



THE STORY BEHIND...

■ We are here again with the Oliver Twins to ask them about another of their games — Advanced Pinball Simulator.

Chris Wilkins talks to the Twins about flippers, tilt and balls of the pin type!

Chris Wilkins: For those of our readers who don't know what Advanced Pinball Simulator was, please can you explain?

Andrew Oliver: Well the title pretty much says what it is! It was a single screen, no scrolling, pinball game that we designed and wrote back in August 1988 for the Amstrad and Spectrum.

The box text describes it as 'A fast, furious and incredibly addictive pinball game featuring — Trapdoors, Rollover Lanes, Mega-bumpers, 4 flippers, Bonus Lanes, extra balls, Ball Trap, Mystery Tube, realistic movement and MUCH MORE!!!'

Philip Oliver: It was released in October 1988 though our publisher Codemasters also arranged for it to be converted to the Commodore 64 & Atari 800 and

these came out February and April of the following year. They were budget games selling at £1.99 on cassette.

AO: World of Longplays have created a great video of the Spectrum version and you can even play the Spectrum version in a browser!

CW: What inspired you to write this game?

PO: We'd had a successful strategy of producing a base engine for a genre of games and then putting out several games in that genre. We'd produced a side-on platform game engine and used it for Super Robin Hood, Ghost Hunters and the Dizzy series. We'd produced the 'top down' Simulator games — Grand Prix Simulator, Jet Bike Simulator and Pro BMX Simulator, so



wanted to start a new series of games in a different genre. We'd also loved the physical pinball games in the arcades. We thought if we produced a good pinball engine — we could develop many games easily all with different themes.

AO: We also listened to music on cassette tapes whilst developing games and one of our favourite songs we had was Pinball Wizard, and with a limited collection of tapes, it came around quite often as a reminder that we really should make a pinball game.

PO: And we mustn't forget Night Mission Pinball that we'd played a lot a few years previously on a friend's Dad's Apple IIe.

CW: The game appears themed to a magically fantasy

setting, with forests, castles and potions. How did that come about?

PO: Yes, the players ultimate goal was to create a potion with which to kill the evil Pinball Wizard, a menace who had destroyed Cigam and wreaked havoc over the rest of the land of Santagon. Those familiar with Dizzy will recognise this plot, and we did this deliberately as a little homage to Dizzy which by this time was a massive hit. We thought it would be fun for those who realised they

Below: One of the many pages of notes from the original design.



Above: The loading screen on the ZX Spectrum.

were playing a similar story line only as a pinball table. It was common by the mid 80s that Pinball tables had popular themes — they were often of

big movies or TV series like Star Wars, Terminator, Star Trek, Airwolf or Knight Rider.

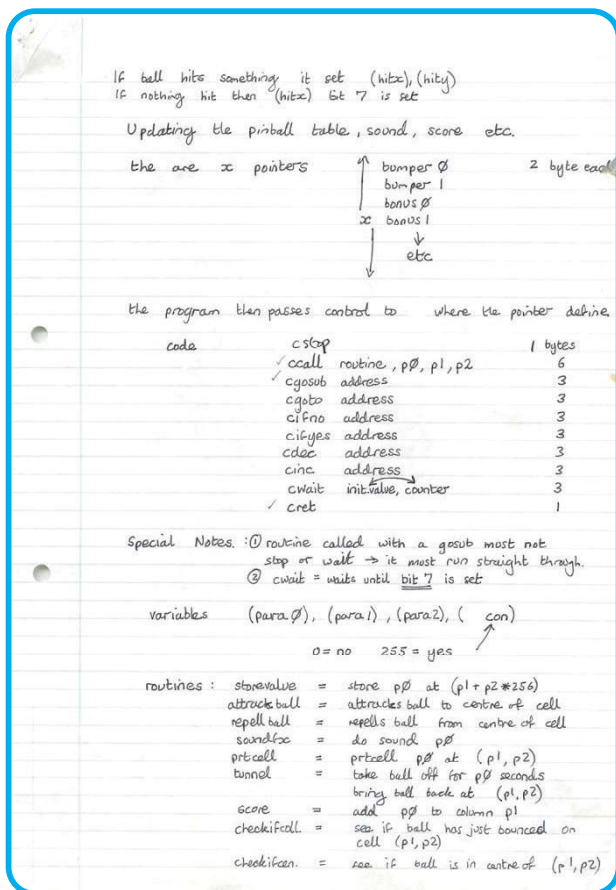
AO: Had we created additional Pinball games the plan was to do a Ghost Hunters themed table as well as a Robin Hood table.

CW: How did you develop this game?

AO: As with all our games we started with the Amstrad version. We designed everything on

paper and then created all the graphical elements (sprites: in Panda Sprites on the Amstrad). By this time we were using PCs (2 x 8086s: with 20 MB hard drives, and 5 ¼ inches disk drives). We'd bring all the assets into the text based code editor where we'd write and compile the code into a Z80 (machine code: executable file). This was then transferred to the Amstrad, and later the Spectrum via the PDS (Programmer Development System) cards installed in the PCs.

PO: It took about a month to write the lead Amstrad version, and then a day or two to add the necessary branches in the code to create a version that would compile to create a Spectrum compatible version. We'd already created all the Spectrum specific routines for all the differences over the Amstrad so it was a simple





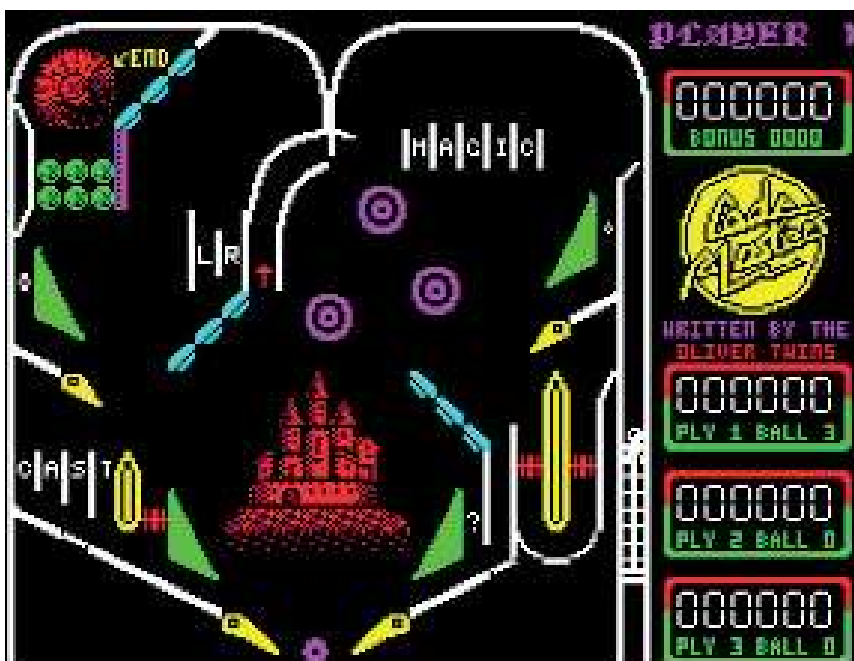
case of integrating these in and making a few tweaks to graphics and screen layouts.

AO: The loading screen, and side panel were produced by Neil Adamson, whilst our friend and neighbour Jon Paul Eldridge did the music and sound effects.

CW: Why was it called Advanced Pinball Simulator?

PO: We considered a creative title little Magical Blast, not actually that title, but you get the idea – a title that was more evocative

Above and Below: In-game shots of the Commodore 64 and Spectrum versions of the game.



and mysterious. However, Codemasters' 'Simulator' logo was recognised by gamers for fun and quality, so it would be foolish to not use this since we were simulating a Pinball experience. Clearly 'Pinball' had to precede the word Simulator for that to make any sense. As we did with Professional Ski Simulator, we felt a superlative adjective would only increase the likelihood that potential customers would purchase it since it suggested it was better than an average Pinball Simulator.

CW: What did you like about

the game?

AO: It actually played really well, was great fun and a good challenge. In fact it was amazing value for £1.99. Whilst we'd played Night Mission Pinball on an Apple IIe a few years earlier, we were not aware of any other Pinball games on Amstrad or Spectrum.

CW: What do you regret about the game?

PO: Every game has its challenges, for Pinball it wasn't a question of processor speed or memory as was usual in most other games. The challenge was to get the ball flying around the screen realistically. Now the problem here was that whilst we'd studied A level maths and learnt about vectors, collisions, angles of reflections, and inertia, Converting this to 8-bit assembler was beyond us. Our previous games had all used very simple maths, even Grand Prix Simulator and Pro Ski Simulator. Added to this, we'd also used screen pixel reading, with the exception of Pro Ski Sim., to determine collisions. As a result we thought we could use a simple polar coordinate system (direction and speed) in combination with reading screen pixels around the ball to determine if it collided with anything and then the angle of what it had collided with. The maths for calculating the angle of reflection (new direction) was relatively easy to determine if you knew the angle of the surface hit.

AO: However, we quickly learnt that given the low resolution of the background



Above and below: The full ZX Spectrum inlay above and below, an Amstrad in-game screenshot.

graphics as the source of surface angle this was not sufficient information. However, we deduced this well over half way through the project and were very reluctant to fundamentally rewrite everything with a completely different system, especially as it was working well most of the time. Instead, we boded it! We added a system that attempted to get a better angle by reading more pixels around the point

of collision. Then we tinkered with friction for the ball rolling around the corners, down the slopes and added an artificial maximum speed for the ball until it was rare to see problems. Then of course there were the flippers — they caused another world of pain. By the time we were near three weeks in, with a week to go, we really thought we weren't going to be able to ship a game that worked well enough. Thankfully, with enough bodes we got it to the point we felt it acceptable to ship. It's a miracle it works as well

as it does.

PO: It's because of these issues that we decided not to risk designing another pinball game.

CW: How did the game do critically and commercially?

AO: It got mixed reviews. The lowest being 42%, but the highest being from Spectrum User at 80%. Sadly, in most they asked what's the point of a computer version of Pinball when you can play the real thing. As with Fruit Machine Simulator, reviewers missed the point that this was a fun computer game at £1.99 and couldn't be like the real thing, but at least you could continue to play for free in the comfort of your own home! Several of them mentioned the ball movement as being less than perfect. Yeah, we know!

PO: The public however saw it as the fun bargain it was intended as and it sold pretty well.

CW: As always, I really appreciate you giving up your time to do these interviews.

