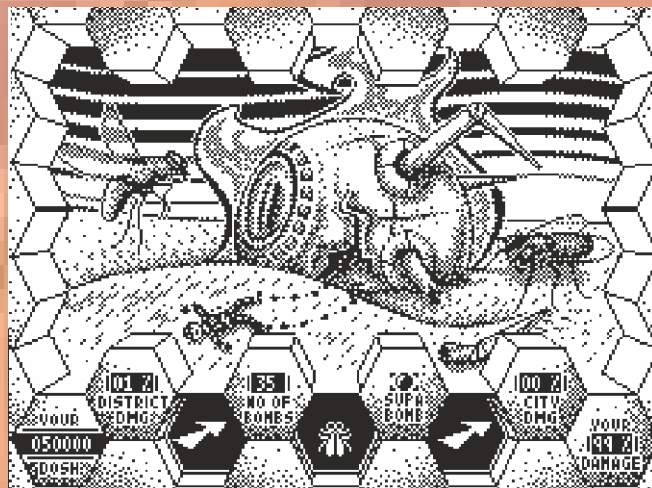
C64 (the only version that didn't use the 3D look - the programmer opting for an easier to code top-down view) and Amstrad versions all shifted over 50,000 units. The MSX version of the game sold even less than the Atari. As a comparison, the Atari and MSX versions of Feud sold about 20,000 copies each and the Amiga version only managed to shift around 10,000.

Fortunately for us, the fate of Amaurote changed in April 2012. After six months of intense work, Polish programmer Jakub Husak gave himself the best birthday present: Amaurote+, a fully optimized version of the game which some had said was impossible to carry out due to the limitations of the Atari. Husak, recognized more for his role as a musician than for his skills as a programmer, took up the challenge of debugging the original code to make the Arachnus 4 move much faster than in Mastertronic´s version. The game was much slower on the Atari than on the ZX Spectrum where it originated. As a result of Jakub's work, the game speed was increased by 50%-200%, depending on the number of moving objects onscreen. Now, when there are 5 or 6 moving insects onscreen, the game does not slow down to a snail's pace. *"It is interesting to note that Amaurote uses all the Atari's available memory and disables the operating system"*, he said on the AtariAge online forum.

The following year, Polish designer Krzysztof A. Ziembik (KAZ) added the superb distortion effects to the intro screens so that the Atari display resembles a wonky old TV set. In the game itself, Husak included new animations for the Arachnus arriving from the air at the start of the game and for teleporting. The control panel compass was improved; the colour indicates the proximity to the object you are looking for. Additionally, he "lit up" the bomb indicators with sprite overlay colours. And if all these enhancements were not enough, Husak recruited Pawel "Ripek" Szewczyk and Adam "OOZ" Powroznik for further assistance and in November 2013 they released Amaurote 128, which Husak calls "Amaurote on steroids". This version features the remarkable intro graphics which appeared in the 128k Spectrum version of the game and runs only on Ataris with at least 128K of RAM. Amaurote 128 ranked second in the Combined Game Compo (covering all Atari systems) category in the fifth edition of Silly Venture, held in November 2013 in Gdansk, Poland.

We cannot avoid mentioning that "Kuba" Husak was one of the first musicians on the A8 scene in Poland. With a lack of musical tools at the time, he wrote some music (i.e. "The Warsaw Tetris" theme) using only assembly language. *"He returned to the Atari scene after his interview with AtariOnline.pl in 2009 when he realized that the scene was in fact very much alive - and also that he was remembered as a living legend..."* says Adam Wachowski, who met Husak at university.

This old game has now been made much more playable and is yet another example of an Atari game which has been souped-up far beyond the limitations of the original program. An extraordinary piece of work!

THE ORIGIN OF THE CITY NAME "AMAUROTE" DERIVES FROM "UTOPIA - THE SECOND BOOK OF THE CITIES AND NAMELY OF AMAUROTE" BY SIR THOMAS MORE, WHICH WAS ORIGINALLY PUBLISHED IN LATIN IN 1516.

8/10
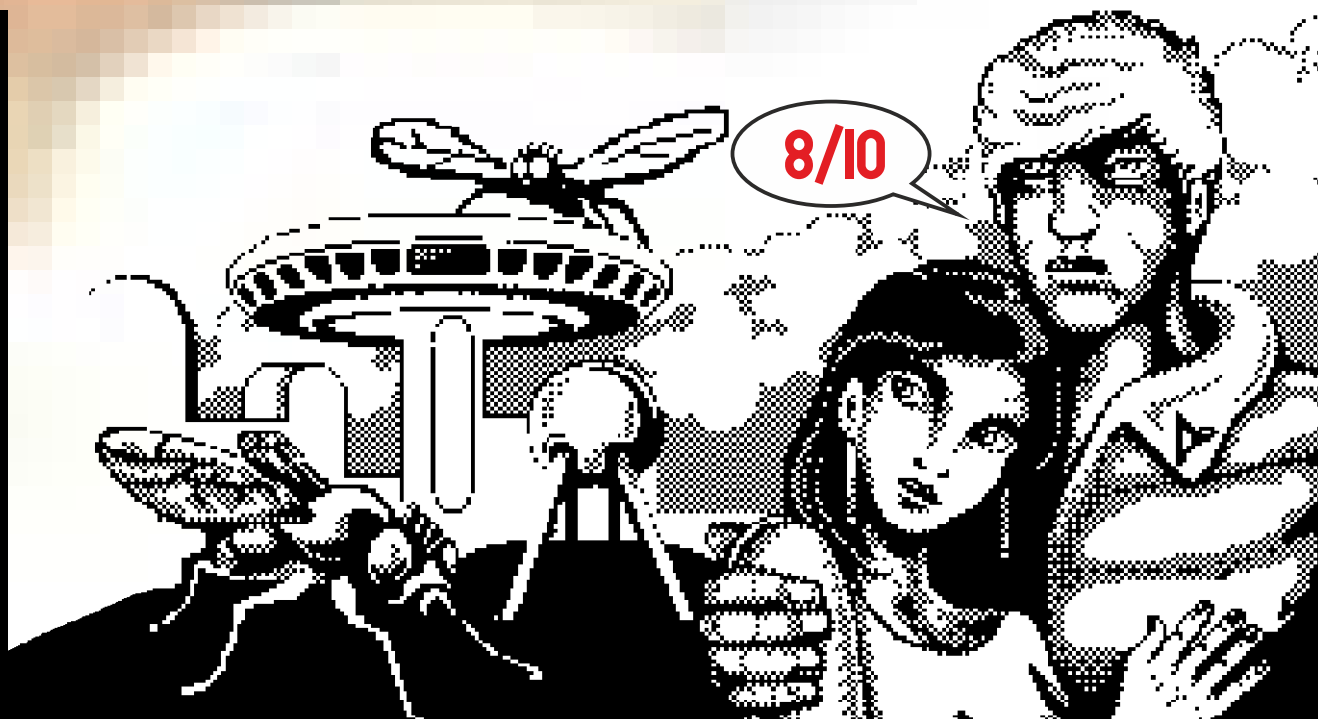
Harder. Faster. Better. Stronger. Almost paraphrasing the famous Daft Punk song, DeathChase was originally written by Mervyn Estcourt for the ZX Spectrum in 1983 and was published by Micromega. It was not only a frenetic arcade game, but also a technical wonder for its time. It had a simple concept and graphics, but was totally addictive and very well received. The game turns you into a motorized mercenary whose mission is to annihilate the enemies of your employers over eight levels. For this task, you ride a motorcycle equipped with a proton cannon, upon which you pursue your rivals through endless forests.

The main features of DeathChase are its amazing speed and fluent movement through the trees and the revolutionary first-person perspective in a pseudo "3D" environment. Indeed, the Spectrum cassette back cover basted that the game used "The Greatest 3D Graphics Ever". The game takes place in 2501, some 100 years after the Great War. It is a time when most of Europe is composed of uninhabited areas, covered with forests and controlled by powerful warlords. The possession of the territory is a source of constant conflict. You are a member of the "Riders of the Big Bikes", an elite team of mercenaries whose mission is to patrol the forests day and night, chasing and destroying enemies while dodging other riders' attacks, tanks and helicopters amid a frantic and often deadly race through the forests. The intro screen puts it very simply: "Being a mercenary is a quick way to get rich - and the quickest way to die. It is said that the greatest reward is reserved for riders who can penetrate all eight sectors - you will need every ounce of skill to find out..."

The premise is simple: annihilate your enemies and avoid hitting the trees until you complete all eight sectors. Once you destroy all four enemy bikes, you progress to the night version in the same sector. After destroying your rival mercenaries in that stage you will advance to the next sector - with even more trees to dodge. Tanks and helicopters appear sporadically on the horizon. Take them down to earn extra points. You have 3 lives which can easily be lost by crashing into trees and there is no way to earn extra lives. You can only shoot your enemies when you go at full speed, and you will not be able to hit them until they are within firing range which is shown by a flash on your range indicator.

In 2011 Krzysztof "XXL" Dudek began to show interest in bringing the game to the Atari XL/XE, by creating an emulator for the Atari which could run his ported code from the Spectrum in black & white. However, it was not until 2013 that the first colour version of the game appeared. XXL managed to involve other Atarians in his project: Adam Wachowski (game design and improvement of the original levels); Jaroslaw "Odyn1ec" Wyszynski (graphic design in black and white, including the title screen); and Michal "stRing" Radecki (music). Together, in 2013 they presented an "extended" DeathChase (XE) with outstanding improvements. The game was entered into the 2013 Abbuc software contest where it finished 6th but ranked second in the Kaz Kompo in the same year. XXL later modified his port so players could record and share their high scores in a global ranking on the website AtariOnline.pl.

The original ZX Spectrum game offered modest sound effects - basically, the motorcycle engine´s noise - but the Atari version boasts not only music whilst loading the game, but a brilliant powerful melody that emphasizes the dizziness of speed that characterises the game. In the original it was enough to kill two enemies to move from daytime to night patrol - a total of four to proceed to the next sector - that number is doubled on the Atari. One easy way to earn points is to use the small number of trees in the early stages to go at low speed - so you can concentrate on killing tanks and helicopters.

There is a hall of fame, on-screen messages during the game and interlude graphics between the sectors. The intro screen is also different from the Spectrum, the design of the bike has been improved (there is even a skull on your cycle's handlebars) and the trees sway from side to side as you hurtle through them, which gives a nice sense of tilt on your bike which is a brilliant touch of genius from XXL. The Spectrum game is commonly known by the misnomer of "3D Deathchase" because of the prominent "3D" on the Spectrum tape cover. It ranked no.1 in Sinclair User's top 100 Spectrum games and no.10 in the readers' poll. It has also been converted to Windows, Android and Apple systems as well as the SEGA Dreamcast console. The Atari version, like the Spectrum original, is an instant classic!

DAY PATROL

NIGHT PATROL

8/10
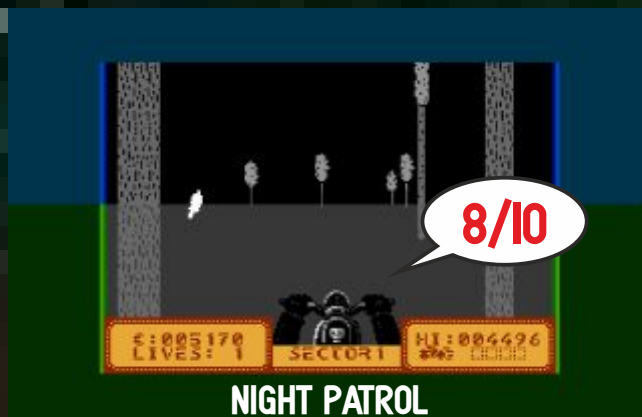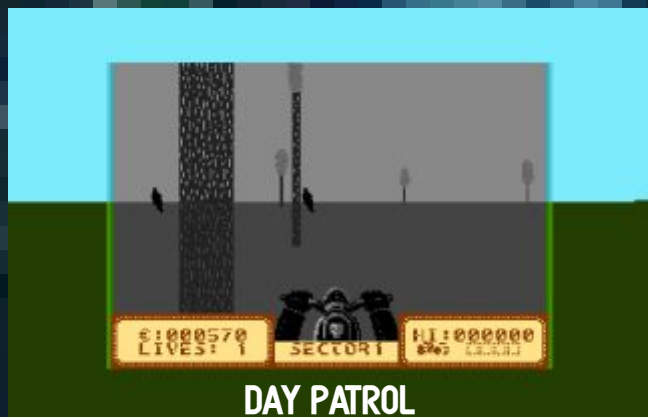
Commando for the Atari has a very chequered history. The game was developed for Atari's XE and 7800 consoles in 1989 by Sculptured Software who also produced a number of very good new titles for the XE games system including Crossbow and Dark Chambers and had previously produced several Atari games including Panther and the Commando "clone" L.A. Swat. Their official Commando conversion was written almost four years after the hit arcade game had spawned successful home computer versions from Elite Software for all the usual suspects - including a dire version for the BBC Micro. Activision had also created a cut-down but almost respectable conversion of the game for the Atari 2600 in 1988. Unfortunately, Commando for the Atari 8-bit was completed but never released as Atari had begun to wind down support for their older computers in favour of the ST machines.

Up until this point, if Atari 8-bitters wanted to play Commando they did have other choices - the aforementioned L.A. Swat from Mastertronic in 1986 was perhaps the best, with nice graphics but in an urban setting and featuring thugs with baseball bats instead of soldiers as the enemies. Also in 1986 was Gun Law, an alleged port of Commando subcontracted out by Elite Software (who probably either turned it down because it wasn't very good, or the story is a pack of lies) which also ended up being published by Mastertronic. This game had basic but nice, clean, cartoony graphics but no diagonal movement for the soldiers, which made playing it a very awkward and frustrating experience. It used multiplexed sprites for all the characters and was pretty fast, if nothing else. In 1987 we got Who Dares Wins II from Tynesoft, written by Brian Jobling who went on to write one of the best Atari games ever - Zybex. This game was a lot slower, using software sprites for all the enemies and even the main player character. It borrowed the graphics from the C64 version but used an appalling colour palette - brown trees, brown rocks, brown buildings, brown soldiers... even your player was brown.

The official Commando "proto" was re-discovered over 10 years after it was completed and was finally made available on cartridge for all 64k Ataris courtesy of Video61. The game was good - very good. Not as slick as the C64 version with its hardware sprites running all over the place and it's unbelievably brilliant theme tune by Rob Hubbard but it had good graphics (a special mention here for the helicopter animation at the start of the game when your soldier is dropped into the jungle, which is brilliant), good controls and eight highly addictive, smooth scrolling levels of non-stop slaughter. But maybe it lacked a little something...

In 2007, Fandal added that little something and created Commando+. It is essentially the Sculptured Software game but with a couple of nice tweaks - very nice tweaks! The rather poor title page was updated with an extravagantly coloured version courtesy of Emkay and the awful, awful title music was thrown out altogether and replaced with an absolutely fabulous Raster Music Tracker version of Rob Hubbard's famous pulse-pounding C64 soundtrack by Sack/Cosine. The bad news was that this version of the game now required 256k of RAM to run, but if your Atari machine is deficient in the memory department, this is no longer a problem in this age of the emulator!

The in-game music uses the same tune, except that it's woeful - and worse, there seems to be no option to turn it off while playing. After hearing the magnificent version on the title page, it is almost painful to listen to. Unfortunately, the Atari doesn't have the CPU power to play the awesome instruments used by RMT and run the actual game at the same time. The game is otherwise unchanged (it also has the same run-of-the-mill sound effects) but I've loaded it up many a time just to listen to that music - it really is tremendous! So, for a few years at least, the best version of Commando for the Atari was... Commando! And the best version of Commando for the Atari now is Commando+! If the in-game sound was better, it would likely have got 10/10.

9/10

How on earth do you convert a game with up to 32,000 sprite objects, over 6,000 colours on screen, pounding music, digitised speech and runs like lightning to an 8 bit system with a small microprocessor and a limited colour palette? That's the miracle performed by UK programmer Chris "Sheddy" Hutt, who programmed what many consider not only the best port of Space Harrier but also the best homebrew game published to date. The original Space Harrier arcade game was directed by Yu Suzuki, who was the author of many other classic games such as Out Run, After Burner, Power Drift, Virtua Racing and Virtua Fighter. The music is the work of famed composer Hiroshi Kawaguchi. The game burst into arcades in late 1985 and was one of the most popular games throughout the following year. Shortly afterwards, there were home conversions for the Spectrum (playing this one could easily induce an epileptic fit and the lack of music destroys the atmosphere), Amstrad (in which all the enemies are wire-frame graphics) and the Commodore 64 (which uses a character mode with no masking of character edges so is very blocky) and then the Sega Master System (graphically superior but even worse blockiness than the C64 version, Game Gear (same problem as the Master System and terrible music) and versions for the Atari ST and Amiga. Us Atari 8-bitters had to wait until 2011 to enjoy this amazing shooter, with its psychedelic graphics, superb music and fun-but-challenging gameplay. The long wait, without a doubt, was worth it! Incidentally, amazing versions of this classic game arrived even later for modern consoles like the X-Box and Playstation.

Once upon a time, there was a beautiful utopia located far beyond the most distant galaxy in the universe, known as Dragon Land. In 6226, the demon Absymbel and his forces destroyed the protective shield and invaded this peaceful world. Your character is Harri - a veteran of many wars who discovers a space-based jetpack from warriors of the past, which allows him to run and fly at phenomenal speeds whilst packing a huge laser cannon at the same time. Equipped with these weapons, Harri must fight the enemy forces: spaceships, alien monsters, combat robots and prehistoric animals in each of the provinces of the now renamed Fantasy Zone.

The game is basically all about dodging the onslaught of the enemy, the various towers and pillars that populate the landscape, larger rocks on the ground and to annihilate everything that moves. The enemy attack patterns are always the same, but the objects on the ground appear randomly. Most oncoming enemies can be destroyed with a single shot; some, however, require several shots and others are indestructible. Harri may encounter some smaller objects on the ground (such as shrubs) and although this does no damage, a collision with any of these means our protagonist is delayed for a second or two - which is a long time in Space Harrier! You start each game with 3 (or 5) lives but you earn an extra life for every five million points scored. The bonus stages (6 and 12) are ways to earn extra points. In these rounds, you fly on the wind dragon Uriah's back to destroy objects.

On the title screen, you can select the difficulty level - easy, normal or hard - and increase the number of starting lives from 3 to 5. While playing the game, the number of lives left is shown at the lower left corner of the screen (represented by small icons of Harri). The current level is shown in the lower right corner, the highest score so far in the upper left corner and your current score is at the upper right corner.

The game consists of 18 levels - 16 battle stages and 2 bonus rounds. At the end of each level, you must face a "boss". In the final stage you must defeat Absymbel - a collection of most of the earlier bosses in a different order than they appear earlier in the game. The stages: 1: Moot, 2: Geeza, 3: Amar, 4: Ceiceil, 5: BONUS, 6: Olisis, 7: Lucasia, 8: Ida, 9: Revi, 10: Minia, 11: Parms, 12: BONUS, 13: Drail, 14: ASuite, 15: Vicel, 16: Natura, 17: Nark, 18: ASYMBEL

Space Harrier has many types of enemy creatures. To aid in your quest to destroy them, studying their patterns of movement and attacks.

**On land:** you earn 5,000 points for each of these you destroy: bushes, trees, ground rocks, Kinoko fungi, orbs, mammoths and IDAs (the giant stone heads - you get 10,000 points when you destroy these in the air)

**In the air:** 10,000 for each one you destroy: Mukadense (small helicopter), Loopers (hybrid of plant and animal), Parkomen, Jets, Floating Rocks, Skeggs (attack in the air), DOMs (very efficient robots), TOMOS (very smart, and divide into three parts to attack you)

**Compound enemies:** You earn 10,000 points for each part you destroy: Rollies (spinning attack), Tetrahedrons (attack opening and closing), Octopus (rotate and attacks with its four tentacles)

**Level bosses:** These enemies require 16 shots in the head to destroy them: Squilla: 800,000 points, Valda: 800,000 points, Barbarian: 900,000 points, Godarni: 1,100,000 points, Syura: 900,000 points, Salpedon: 1,100,000 points, Wi Wi Jumbo: 1,300,000 points, Komainn (appears after defeating Wi Wi Jumbo). The following creatures/obstacles cannot be destroyed by weapons - your only defence is to avoid them: Matsutake Mushrooms, Inca towers, Ruined Towers, Inhabited Towers, Control Towers, Sword Towers, Binzbean (20-sided spacecraft) and Stanrey (DOM robots mothership).

Chris Hutt has said that his first attempts to bring Space Harrier to Atari computers date back to the late 80s: "*At that time, the Atari 8-bit was dying (at least in the UK), with the new games consoles from Sega and Nintendo and the C64 at its peak. Elite Systems had no incentive to produce Space Harrier for the Atari.*" As he took his first steps in programming, Space Harrier challenged Chris to try to write routines to move large four-colour objects on the Atari. "*After that, it just seemed a natural progression to keep trying other difficult things in the game while learning, so it became a hobby.*" However, he soon postponed the project due to the colour limitations of the 8-bit computers and his demanding work. "*I did (remade and discarded) a lot of routines in a few years - it was in 1992 when my real work began which involved more programming. It eventually wasn't fun for me. Finally, I gave up.*"

Later, upon learning about the Atari emulators, Chris decided to resume programming, but this time with an emulator and a cross assembler. He revived the project in 2001 with the publication of a demo of the first level of the port. A year later, in April 2002, he released the first playable demo as a disc image for Atari 130XE only. With this release, the hero, enemies and scenery were fully recognizable. Up until March 2011 he published occasional updates on his blog, where he documented the progress of the project - although this was deactivated shortly after the release of the final version of the game.

Chris had to make some tough decisions, keeping in mind that it would run from a cartridge and reprogrammed the first levels. In March 2007, the well-known musician Sal "kjmann" Esquivel arrived, who provided the music for the game with Raster Music Tracker tool. By December 2010, "Sheddy" shared images of levels and bosses and finally, in April 2011, screens with the names of each level were added.

The humble 8-bit Atari is obviously no match for the awesome (at the time) power of the original arcade machine. However, despite having lower resolution graphics, a much more limited colour palette and a LOT less processing power, Space Harrier for the XL / XE series boasts all the speed, graphics, music and gameplay of the original. Even a digitized voice welcomes you to the Fantasy Zone - just like in the arcade! For this and many other reasons, the Atari port surpasses the conversions to all other 8-bit platforms.



No conversion is perfect; there are some things that one could object to: the ground no longer has the "chessboard" look that characterized the original but Chris justified the omission with the fact that it would have slowed the game down. Space Harrier demands hardware above the average to run; you need an AtariMax 8Mbit flash cartridge or an SIO2SD device to play it on real Atari hardware. Also, some users complain that the flickering is substantial. The author explains that when the game is played on the Altirra emulator, frame blending eliminates the flicker caused by the rapid colour changes, which is not possible when playing on real Atari machines linked to a TV/monitor. "*I suggest adjusting the brightness and contrast of the TV until the flicker is least invasive. The colours end up being less alive, but (the flickering) is easier on the eyes.*"

Space Harrier for the Atari won the Kaz Kompo retro contest in 2011 and deservedly so as it is one of the best Atari games ever and is technically a programming tour-de-force for the venerable 8-bit. Astonishing!

HELICOPTER

PARKOMEN

JET

SKEGG

VOLUME

FLOATING ROCK

LOOPER

DOM

WEED

TREE

ROCK

ORB

MUSHROOM

IDA

MAMMOTH

TETRAHEDRON

ROLLY

OCTOPUS

SQUILLA

VALDA

BARBARIAN

GODARNI

SYURA

SALPEDON

WI WI JUMBO

KOMAINN

MATSUTAKE

INCA TOWER

RUINED TOWER

INHABITED TOWER
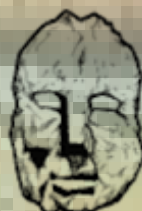
CONTROL TOWER

SWORD TOWER

NINZBEAN
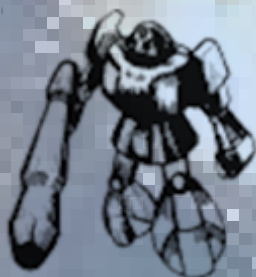
STANREY

Originally conducted by Giann Velasquez for the website **atariteca.blogspot.co.uk** in November 2015.

With two outstanding ports from the C64 released during 2015 and four other games in development for Atari computers, Mariusz "mariuz" Wojcieszek is - indisputably - one of the most active members of the current Atari 8-bit scene in Poland. In this interview, he revealed to Atariteca his short term plans as well as the background of such prolific production.

Giann Velasquez:
Tell us a little about yourself.

Mariusz Wojcieszek:My name is Mariusz Wojcieszek, I am 39 years old. I live with my wife and two kids in Poland, in a small village near Poznań. I work as a project manager for a small software company located in Poznań.

GV:    How did you get involved with the Atari 8-bits?

MW:  It started long, long ago "in a galaxy far away…"; seriously speaking, it was the middle of the 1980's and it was my friend's Atari 800XL. I started with playing River Raid, Bruce Lee, Montezuma's Revenge, Quasimodo and Goonies. Later, when my parents finally agreed to buy me a computer, I got an Atari 800XE and started some programming. This was the beginning of my professional career as a software engineer. Actually, no code from these years has survived until today, but the passion for programming is still with me.

GV:    Do you still own an Atari 8-bit computer?

MW:  I don't have a real Atari now, but Altirra seems to give a good experience – it emulates every hardware quirk I remember about the real Atari hardware.

GV:    The Great Escape, Fairlight: A Prelude and Bobby Bearing... Why did you choose to port isometric games?

MW:  First of all, I liked these games and missed them on Atari back in 80s. Nowadays many of them have been ported (like Knight Lore and Alien 8), but I still wanted more. Also, when I decided to do some Atari programming, I was looking for games which could have ports completed in reasonable time. These isometric games were good candidates, as they are not using hardware sprites on C64 nor other special C64 capabilities, so they run on Atari with only a few routines patched.

GV:    Which of these three projects do you like the most and why?

MW:  I like every project. With The Great Escape I had to spend the most time out of these three, because I had to learn Atari programming once again, then C64 hardware and code analysis, etc. I also spent some time trying to optimize its
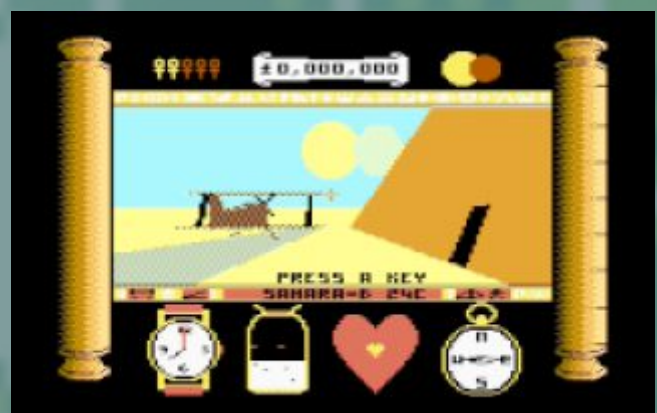


SABOTEUR - ATARI



BOBBY BEARING - ATARI



THE GREAT ESCAPE - ATARI



TOTAL ECLIPSE - ATARI

performance and I am pretty satisfied with the effects, as game runs around three times faster than the C64, with speed comparable to the Spectrum version, which was the fastest. Fairlight has good atmosphere and astonishing graphics – it also gave me biggest headache while trying to optimize the game, as it looks to be line by line converted from Z80 assembly, so the code is weird and difficult to understand. Bobby Bearing is small and nice, and it was the fastest port to be made, as that game doesn't require any optimizations.

GV: Tell us a little about "Saboteur!", the port you have just released. Are you moving away from isometric games?

MW: Again, I wanted something different than previous games. And Saboteur! is very nice as an action game, with exploration, fighting, etc. I think such games are missing on 8-bit Atari.

GV: Most other programmers tend to finish one project before jumping into the next one. But you seem to prefer to develop many projects at once... why?

MW: I only make code for the games, so I need others to help me with additional graphics, loading screens, music and sound effects. While I wait for these, I usually spend time looking at another game from the Commodore 64.

GV: Total Eclipse is the first "3D" project in your hands. Why did you move from isometric games? Do you plan to port other pseudo 3D adventure games?

MW: With Total Eclipse I wanted to try something different. Also, I read discussions on AtariAge where people were wondering if this game could be fast and look good on the Atari, so I decided to try it by myself. The other Freescape games (Driller, Darkside, Castle Master, etc.) will be also possible to port to Atari.

GV: In technical terms, which one of your projects (current and past) satisfies you the most?

MW: It was The Great Escape - I had some nice ideas for performance which gave good results. My favourite was how I handled the scrolling of the play area: TGE uses offscreen frame buffer to do all rendering, and blits this buffer to screen. When the hero is moving outside, scrolling is applied when the buffer is blitted on screen. On the C64 this was done in software, so every byte had to be rotated four times (scroll by 4 pixels) when saved. This resulted in huge CPU load. On the Atari, I have two screen buffers, one with hardware scroll applied, so I save scrolling in software. With Total Eclipse I liked the idea of the main screen design done by me and Jose (Pereira) – we used P/M graphics for columns on the side which allows us to use different colours for the 3D view, exactly as the C64 version had. Also, with Total Eclipse I had to learn how to do 3D maths efficiently on 6502 –
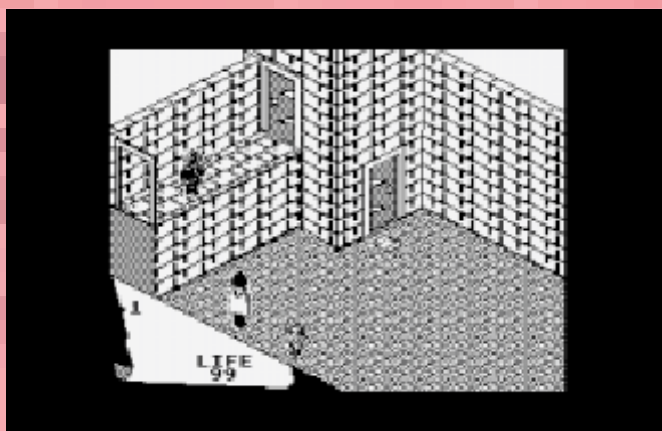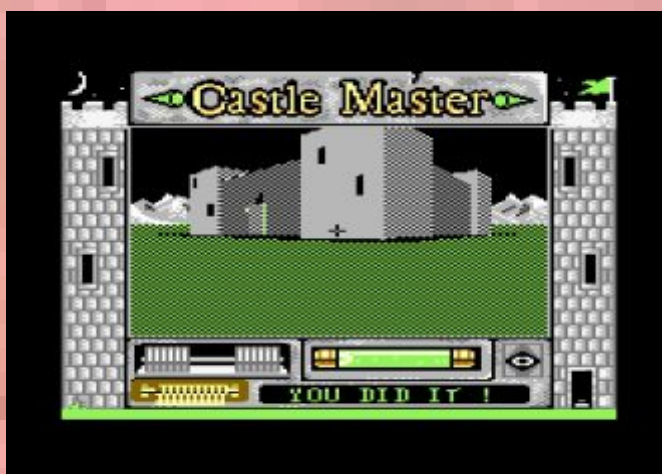


**FAIRLIGHT - ATARI**

**COMING SOON TO ATARI...?**



**DARKSIDE - C64**



**DRILLER - C64**



**CASTLE MASTER - C64**

most of the game speedup comes from new and improved routines for multiplication and division. Saboteur! was really easy, it took me two evenings - one for studying C64 code, and the second for writing the Atari version. The reason for such a fast port is that it was actually one table in the game which had to be changed (the table containing pointers to screen rows and columns) and one routine which was clearing screen buffers (Atari is using $1800 bytes for screen buffer while C64 is using $2000 bytes). Of course I had to comment all SID accesses (music and sound fx) and place in my routines for reading keyboard and joystick, but this is standard work. For now, I expect there will be some work with getting the colour overlays to work.

GV: What was the most complicated/challenging feature in the development of each of your projects?

MW: The biggest challenge was actually developing a way to efficiently analyse C64 games (I use VICE + ICU64 for debugging C64 games and Infiltrator Disassembler for disassembling the games); and also how to prepare the Atari version efficiently - now I just load the C64 game image directly on the Atari, apply necessary patches and add Atari initialization. I also developed a few standard routines for reading the joystick and keyboard, which return data exactly in the same way as the C64 expects it, which now saves time in the next ports!

GV: How do you value the participation of members from AtariAge's forums?

MW: They all make final release of the game(s) possible, providing music, sound effects, loading screen and graphics. Without them, games could not be finished. So thanks to: Jose, Poison, Philsan, Wieczór and all others for giving me precious advice and helping to resolve the problems.

GV: What do you think will be the next release among your current WIP? (speaking about Fairlight: A Prelude, Bobby Bearing and Total Eclipse).

MW: It will be either Fairlight or Bobby Bearing, depending which musician will finish his work first. Total Eclipse requires some more work with additional graphics and saving and loading the game state.

GV: Porting games from other platforms/systems is wonderful. But if you had the chance, what original game would you like to make for Atari 8-bits?

MW: I like the Mojon Twins games very much (such as Uwol and Sir Ababol) and I would like to see these games on Atari.

GV: What do you think of contests like ABBUC?

MW: I think contests like ABBUC are great, as they

boost game development on 8-bit platforms. My games can't take part in ABBUC competition, as they are not originals and I do not have appropriate permissions from original authors.

GV: Which are your all-time favourite Atari 8-bit games?

MW: My favourite games are River Raid, Bruce Lee, Montezuma's Revenge, Quasimodo and Goonies from the beginning of the Atari's life. Later games I liked are Zybex, Draconus and Polish games from 1990's: Robbo, Fred, Misja and Lasermania. Why these? They were addictive, with reasonable difficulty and well-engineered.

GV: What are your thoughts on the Atari 8-bit scene in Europe?

MW: It looks like that scene is not very big, compared to other 8-bit micros like the Spectrum or Commodore 64 but the people are very friendly and helpful.

GV: Any recommendations for those that like you want to embark themselves on the task of resurrecting or creating games for the Atari 8-bit computers?

MW: Never stop when there is a problem. Wait a little and ideas for solving them will come to mind. If not, ask on AtariAge's forums.



**UWOL, QUEST FOR MONEY - ZX SPECTRUM**



**SIR ABOBOL - ZX SPECTRUM**

A conversion of Rick Dangerous has been in development for a couple of years now and judging by the videos posted on YouTube looks like one of the best platform games ever seen on the Atari. The colours are just right and the beautifully animated software sprites move very smoothly indeed. Let's hope this one sees the light of day soon and does not end up like IK+, which was equally amazing looking but sadly to this day has never been fully completed. An enhanced version for VBXE-equipped machines was also planned.

Laura is another game Atari 8-bitters have been patiently awaiting for a few years. It resembles a cross between Robbo and Boulderdash, and looks like it will have some gorgeous intro graphics. Programmer Arkadiusz Lubaszka has recently announced that the game will be released in November at this year's Silly Venture party in Poland. The game will support stereo sound and will look nothing like the YouTube videos seen so far as they only showed what Arkadiusz calls his temporary "coder's graphics". This 128k game will be released on ROM cartridge and will support XXL's High Score Café.

Krzysztof "XXL" Dudek is almost ready to unleash Hobgoblin 2 to Atari fans and from the brief glimpses we've had so far, is looking like another tremendous game conversion to add to his increasingly impressive looking CV. We will be presenting a brand new interview with Krzysztof about his Atari projects in an upcoming issue early next year.

Janusz "shanti77" Chabowski has been working on an Atari version of the 1981 Namco space shoot 'em up Bosconian which is looking very nice. The game will support the High Score Café on XXL's website. Mastertronic released a home computer version of this in 1987 - the spaceship in the C64 version could not move diagonally which really killed the game. Happily, the Atari version does include this feature from the original arcade game!

Andrea "Wanax" Schincaglia converted the 1995 Amiga game Platman to the Commodore 64 and is now almost finished converting it a second time with his first game for the 8-bit Atari. With graphics adapted by José Pereira and great music, this looks and sounds like another great new game. It was planned to enter Platman into the 2016 Abbuc software competition but unfortunately the game wasn't completed in time.

UK Atari coder Terence "Tezz" Derby has been rather quiet since the release of his amazing conversion of Manic Miner a few months ago, following his stellar work on Chimera+ and Saboteur! He has developed procedures for a rather more impressive looking conversion of Barbarian and from the screenshots he sent us, it looks absolutely terrific. The game will also include digitised sound effects and Miker has produced an Atari version of the original Richard Joseph music from the Commodore 64 game.







Slovakian coder Jinroh is working on a game starring the infamous Beavis and Butthead from the MTV animated series. He has also been programming a game for the Atari 2600 console called Carrot Kingdom which looks like a clone of Super Mario Brothers.

# HOBGOBLIN

THE MAP