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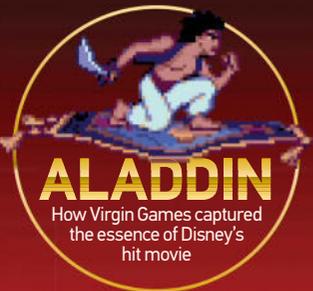
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Digital Edition
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ISSUE 156

GAME BOY ADVANCE

THE RETROBATES

DARRAN JONES
Playing the original sit-down cab for the first time. One of the most exciting arcade experiences I've ever had.
Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine
Currently playing:
Fire Emblem Fates
Favourite game of all time:
Strider

NICK THORPE
Before *OutRun 2* came out on Xbox, I volunteered myself for wheelchair duty on an OAP's coach trip to Southend in the hope that I'd see a cabinet during one of my breaks. I did, and it was *so* worth it.
Expertise:
Owning five Master Systems (I sold two)
Currently playing:
Valkyria Chronicles Remastered
Favourite game of all time:
Sonic The Hedgehog

LUKE ALBIGÉS
When I first heard about Flag Man's dance in *OutRun 2*, I assumed someone was pulling my leg. They weren't – it's absolutely glorious.
Expertise:
Unstoppable *Bomberman* player and real-life Guitar Hero
Currently playing:
Overwatch
Favourite game of all time:
Micro Machines 2: Turbo Tournament

DREW SLEEP
Late last year I started collecting PS2 games and one day Darran waltzed in and dropped *OutRun 2006: Coast 2 Coast* on my desk. I play it most Fridays now for that feel-good feeling.
Expertise:
Revisionist 8-bit history
Currently playing:
Overwatch
Favourite game of all time:
Rocket Knight Adventures

ANDREW FISHER
Beating Jeff Minter at *Outrun 2* (Xbox) during a Retrovision event...
Expertise:
Commodore 64 and Nintendo fan, gaming for 33 years
Currently playing:
Hessian
Favourite game of all time:
The Sentinel

PAUL DRURY
The first time I span out and felt the finger-wagging wrath of my passenger. A lovely touch and an important life lesson learned.
Expertise:
President Yamauchi's muffler
Currently playing:
Golden Joysticks
Favourite game of all time:
Sheep In Space

GRAEME MASON
Playing it for the first time at my local arcade. Nothing could beat that feeling. Awesome experience.
Expertise:
Adjusting the tape azimuth with a screwdriver
Currently playing:
Doom (2016)
Favourite game of all time:
Resident Evil 4

RICHARD BURTON
Discovering the deluxe hydraulic coin-op (alongside *Space Harrier*) at Flambards, Cornwall in 1986. I played them endlessly that summer and they're still two of my favourite games of all time.
Expertise:
Time travel
Currently playing:
Harrier Attack
Favourite game of all time:
Manic Miner

JASON KELK
My favourite memory is seeing the original *Out Run* for the first time – just watching the demo running was stunning!
Expertise:
Being a homebrew hero
Currently playing:
GWNN (C16)
Favourite game of all time:
Io

LOADING...

The other week I was driving home from Devon, after a visit to a local resort there. As I sped through the countryside (at a legal speed, I might add) I started humming *Magical Sound Shower* to myself. "You're singing along to *OutRun* aren't you?" my wife inquired. "You really are a sad little nerd."

She was right, of course, but I didn't care. After all, I was able to point out that she was equally nerdy for knowing the reference in the first place. In fact, I'm quite proud that my wife knows the *OutRun* soundtrack, it tells me that she actually takes an interest in what I do for a living.

I've always loved *OutRun*, and not just because of its music. It screams summer to me and has a carefree feel to it that few other racing games of the time head. Most importantly, even today, it remains incredibly fun to play. As much as I love Sega's original game, though, I have just as much respect for its 2003 sequel *OutRun 2* and *OutRun 2006: Coast 2 Coast*. In fact, I've been playing *Coast 2 Coast* ever since it came out.

Judging by the presence of both *OutRun* and *Coast 2 Coast* in our top 150 games of all time list, both titles still resonate with you too, so it only makes sense that we look at the series on the cusp of its 30th anniversary. We've not only been able to interview *Out Run*'s creator, Yu Suzuki, but have also received insight from key people at Sumo Digital, including the ever-helpful Steve Lycett. Here's hoping you enjoy reading the article as much as we enjoyed creating it.

Enjoy the magazine!

CONTENTS

The Making Of: Universal Hero

Graeme Mason discovers the story behind Mastertronic's arcade adventure

30

20

The History Of OutRun

Track Sega's greatest arcade racing series from the starting line to the chequered flag

34

Ultimate Guide: Mr. Do!

Kieren Hawken looks at Universal's rival to *Dig Dug*

"**There's rarely any kinds of continuity between releases outside of genre**"

REVIEWS

ESSENTIALS

Celebrating The Game Boy Advance
70
Look back at Nintendo's short-lived portable powerhouse with Damien McFerran
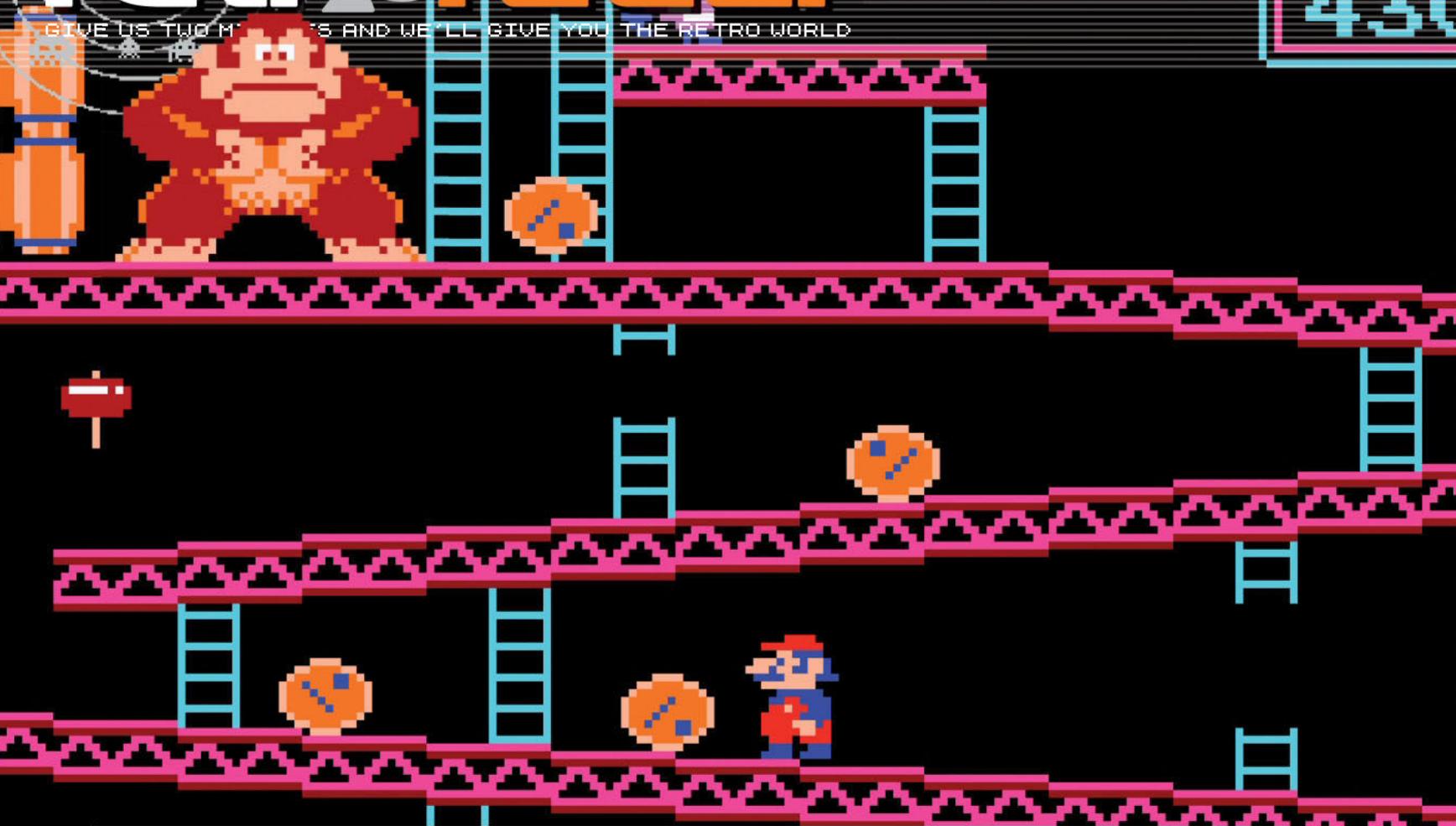
THE REAL KING OF KONG

CONTENTS

Wes Copeland on how he pushed boundaries with a new Donkey Kong record

If your knowledge of the chase for the *Donkey Kong* world record begins and ends with *The King Of Kong*, you might be surprised to know that competition for the score is even more intense today. The record has been broken ten times in the last three years, by just two men – Robbie Lakeman, who took the record from long-time holder Hank Chien in 2014, and Wes Copeland, the current record holder who has just achieved a perfectly-played game and broken the 1.2 million point barrier on actual arcade hardware.

Given his accomplishments, you might be surprised to learn that Wes isn't a hardened veteran of Nintendo's coin-op, but a relative newcomer to the game. "I first started playing *Donkey Kong* in September 2013 at a local arcade," he recalls. "My favourite arcade game at the time was *Defender*, but, unfortunately, it didn't have either a following or much competition. *Donkey Kong* was where all the competition was at, so it's what I naturally gravitated towards." It didn't take a tremendously long time for him to reach a competitive level. "I achieved my first kill screen in December 2013, but it wasn't until late 2014 that I was good enough to start chasing the record. It was only around 1,150,000 at the time, so it felt like a good mark to shoot for."

Wes first achieved the *Donkey Kong* world record in September 2015, posting a score of 1,170,500. However, he lost the title before his run could be verified, as Robbie Lakeman achieved a score of 1,172,100 within hours of Wes' run. Robbie beat his own record in October, taking the score to 1,177,200, but Wes was able to take the crown back in January 2016 with a score of 1,190,000. Robbie pipped that with 1,190,200 on 11 April, but Wes then pushed the bar higher to 1,195,100
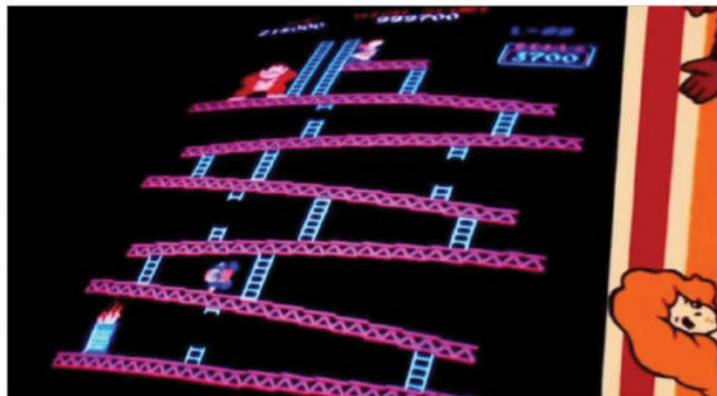
» The record-setting game was recorded in full, and lasted for over three hours.

» The proud champion poses with a game he has unquestionably mastered.

"I first started playing Donkey Kong in September 2013 at a local bar"

Wes Copeland

eight days later. Wes' latest score of 1,218,000 was achieved on 5 May.

It's not uncommon for *Donkey Kong* players to break their own scores, and we were curious to know what motivated Wes to do so. As it turns out, the motivation was partially personal satisfaction and partially rooted in competition. "The ultimate goal on arcade hardware has always been 1,200,000 and I was pretty close," the record-holder explains. "I knew Robbie Lakeman was working behind closed doors for the same thing. He may get his 1.2 million score sooner or later, but only one of us could do it 'first'. There would never be another 'first', and I wanted to be the one to plant the flag."

Apart from the milestone, what has propelled Wes' latest run into the headlines is the claim that it was a perfect game. "'Perfectly executed' is better terminology than 'perfect'," he tells us. "Not only was I able to finish a game at the highest scoring rate ever, but I did it while taking my first guy all the way to the final board. It's a great game if you can get to the final barrel board with just one guy left – I had all three. Because of this, I was able to perform the ultimate 'cash in', where I sacrificed all my extra guys by playing that barrel board over and over, racking up nearly 40,000 points in deaths."

To have played a game of *Donkey Kong* without involuntarily losing lives is

a monumental achievement, as is being the first to reach the 1.2 million mark. "To be honest, it still hasn't sunk in," says Wes. "1,200,000 is an incredibly high score, but never in my wildest dreams did I think I'd score 1,218,000. I felt more relieved than anything."

It remains to be seen whether this new record can be beaten. "It's beatable, but I don't see it being done any time soon. With that in mind,

stranger things have happened," says Wes. "If it's not beaten by the end of this year, I predict it will stand for a very long time. There are three elements to a high *Donkey Kong* score: how well you play the first four random levels, your scoring rate until the kill screen, and your death points. You have direct control of the first two, but the death points you typically have little to no influence over. For the world record to be beaten, all three would have to go even better than my game."

For now, it would appear that the chase for the *Donkey Kong* world record might be over. But if it isn't, don't count Wes out. "I still have a few strategies in my back pocket," he confesses. "While I've told other outlets that I don't think I could get a higher score, if I wanted to push the envelope I could get up to 1,230,000. We'll have to wait and see what happens. If Lakeman takes the record back sometime this year, I'll probably start playing again." What if that doesn't happen? "I'll let it go and move on to other games like *Donkey Kong Jr.*, *Balloon Fight*, and speedrunning *Link's Awakening DX*," says Wes. Time will tell if anyone fancies their chances. ✱

HALL OF FAME

The big five who held the world record before Wes

BILLY MITCHELL
■ 874,300 was the score to beat for many years, and Billy Mitchell was the man who set it in 1982. He'd recapture the record four times over the years, last doing so in 2010 with 1,062,800 points.

TIM SCZERBY
■ The only one-time holder of the *Donkey Kong* world record toppled Billy Mitchell's high score after 18 years, setting a new record of 879,200. His record stood for almost four years before being reclaimed by Billy Mitchell.

STEVE WIEBE
■ Despite multiple rejected video submissions in 2003 and 2004, Steve Wiebe eventually claimed the *Donkey Kong* world record three times in 2005, 2006 and 2010. His final record score was 1,064,500.

HANK CHIEN
■ This plastic surgeon is a two-time champion who set six record scores. After claiming the title for the second time in 2010, he beat his own score four times for a final record of 1,138,600.

ROBBIE LAKEMAN
■ Wes Copeland's rival took the record from Hank Chien in 2014, ending a four year reign at the top for the doctor. His most recent world record score was set in April 2016, at a massive 1,190,200.

WHERE NEXT?

Wes Copeland isn't just great at Donkey Kong – here are his other high score pursuits…

DONKEY KONG JR.
■ The *Donkey Kong* world record holder is currently in fifth place on Twin Galaxies' high score table for the sequel. To claim the record, he will need to surpass previous *Donkey Kong* record holders Billy Mitchell and Steve Wiebe as well as the current champion Mark L. Kiehl.

GAME & WATCH GALLERY
■ At present, Wes holds the highest score for every game on this Game Boy compilation, in both classic and modern forms – except one. Andrew Pete Mee took his record for the classic version of *Octopus* in April, just months after Wes broke the previous record.

THE LEGEND OF ZELDA: LINK'S AWAKENING DX
■ One of Wes' targets is the updated version of Link's portable adventure. The any% speedrun record stands at 55 minutes and 30 seconds, but it's a hotly contested record – at the time of writing, it has changed hands three times in the last two months.

BALLOON FIGHT
■ As another one of Wes' declared post-*Donkey Kong* targets, *Balloon Fight* could use a good shake-up. The current NTSC records have stood uncontested for years – Martin Bedard's 4,202,200 record for Game A was set in 2002, and Sean P. Houston's 3,016,990 Game C score has stood since 2010.

» [Game Boy Color] Wes is a big fan of this *Zelda* game. Expect it to be smashed shortly.

DONKEY KONG
■ Oh yes – while Wes is the arcade *Donkey Kong* champion, he's still second in the MAME high score rankings behind Dean Saglio, whose 1,167,400 score has stood since May 2012. Wes' most recent score is 1,121,600, achieved in October 2015 – can he take the crown on emulation software as well as real hardware?

TURRICAN II AS YOU'VE NEVER HEARD IT BEFORE

CHRIS HUELSBECK TELLS US ABOUT HIS RECENT KICKSTARTER SUCCESS STORY

Chris Huelsbeck has been making videogame music for over three decades and has created music for over 70 videogames. He is particularly acclaimed for his work on the Commodore 64 and the Amiga and has recently completed a Kickstarter campaign to release a brand-new orchestral soundtrack for *Turrican II*. We caught up with Chris to ask him how it all came together…

Why do you think the *Turrican II* soundtrack is so highly regarded?
The *Turrican* series was developed at a time when gaming hardware was still quite limited and we, as young computer artists, had a chance to push past the technical limitations and dazzle the audience with things they had never seen or heard on their computers before. As a composer I also felt that for the first time I could freely create the sound that was in my head, which resulted in the memorable soundtrack of *Turrican II*.

How has creating game soundtracks changed over the past 30 years?
In those early days we had to literally 'program' the music, with lots of editing of hexadecimal numbers and using all kinds of tricks to get around the technical limitations. This also meant that there were only a handful of people who could do it. Today the music of videogames is largely produced the same way as any other music, be it movie scores or pop music production, in a studio, often with live musicians and even with full orchestras. So there are hardly any technical limitations anymore and you would think that this freedom would create even better results, which I believe is mostly true. But we also lost some of that awe of the early days, marvelling at what we heard from our 'home computer' machines.

Why create an orchestral score for *Turrican II*?
Working with a large orchestra is one of the most rewarding things that a composer can do and it still pushes the envelope of the music. There's just nothing like it and I love that sound and feeling when hearing 60+ talented musicians putting their heart and soul into the music they are playing. So when my friend and coproducer Thomas Boecker (who also produced an awesome 12-minute live orchestra medley for the *Turrican Soundtrack Anthology*) suggested that we should do something special for the 25th anniversary of *Turrican II* and try to produce a full album, I was immediately on board!

How many instruments will be involved and will you be playing any?
I am not a great performer myself, having just enough 'chops' on the midi keyboard to get my music into the computer, so I rather let the virtuoso musicians at the FILMharmonic Orchestra Prague perform the pieces… There will be over 60 players with the typical set of instruments, like strings, woodwinds, brass and percussion that make a modern full symphonic orchestra.

You are creating a brand-new *Turrican II* track using original Amiga hardware. How are you finding going back to that system?
Going back to my old tools and the limitations of the original hardware is definitely a challenge, but I am actually working on another (unrelated) full game project that has this requirement (a new original Amiga game is in production). So I already have regained some experience and I'm looking forward to composing and 'programming' the new *Turrican II* style piece!

Why create the new track specifically for vinyl and not CD?
We wanted to give it as a special reward to our Collector's Edition backers. Kickstarter projects only really get funded when there are people willing to invest that bit more in the project, so we wanted to reward those people with something special and unique. I think the track was one of the main reasons that we got the funds to create this whole project. ✳
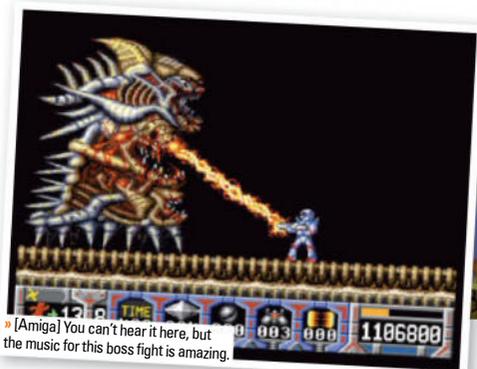
» [Amiga] You can't hear it here, but the music for this boss fight is amazing.

» [C64] Chris created the soundtrack for both the C64 and Amiga versions of *Great Giana Sisters*.

MASTER OF ORION

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Master of Orion
I, II, and III

Hints & Tips For Videogame Pioneers

The man in charge of Hewson Consultants and 21st Century Entertainment, Andrew Hewson, has spent years in the games industry and he recounts those days in this book, which was funded through Kickstarter. It's an interesting tale that not only covers the people and games that made the companies so important, but the issues that drove Hewson Consultants to closure.

You may wish to keep a web browser handy if you're not 100 per cent familiar with the catalogue of the publishers as, while the book includes interesting information like awards and accolades, you won't find any screenshots here. However, there's a wealth of insight from Andrew Hewson himself and industry veterans including Raffaele Cecco, Jon Hare, Julian Rignall, Andreas Axelsson and Roger Kean.

Price: £14.39   **From:** hewsonconsultants.com

PICK OF THE MONTH

Super Famicom: The Box Art Collection

This coffee table book is aimed at the early Nineties import enthusiast, with each page offering a photograph of Super Famicom box art and some accompanying explanatory text. There's not enough room to cover every game in such a vast library, but most of the ones you'd expect are here and there are some interesting lesser-known ones too.

Price: £24.99   **From:** funstockretro.co.uk

A Gremlin In The Works

This weighty two-book set covers the history of Gremlin Graphics, the company behind games such as *Jack The Nipper* and *Zool*. Both volumes are packed with colour photographs and imagery, while the text content takes the form of straight question and answer sessions between interviewer Mark Hardisty and a variety of former staff of the Sheffield-based publisher.

Price: £29.99
From: funstockretro.co.uk

The Making Of Slightly Magic

This arcade-adventure was a big hit with the Spectrum community back in 1991, and its designer Colin Jones has written this book to celebrate the 25th anniversary of its release. It's not tremendously long, but it covers all aspects of *Slightly Magic*'s creation and fans of the game will be pleased to see nice full-colour screenshots and sprites on every page.

Price: £7.95   **From:** amazon.co.uk
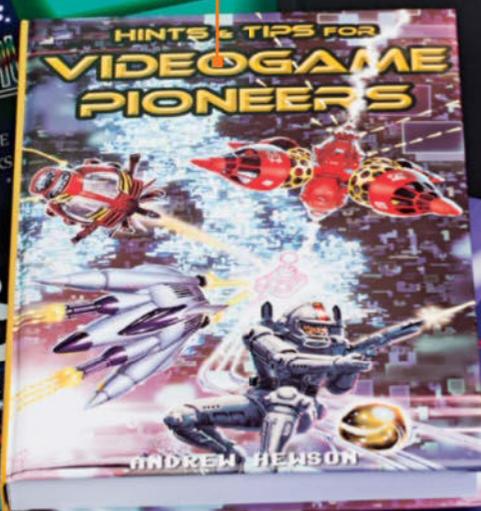
The Story Of The Commodore 64 In Pixels

Chris Wilkins' book tells the story of the world's bestselling home computer from a gaming perspective, looking at the machine's creation, various aspects of the hardware and a selection of key games, accompanied by full colour screenshots and photography. Also included are memoirs from key figures including Tony Crowther, Archer Maclean, Gary Penn and the late Fergus McGovern.

Price: £25.00   **From:** fusionretrobooks.com

a moment with...

Deleted Scenes

Luke Zapart has been releasing prototype games for over a decade via Hidden Palace

How did you get into the hobby of releasing prototype games?
I was originally interested in trying to find *Sonic The Hedgehog* prototypes. One of my first big releases was a crowdfunded effort to buy and release a *Sonic The Hedgehog 2* prototype for the Mega Drive, almost ten years ago. It turned out to be a very early build of the game, containing only a few levels, including the first zone from the previous *Sonic* game still compiled in. It told us a lot about how the game was developed. Since then I have found over 1,700 distinct prototypes, including over a hundred *Sonic* prototypes, as well as over a dozen games that were never released. To date, I have released over 1,200 of them and I continue to release more.

Why do you think people are interested in prototype and unreleased games?
For games that were never released, it is a matter of preserving them before they disappear forever, similar to how a number of silent films or episodes

» [Mega Drive] This licensed game featuring wrestler-turned-politician Jesse Ventura is a recent release.

of *Doctor Who* are lost to the sands of time. Unreleased games are rarely archived, sometimes getting cancelled as a result of a company going out of business. Usually, there's only a handful of copies that exist, somewhere in someone's attic. In some cases only one copy. And once those are gone, the game is lost.

As for released games, prototypes allow us a glimpse into the development process of a game, often showing cut features. In a few lucky cases, they allow us to play entire levels that were removed due to time or budget constraints.

What are the difficulties involved in finding and acquiring such prototypes of games?
The main difficulty is their rarity. Prototype versions of games are not particularly valued by developers, who understandably mostly care about the finished product. They are usually kept as random mementos. Many are lost when people just throw them away. And then those that still exist are recorded on perishable media, such as EPROMs, which are subject to eventual bit rot, and CD-Rs which suffer from oxidation, accidental abrasion and other contaminants if kept improperly. Trying to find and preserve them is a race against time.

Has your site's reputation encouraged people to come forward with their own unreleased work?
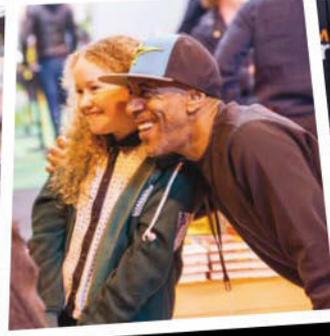A number of our releases have come from donations, in fact we encourage

» This Mega Drive development board currently hosts early *Pro Striker Final Stage* EPROMS.

» This Mega Drive development board currently hosts early *Pro Striker Final Stage* EPROMS.

> **"[Prototypes] are usually kept as random mementos. Many are lost when people just throw them away"**
> Luke Zapart

it. Many developers are eager to share their work, especially unreleased games, to save the fruits of their labour from being forgotten.

What do you feel have been your most significant releases thus far?
The *Sonic The Hedgehog 2* release I mentioned before remains one of my favourites. In 2008 I released a batch of over a thousand Sega prototypes from a single source, which received some recognition. Our releases have included early builds of games such as *Crash Bandicoot* or *Tomb Raider*. The cancelled games we released are probably of the highest historical significance, such as the PlayStation port of *Baldur's Gate*, or *Judgement Force*, the Sega Saturn precursor to *Fighting Force* on the PlayStation.

» [GBA] This unreleased handheld version of *Turok* was released through Hidden Palace.

You released a big new batch of prototypes recently – what are the highlights in terms of unreleased and alternate versions?
An interesting one is a cancelled wrestling game featuring Jesse 'The Body' Ventura, the eventual governor of Minnesota. By the time this interview is printed we will have released the scrapped Dreamcast sequel to *Ecco The Dolphin*, which many people have asked me to find.

Are there any particular games that you'd personally like to find in prototype form?
Faithful to my original goal of tracking down *Sonic* prototypes, I have released significant development versions of just about any classic *Sonic* game, except for *Sonic* and *Sonic 3* for the Mega Drive. I have made a considerable effort to find those, but to no avail so far.

A prototype of *Super Mario World* would be interesting, back when it was called *Super Mario Bros. 4*. Or a prototype of *Pokémon Gold & Silver*, when it was called *Pocket Monsters 2*.

More generally, I am interested in finding any builds of games that have major differences from the final product, or builds of games that were never released. ✱

Fabian De Gaillande

ALEX RATTRAY

ALEX RATTRAY

Nikko Hurtado

ALEX RATTRAY

KHAN

God Machine

Denis Sivak

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Anarchy OK

I had to Google 'anarchy' to write this article, which has potentially added me to the CIA most-wanted list. But I'm risking it all to share a eureka moment that, honestly, I'm still trying to figure out for myself.

Paragon, the new MOBA-like from Epic Games, has been blowing my mind lately. I went right ahead and paid for early access to the beta, handing over money for something that eventually I could play for free – this being intended as a F2P game when it finally launches, whenever that will be. To me, hungry for something new after grinding *Destiny* for 18 solid months, this just felt like buying a new game from Epic, which I greatly admire, nay love. Buying into Early Access was 'showing support'.

Also, before I get into this properly, I knew that I wanted to play *Paragon* a lot, as soon as possible. So, waiting was not an option for me. I'm one of the 'imaginators', according to Sony marketing in 2000.

Anyway, the huge interesting thing about *Paragon* is that Epic Games is publishing this title as an independent. It's hard to picture Epic

Games, creator of *Unreal Tournament* and *Gears Of War* as an indie, but I guess by now it kind of is. Epic Games is going to decide how *Paragon* turns out and when it's going to eventually turn up; it's the team's baby and the big publishers have been told to take a hike.

This is part of a trend that's happening across the whole industry right now, but it reminds me so much of when we had the likes of Namco, Sega, Capcom and Konami rolling out killer coin-ops such as *Starblade* and *After Burner* every other month, answering only to themselves, building monster reputations, before becoming tied to Nintendo/Sony/Microsoft contracts for the home market that sadly usurped the arcades.

Also, let's not forget the individuals that pursued their own vision for what a cool game could be, such as Tony Crowther, Jeff Minter, Matthew Smith, David Braben and Geoff Crammond. Publishers during their time were talent spotters and risk takers, without a road map of anything in particular. These incredible talents made up something, offered it up and then we lapped it up. The games arrived finished

too, best as I can remember. The same applied to the arcade games of the Eighties and Nineties. They didn't get a day-one patch. They had to work (the coin-ops, I mean) or they just wouldn't make any money.

So, this eureka moment that I mentioned has something to do with marvelling at the likelihood of all creative studios and individuals self-publishing in the very near future, and how this is going to boost the quality of the best games, while weeding out the absolute crap. A publisher PR once confided in me, which I am now about to betray, that some of his company's games were rolled onto store shelves because people would just pick them up by accident, or because they had more money than sense and bought almost everything. Some games were signed to feed the bottom line like that.

There's something raw and exciting about the disappearance of the publisher/retail relationship, removing the artificial wheel and deal. I hope it leads to greater fortunes for the guys with the greatest ideas and most valiant hearts. I'll be here waiting with my wallet. ✱

What do you think?
Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK   @RetroGamer_Mag   retrogamer@imagine-publishing.co.uk   www.retrogamer.net/forum

DISCUSS

What's your most prized gaming possesion?

Forum
www.retrogamer.net/forum

■ My copy of *Football Manager* signed by Kevin Toms. Everything else can just be emulated.
the_hawk

■ My Vodafone 1615. I keep it because it runs the best version of the old Amiga/PC game *King's Bounty* and that has become my favourite ever game.
Bluce_Ree

■ My original boxed copy of Sierra's *The Black Cauldron* on PC – the game I wanted for nearly a year prior to getting it for my 11th birthday, and the first adventure game that I ever played.
antsbull

■ Vectrex. It is the best videogame system ever. Even people that hate videogames like it. It sits in my living room and has started many a conversation with gamers and non-gamers alike.
ianpmarks

■ My Game & Watch *Fire Attack*. Countless hours I'd spent belting away at it, perfecting my game. I lent it out and never got it back.
ncf1

Twitter
Twitter.com/@RetroGamer_mag

■ My hipster side would say the Pioneer CLD-A100, while my practical side would say the Neo-Geo MVS.
@ausretrogamer

■ A perfect *Mario Bros.* Nintendo Game & Watch, bought for me in Andorra in 1990, signed by Miyamoto in 2005. Love it.
@johnpaulboi

■ Gotta be my original *R-Type* cab :) Imported and meticulously restored over 8 months.
@michaelheald

■ A bit of a cheat, but I'd keep my PSP, it can play practically everything up to the N64 pretty well.
@SpAM_CAN

■ My 16k ZX Spectrum. It broke in 1984 when I was eight years old and in Jan 2016 I fixed it. Using it brings back so many memories.
@TheRealSiMcD

■ My *Super Mario Kart* cart. It's like a time capsule with my original time trial scores from over the years.
@HolmesNinja

■ My Sega Saturn.
@takerdemon

Facebook
facebook.com/RetroGamerUK

■ My Mario chess set. My mum bought it for me before she died.
Lee Murphy

■ My copy of *Wiz 'N' Liz*, the first game my (then) girlfriend played with me and my (now) wife is now a gamer.
Ryan Pascall

■ *Panzer Dragoon Saga* due to it being my most valuable game right now.
Steven Noad

■ *Morrowind Game Of The Year Edition*. Still a few caves, storylines and Daedra shrines I've not explored yet.
Dave Gardner

■ Impossible to pick one thing. My collection is too badass. If the house was burning down I'd have to straddle the games and burn with them, then play them in Valhalla for the glory of the gods.
Oliver Boulton-Lear

■ I guess it would have to be my Amiga 1200. That covers quite a lot of stuff as it's all on CompactFlash now.
Stephen Marshall

■ My signed **Retro Gamer** issue 135 with the subscriber-only Pikachu cover!
Kósa Bence

What We Think

■ We didn't expect so many great answers – if you get a chance, go online and read the lot! I'd have to take my copy of *Sonic The Hedgehog*, signed by Yuji Naka at Summer Of Sonic 2011, while Darran would spare his MAME cabinet – but maybe not from a burning building…

BACK TO THE NINETIES

[PlayStation] *Ape Escape* made clever use of the Dual Analog Controller to make an already great game excellent.

THE LATEST NEWS FROM JULY 1999

JULY 1999 – Saucerman attacks, Syphon Filter delivers, F355 Challenge powers into arcades, Ape Escape swings by, Dropzone drops in while Emergency Call Ambulance sets alarm bells ringing. Richard Burton calls 999…

R.B
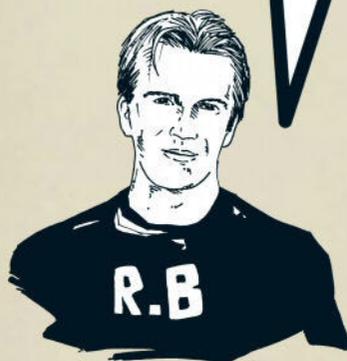
On 3 July American arcade gamer Billy Mitchell became the first to register a perfect score on an imperfect game when he scored 3,333,360 points on Namco's classic *Pac-Man* coin-op. His scoring was ended only by the infamous integer overflow 'split level' screen on level 256.

Out for PlayStation was the underwhelming *Attack Of The Saucerman* by Psygnosis. An alien invasion wants to scoff humans and you must stop them over 28 levels of 3D arcade shooter action. While its comedic sci-fi elements worked fine, the gameplay wasn't as polished as its comedy, with torturous repetition and stodgy controls being the defining memories of the game.

Sega released the next in its line of *Real Life Career Series* coin-op games with *Emergency Call Ambulance,* which sees you speeding from accident to

[PlayStation] This was to be Psygnosis' last game for the PSone as a third-party developer before joining Sony.

incident, collecting your patient and racing to the hospital whilst keeping tabs on their vitals. Avoid crashing your ambulance en route to the emergency room as, naturally, this will worsen your patient's condition. The medical angle is unusual for a videogame and while that aspect is interesting, the gameplay is similar in style to *Crazy Taxi*, another game in the series.

Biological warfare hit the PlayStation in the form of *Syphon Filter* by Eidetic. This stealthy third-person shooter places you right in the middle of a terrorist alert. As one of the government's best agents, Gabe Logan, you must find and destroy biological weapons hidden in Washington D.C. while eliminating the terrorists. It's then off to the virus labs and warehouses of the company responsible for making the weapons to destroy the eponymous Syphon Filter, a programmable bioweapon, along with its delivery system.

Syphon Filter was a great example of a game that spent time on nurturing the storyline, progressing it at a logical speed with just the right blend of action, adventure and puzzling elements. Graphically it suffered in places from polygon and texturing problems but the gameplay and superb story more than papered over those hairline cracks.

Sega and its AM2 division returned to a familiar subject with the release of the coin-op game *F355 Challenge*. Featuring a bright red shiny Ferrari, not seen since

[PlayStation] Despite sounding like a part of a water treatment process, *Syphon Filter* was splendid.

the days of the *Out Run* coin-ops, Sega produced a racing simulation that really did prove to be a challenge.

The deluxe version of the cabinet featured three wraparound screens for that immersive feel and also included a full set of driver's pedals, four driving assist buttons, including ABS and traction control, and, should you prefer manual gears to automatic, there's an H-shaped six-gear stick shift.

It was about as real as you could get as you race around its six circuits. It proved popular in both deluxe and standard cabinet formats and home versions for Dreamcast and PlayStation 2 followed a year later.

The King Of Fighters '99: Millennium Battle saw the latest in the long-running fighting game series by SNK arrive in arcades. It started a new story arc for the series and introduced several gameplay changes. A couple of months later the Neo-Geo home version would be made

THIS MONTH IN...

COMPUTER & VIDEOGAMES

C&VG had undergone a regeneration with new layouts and a new cover logo. It was the magazine equivalent of *Doctor Who*. Inside, the team was hyped about the Dreamcast release and celebrated ten years of the Game Boy, as did Nintendo, by releasing four different Game Boy Color variants.

NINTENDO WORLD

A new magazine from the Future Publishing stable was released this month. Entitled *Nintendo World*, it proudly pronounced itself as 100 per cent unofficial (just as *Amstrad Action* did, Future's first magazine, launched in 1985). It was so new that it was still referring to the forthcoming GameCube console as the Dolphin on its cover.

AMIGA FORMAT

A lengthy six-page interview with Jim Collas, head of Amiga Inc. featured questions such as: 'What are the plans for the classic Amiga?', 'Why was the company dropping Inc. from its name?', and why he thought the next generation of Amiga computers would be more than capable of taking on Microsoft.

available with a Neo-Geo CD version appearing in December.

Ape Escape for the PlayStation belatedly got its European release but it was worth the wait. The 3D platform game sees you control Spike, a young lad who must capture roving apes who have fled in a time machine after Specter, an ape that gained intelligence through an experimental helmet, creates his own army of apes sending them back in time with the task of rewriting history. Sounds plausible.

You must utilise items and gadgets gathered along the way and collect coins to open hidden minigames. Although the graphics and sound were superb, the controls and gameplay were the real innovation with cunning use of the Dual Analog Controller making *Ape Escape* easy to control yet massively fun to play. Was it one of the best platform games

NEWS JULY 1999

16 July saw a light aircraft piloted by John F. Kennedy Jr., son of the assassinated President, crash into the sea near Martha's Vineyard, off the coast of Massachusetts, USA. Kennedy Jr., his wife and her sister died instantly, with the cause of the crash being attributed to pilot error.

There were several notable films premiering this month. One movie that made standing in a corner of a room very disturbing was *The Blair Witch Project*. The independent film was made on a budget of just $60,000 and was filmed over eight days. It's a 'found footage' movie detailing the fate of a trio of students investigating the local legend of The Blair Witch.

The actors filmed the footage themselves with little camera training and much of the dialogue being improvised. They were left in a forest with occasional messages directing them to their next location with it all resulting in an eerie and uniquely haunting movie. *The Blair Witch Project* was a resounding commercial and critical success with it snagging $250 million at the box office.

Other new films worth a peek this month included *Deep Blue Sea*, *Arlington Way*, *The Iron Giant*, *Eyes Wide Shut* and *American Pie*.

Amongst the pick of the music album releases this month were *California* (Mr. Bungle), *On How Life Is* (Macy Gray) and *The Writing's On The Wall* (Destiny's Child).

25 July saw American cyclist Lance Armstrong win the first of seven consecutive Tour De France titles. He would later be stripped of them all when lingering doping allegations proved true.

[Game Boy Color] Archer MacLean's classic retro game returns and remains as playable and fun as ever.

on the PlayStation? More than that, it's arguably one of the best games of any genre released on the console.

Game Boy Color owners were treated to a platform-puzzler based on a German animated television series called *Maya The Bee And Her Friends*. Although seemingly aimed at a younger audience, the game was something akin to *The Lost Vikings*.

You and your two insectoid friends must cooperate throughout the 120 levels to rescue a fellow insect. It was pretty simplistic in terms of gameplay and the graphics and sound proved merely adequate.

More European adaptation shenanigans arrived on the Game Boy Color with *Asterix And Obelix*. Based on the Goscinny and Uderzo characters the game is a fairly standard side-scrolling platform game with occasional mini-game distractions. You spend much of your time beating up Romans in a variety of countries but it all got tiresome rather quickly.

While mediocrity ruled over Game Boy Color July releases, a classic old retro game rose up phoenix-like to offer good old fashioned playability without being hampered by lovely graphics.

Archer MacLean's classic *Defender*-esque game *Dropzone* made it onto the Nintendo's handheld. You must save scientists captured by aliens by blasting them, catching the falling white coats and return them to the dropzone. Other aliens prefer to drop deadly robots as decoys to try and catch you out… and that was the gameplay in a nutshell.

The thing is with *Dropzone* is that doesn't require jaw-dropping graphics or ear pleasing tunes as the gameplay was the bottom line. The graphics might

JULY 1999

NINTENDO 64

1. Star Wars: Episode 1 Racer (Nintendo)
2. Castlevania (Nintendo)
3. Star Wars: Rogue Squadron (Nintendo)
4. FIFA '99 (Electronic Arts)
5. Mario Party (Nintendo)

PLAYSTATION

1. Metal Gear Solid (Konami)
2. Civilization 2 (Activision)
3. UEFA Championship Manager (Eidos)
4. Rugrats (THQ)
5. FIFA '99 (Electronic Arts)

GAME BOY COLOUR

1. The Rugrats Movie (THQ)
2. The Legend Of Zelda DX (Nintendo)
3. Warioland 2 (Nintendo)
4. V-Rally (Infogrames)
5. Bugs & Lola Bunny: Operation Carrot Patch (Infogrames)

MUSIC

1. Livin' La Vida Loca (Ricky Martin)
2. 9pm (Till I Come) – (ATB)
3. Wild Wild West (Will Smith Ft. Dru Hill)
4. Boom, Boom, Boom, Boom!! (Vengaboys)
5. My Love Is Your Love (Whitney Houston)
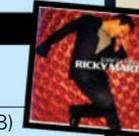
[Arcade] It's certainly tough, but there's no denying that *F355 Challenge* delivers a compelling driving experience.

look like they've been taken directly from the Commodore 64 version but the playability, the learning curve that eases you in and the addictiveness that hooks onto you remains strong. Who needs pixelated eye candy when the gameplay is this good? *
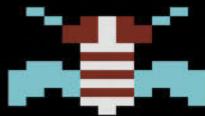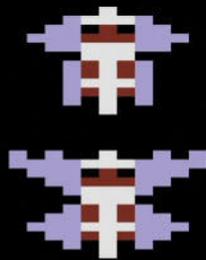
Galaxions

"LET US RAIN SOME DOOM DOWN UPON THE HEADS OF OUR DOOMED ENEMIES"

#101 » JOHN P. SHAY » COMMODORE 16 » 1984

Way back in 1985, when I first bought this game, I remember being in a department store in West Ealing, London, and there I found a bundle of C16 titles on display. Well, my first choice of games then was the arcade classics I used to enjoy on my holidays. A clone of *Galaxian* by Namco was one of them.

This really doesn't take much explaining unless you've lived under a rock for over 30 years. On the first level the enemy doesn't fire back, but from level two onwards they will with increasing difficulty as you progress further. When you lose all four lives then it's game over.

If you enjoy old-fashioned single-screen shoot-'em-ups, then this might be your thing. The graphics aren't bad, the aliens are pretty well detailed and colourful, although I feel that they're a little on the large size and that there aren't as many enemies as in the original

arcade classic, which may disappoint fans of the original. However the ship itself is fine and moves adequately, and I particularly like the star-field effect which scrolls downwards while you play.

I wouldn't call this a particularly easy game. Sure, the first level is so simple that you could probably beat it with your eyes closed without losing a life, but it starts getting gradually tougher after this that by level eight you will have done pretty well not to lose all your four lives.

Overall, after you get over the initial disappointment of it not looking anything much like the original arcade version, it's quite a good game and it is fun to come back for high scores. It's one of the better classic titles by Solar Software, and I do believe that it's the only *Galaxian* clone on our system. It's good, not great, but not half-bad, either. ✳

BARRY LENDRUM

The Road Trip of a Lifetime

Out
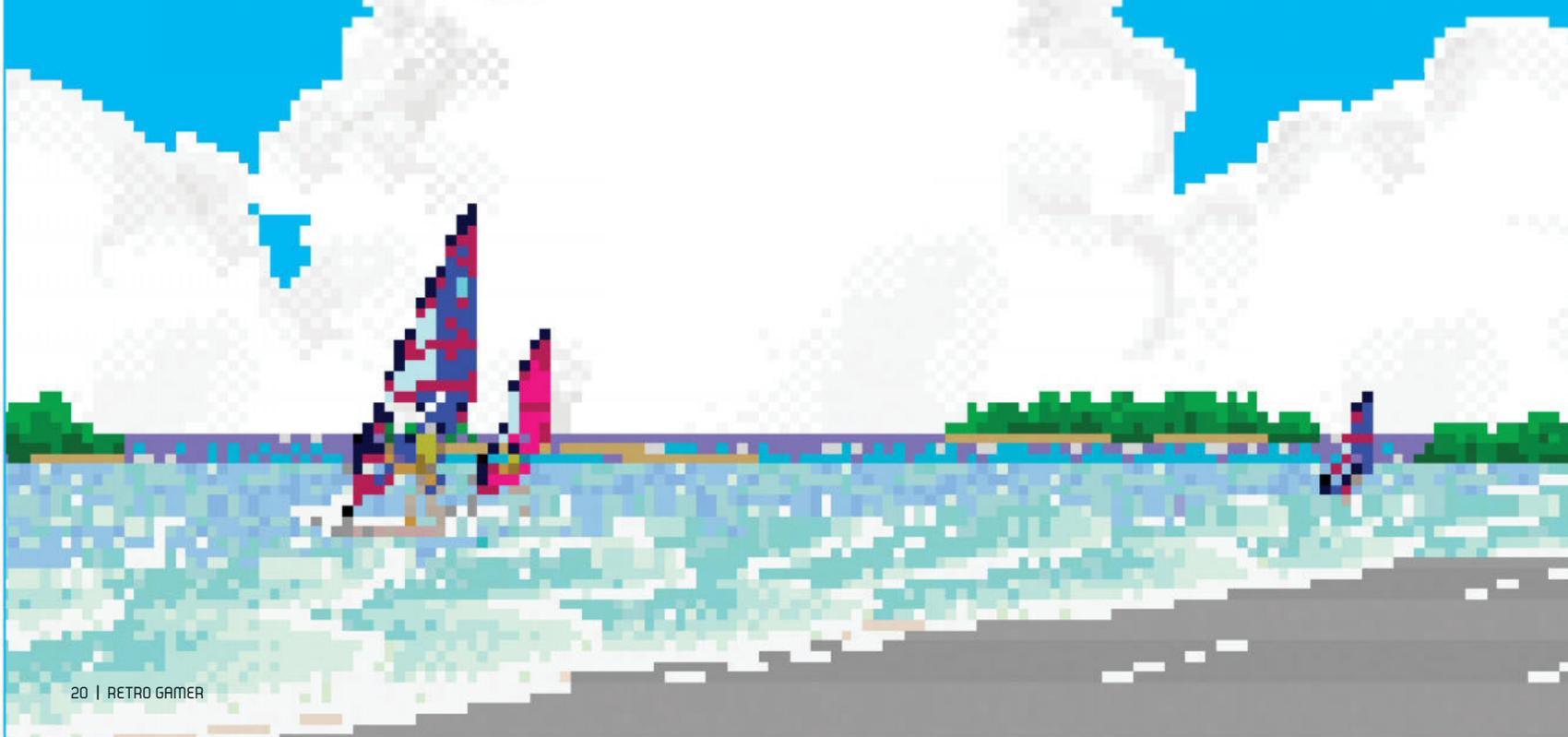
Run

For decades, Sega's iconic racing series has delivered on a fantasy only seen in car adverts – high speeds, beautiful scenery and an equally lovely companion. Nick Thorpe is in the driver's seat for this tear down memory lane…

Envy is not a pretty thing, but we've never claimed to be flawlessly beautiful – and we're not sure we've ever felt greater envy than when we happened across a nice red Ferrari parked just a few doors down from our home. The lucky driver that owned it could just swan off somewhere beautiful at a moment's notice, probably at high speed and almost certainly with an attractive passenger, while we'd have to continue the dreary door-to-door leafleting task that had brought us to the owner's house. Needless to say, we were green enough to be mistaken for a certain Doctor Banner.

Luckily for those of us who employ a more modest means of transportation, Sega has spent many years bringing us the *OutRun* series, and thus the chance to enjoy the fantasy scenario we had envisioned for that local motorist. "*Out Run* is not an endurance, battle-against-the-clock racing game, but rather a driving game akin to a Sunday drive with beautiful scenery rolling past," says Yu Suzuki, *Out Run*'s director and a noted motoring enthusiast. The original ▶
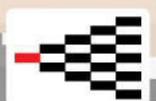
» [Arcade] Police will try to ram you off the road and generally hinder your efforts in *Turbo OutRun*.

▶ inspiration for *Out Run* was *The Cannonball Run*, the 1981 comedy film depicting a cross-country race across the USA, but having been told that scenery in the US isn't tremendously varied Suzuki instead went to Europe.

"Doing research for the game, we rented a car in Frankfurt, and drove the Romantic Road (Romantische Straße), the French Riviera, through the Swiss Alps, Florence, and Rome to name a few stops along the way," recalls the veteran director. Some amusing incidents made it a journey to remember, too. "We stopped at Trevi Fountain along the way, where my superior says, 'Face away from the fountain, and we are going to throw our coins in at the same time. Got it?' So, okay, we did. I am guessing he saw it done in a movie one time, so he said we had to do it," Suzuki recalls. "I come to find out later on, when two people face away from the fountain and throw coins in at the same time, they are to be wed."

AM2 was at the forefront of arcade development throughout the Eighties and its two previous hits, *Hang-On* and *Space Harrier*, were both graphically impressive and housed in attention-grabbing cabinets. *Out Run* was given the same treatment – not only did it employ the same sprite-scaling technology as the previous games, the deluxe cabinet could sway left and right to give the sensation of movement. The result was that it was the kind of game that made an immediate impression. "I think it was probably the summer

of 1987 and it was pretty mind-blowing for me," remembers Patrick Michael, head of research and development at Sega Amusements International. "I think it was my first experience of a moving cabinet and my first branching stage driving game. It was all about the summer, blue skies, great tunes, a convertible and a beautiful woman by your side."

Steve Lycett, designer on the Sumo Digital's conversion of *OutRun 2* and producer of *OutRun 2006: Coast 2 Coast*, was similarly impressed. "I'd already been blown away by *Space Harrier* (especially the deluxe hydraulic version!) so when I saw *Out Run*, which was even more impressive, and let you drive a Ferrari, how could I not fall in love? Of course back then I was rubbish at it, never touched the brake and just set gears to high, but even then, it was just fabulous soaking up the drive, the music and the scenery." Sean Millard, creative director at Sumo Digital and senior designer on the home version of *OutRun 2*, was also amazed by the hardware. "The sit-in cabinet was a exciting proposition and added to the thrill of the game. To then enjoy the game as much as I did and to find it so accessible, meant that it became my go-to arcade game."

Your objective in *Out Run* is to reach each checkpoint before the time limit expires. The only choice you have to make, save for picking your music at the beginning of the game, is which way to drive at junctions. Other than that, it's about driving fast and not crashing, and this simplicity was core

Did you know?

■ *Out Run* was originally designed to include motorbikes and oncoming vehicles amongst the traffic.

Team Picks

Everyone has an OutRun tune they swear by – here are our picks…

RISKY RIDE

■ As much as I love the various remixes of the original *Out Run* tunes on *OutRun 2006: Coast 2 Coast*, it's *Risky Ride* that really does it for me. The guitar work in it sounds amazing and it just makes me feel happy whenever I hear it. It's pretty much perfect and there's a rather stunning guitar remix, too.

MAGICAL SOUND SHOWER

■ As much as I'd love to be a hipster and pick something obscure, I just can't – *MSS* is too good. The delayed kick-in also helps on a gameplay level, giving you an audio checkpoint by which you can eventually learn where you should be when that iconic melody drops.

PASSING BREEZE (1993)

■ This was probably my least-picked track in *Out Run*, but Takenobu Mitsuyoshi's remix for *OutRunners* foreshadows his *Daytona USA* work and brings it to the top of my playlist. There's something about the synth sound of early Nineties music that just works for me.

KEEP YOUR HEART

■ Maybe not an obvious choice, but this is always the one that gets stuck in my head whenever *OutRun* gets discussed in the team. Unfortunately you couldn't select the music in *Turbo OutRun*, but I was over the moon to see it included in *OutRun 2006: Coast 2 Coast*.

SPLASH WAVE

■ I spent an entire afternoon making an expansive tier list for *OutRun* tunes – it was a perfectly good use of my time, trust me – and, of course, *Splash Wave* reached number one. That intro and main riff knocks anything else out of the park, even *Magical Sound Shower*.

"It was probably the summer of 1987 and it was pretty mind-blowing for me"

Patrick Michael

to its appeal. "It was so accessible, bright and *fun*… it was way less intimidating than *Pole Position*," says Sean. "I remember watching an older kid playing it and using the gear to drop speeds for the first chicane by the beach huts and suddenly, there was a junction! I don't think I'd seen choice like that in a game before," Steve recalls. "Suddenly the course map on the machine made sense, you could go where you wanted!"

When asked what the hardest part of development was, Suzuki replied "To make the driving experience as fun as possible," which is a surprising admission about a game that is virtually synonymous with fun. "To achieve that, we widened the roads, and put a lot of work into the buildings and ground splatter to ramp up that feeling of going fast," he explains. "We also had the idea of putting in the radio to make it enjoyable. The key term here is 'superiority complex'."

Out Run was an *enormous* success for everyone involved. Sega sold 30,000 cabinets, making it the company's bestselling arcade game of the Eighties. When the home conversions arrived, despite failing to keep up with the technologically-advanced arcade game, they did similarly well. US Gold managed to shift over a quarter of a million 8-bit computer copies in time for Christmas in the UK alone, making it the bestselling game of the year. Sega and US Gold spent the next few years bringing *Out Run* to a variety of formats including

consoles and the 16-bit computers. Notable later conversions include the *Sega Ages* version on PlayStation 2, which includes polygonal graphics and a new Arrange mode with a diamond-shaped course and rival racers, and the 3DS version which includes stereoscopic 3D visuals and new music.

Even the best arcade games eventually see a drop in earnings, and while that process took a few years for *Out Run*, eventually a successor was needed. That need was fulfilled in 1989 by *Turbo OutRun*, a radical overhaul which could be installed as an upgrade kit in original cabinets. The core concept of driving a Ferrari with a beautiful woman as a passenger hadn't changed, but practically everything else had – starting with the location and format. Where the original game gave players the freedom to choose their route through a series of stages inspired by Europe, *Turbo OutRun* was a linear cross-country race across the USA.

Greater elements of danger and competition were added, in the form of police pursuits and a rival racer who could steal your girlfriend if he beat you to checkpoints. That wasn't all – on-track hazards such as barriers were there to impede your progress, and adverse weather conditions including rain and snow were included. To cope with all of this, your car – this time modelled on an F40 – could be upgraded, taking ▶

» [Arcade] Major crashes are a big part of *OutRun* history, often sending the car into the air.

» [Master System] *Out Run 3-D* is now a sought-after rarity, due to its improvements over the original.

» [Arcade] Failing to reach a checkpoint ahead of your rival ensures your fickle companion will hop to his car.

Did you know?

■ The Dreamcast and 3DS versions of *Out Run* include a redrawn car sprite to avoid copyright infringement.

Data Discs Interview

We talk to Jamie Crook to find out why Out Run's soundtrack has stood the test of time

When did you first hear *Out Run*'s music? What impression did it make on you?
Probably on the Mega Drive. I grew up in a small town in Devon, so we didn't have access to many arcade machines at the time. It wasn't until much later that I heard the arcade version, which is, of course, the superior one. I had a friend at University, about 14 years ago, who used to listen to the *Out Run* soundtrack on a Sony Walkman in between classes. He was always praising it, so I revisited it then, too. It never gets old.

The three main *Out Run* tracks have been remixed and arranged frequently over the years, and they always manage to remain relevant. What do you think gives them this timeless quality?
Hiroshi Kawaguchi is a clearly gifted composer who, despite working in an extremely restricted medium, produced something really special. The tracks are all well structured, with hooks in all the right places and memorable rhythms running underneath. It's just great songwriting. Simple as that.

What was *Out Run* doing differently to other games of the mid-Eighties in terms of its sound and music?
In the Eighties Sega was at the cutting edge in the arcades. Hiroshi Kawaguchi worked with their machines from really early on, which I think gave him an intricate understanding of the technology and its restraints from the outset. Beyond that, I think he also cared deeply about song structure and the pivotal role played by music within the game. It's clear there was a lot of thought put into the music in *Out Run*, which perhaps was missing from other games. The music was always designed to be fundamental to the experience, with each track having its own distinct flavour.

**What drove you to release the *Out Run* soundtrack on vinyl?**
It's a timeless soundtrack that can be enjoyed as a standalone album, irrespective of whether you're familiar with the game or not. It's just really good music.

Magical Sound Shower, _Passing Breeze_ or _Splash Wave_? No cop-outs!
Passing Breeze. That bass-line…

Look out for *OutRun* on vinyl this summer. More info at data-discs.com
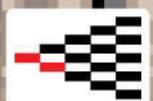
on three new parts over the course of the game. What's more, a turbo button was added – perfect for pulling ahead of the rival or ramming through barriers. If *Out Run* resembled a car advert, *Turbo OutRun* was closer to an action film.

There was no question that *Turbo OutRun* was a good game, but whether or not it was a good sequel was a matter of personal taste, determined by how you saw the new mechanics. "I liked them; they felt like they added to the action without breaking anything," says Sean. "I wiled away many happy hours on my Amiga with *Turbo OutRun*." Not everybody was so enthusiastic about them, though. "To be honest, I always preferred the original game and its sense of freedom," says Steve. "What was refreshing about *Out Run* was more it was you versus the clock, the traffic was merely obstacles. *Turbo OutRun* felt like a step back, you lost the freedom, the police were a hindrance, the turbo charge, while fun to use, could land you in a lot of trouble and worse still, it rained!" Patrick feels similarly. "I can't say that I was a big fan, it added a lot of complexity with the turbo with the overheat mechanic and the upgrades system. For me the simplicity of the original was more enticing."

Between 1989 and 1991 three more home-exclusive *OutRun* games were devised, but if you were outside of Europe they probably passed you by. The first of these was *Out Run 3-D*, a rather good remixed Master System conversion of the original game with 3D glasses support, new graphics, revised stages and even three pretty good new tunes to pick from. The Master System was dead in Japan and the North American release was cancelled due to low 3D game sales, so it only hit Europe and

Brazil. *Battle Out Run* was another Master System exclusive, and another oddity. Sega's Master System developers put together a game that was obviously heavily inspired by Taito's arcade hit, *Chase HQ*. In each of the eight US-based stages, players were tasked with chasing down upgrade trucks to trick out their car, then catching up to a criminal and ramming them off the road. It received a warm reception from the press in spring 1990, but players were advised to wait for the official conversion of *Chase HQ*.

Lastly there was *Out Run Europa*, which wasn't produced by Sega at all, but instead by US Gold. Having produced the home computer conversions of the two coin-op games, the publisher had secured an agreement to make a sequel of its own. Combat was once again a major element of the game, which cast you as a secret agent chasing down enemy spies in a cross-continental chase to Berlin. It was also the first *OutRun* game with different player vehicles. "Starting on a motorbike was all sorts of weird and wrong," Steve recalls, adding, "I'm sure you drive a Porsche at some point too." He's correct, and in fact the Ferrari only appears in the final stage. For the first and only time, players were able to race across the seas and could even fire weapons at enemies. The game launched in 1991 for Europe's major 8-bit and 16-bit computers, as well as the Master System and Game Gear – the latter version also making it to US shores. It received a mixed reception, with the Amiga and Master System versions being considered the best.

The last home-exclusive *OutRun* of the Nineties wasn't originally meant to be an *OutRun* game at all. Sega subsidiary SIMS was working with Hertz to create a futuristic racing game for the Mega-CD titled *Cyber Road*, but by mid-1992 plans had changed, with the project being moved to the Mega

> Steve Lycett is a huge fan of the series and has been heavily involved with the later ports.

> [Master System] *Battle Out Run* takes place across eight stages, but the differences are mostly cosmetic.

> "To be honest, I always preferred the original game and its sense of freedom
>
> Steve Lycett

Drive and renamed *Junker's High*. Despite this, the game shared some commonalities with previous *OutRun* games – branching paths were in, and there was turbo boost mechanic. Perhaps for these reasons, Sega granted SIMS the use of the *OutRun* licence and picked the game up for export.

However, the game that became known as *OutRun 2019* was also a departure from previous entries in the series. For a start, bridges were a major part of gameplay – for the first time ever, you could fall off the road. Sometimes you'd harmlessly drop down to another road, but you could just as likely fall into a lake. What's more, the colour palette was pretty drab, taking the game further from the summer vibes the series was known for. The game ultimately proved divisive when it released in March 1993. "*OutRun 2019* was more true to the original in gameplay but the *F-Zero*-style theme just did not capture the same warm feeling," recalls Patrick. Critics offered sharply differing opinions – *GamesMaster* dismissed it as a "five-minute wonder" and awarded it a miserable 30%, while *Diehard GameFan* described it as "much better than the original" in a 77% review.

Fortunately, fans didn't have to wait long for another game to appear, as the third arcade *OutRun* game arrived just before the summer of 1993. *OutRunners* was developed by Sega's AM1 team, and returned to the traditional *OutRun* format of blue skies, branching roads and simple driving – the only concession to complexity was the addition of various cars with different transmission configurations, ranging from two to six gears. Even splitting the courses into two sets, the east and west routes, didn't matter much given that both shared quite a few stages. The biggest new
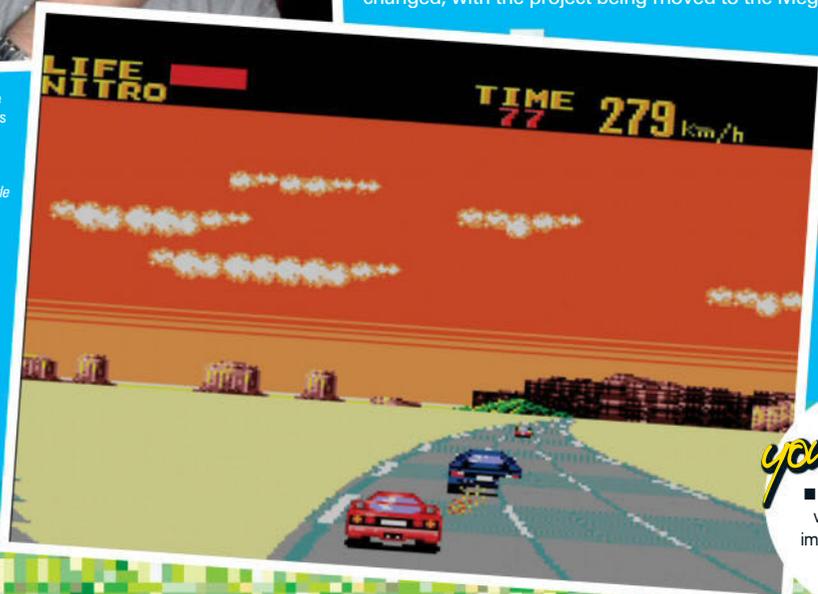
Did you know?

■ The Saturn and 3DS versions of *Out Run* improve on the original by doubling the frame-rate.

Pick up some wine?

Speed up here, nothing to crash into!

Watch out for that final S-bend...

No speed limit!

Weather forecast's dodgy here

The End Of The Road

If you have a favourite route, you might not know Out Run has an ending for each of its goals – and here's what happens in each of them

a GOAL
■ Having reached the end of the game's easiest route, our illustrious driver is hoisted aloft by a crowd of cheering spectators. Unfortunately, they're all easily distracted men. When a pretty lady stops by, they all stop to gawk at her and drop our man. Poor form, chaps.

b GOAL
■ Congratulations, you've driven a long way from home! Commiserations, your Ferrari has broken down. We're not sure where the nearest Ferrari repairer is, but we're guessing that it's nowhere near here. Oh, and it's the Eighties so you probably don't have a mobile phone.

c GOAL
■ What's most important about *Out Run* to you? If it's the female companionship, the middle route is where you want to be. Having been presented with a magic lamp, our driver receives his wish, which turns out to be a harem. Your passenger doesn't look best pleased with that.

d GOAL
■ Will this ending finally play it straight? It seems so, as someone wanders towards you with a trophy for your achievement – only to saunter straight past you and present the trophy to your female companion. Hang on a minute... was the steering wheel on the right, then?

e GOAL
■ For the master driver that reaches the most difficult of *Out Run*'s goals, there is no joke or calamity – you're presented with a well-deserved trophy for your, frankly, excellent driving. Now you've truly mastered the original *Out Run*, it's time to try one of the sequels...

OutRun

La Scuderia Rossa

OutRun has always been most closely linked with Ferrari – and here's every model featured in the series

	250 GTO	365 GTS/4 Daytona	Dino 246 GTS	512 BB	Testarossa	288 GTO	328 GTS	F40
Introduced	1962	1971	1972	1976	1984	1984	1985	1987

feature that *OutRunners* brought to the series was easily the introduction of multiplayer racing. Depending on the number of linked cabinets, up to eight players could compete against each other with the race leader choosing the way at each checkpoint. To accommodate for the increased player traffic, the number of CPU-controlled vehicles was reduced from previous games.

Thanks to the power of the System 32 board, *OutRunners* proved to be the best-looking *OutRun* game yet, with amazingly smooth scaling and very detailed backdrops. The soundtrack featured the original music, revamped by Takenobu Mitsuyoshi, as well as some brand-new tracks, and for the first time you could switch between them mid-game. The return to a successful formula coupled with new advances sounds like it should have been a guaranteed hit, but *OutRunners* wasn't a particularly successful arcade game.

"I think there was a mix of reasons for that," Steve tells us. "First it was a two-player arcade cabinet only, so it was probably quite expensive for arcade operators at the time. Second, it was around the advent of polygonal 3D racers, released the same year as *Virtua Racing* so likely for many operators it looked a bit more old fashioned." It's a very valid point – not only was the game sandwiched between *Virtua Racing* and *Daytona USA* in Sega's release schedule, those games also offered the game's key selling point of support for eight-player races. It also had a different tone than previous *OutRun* releases, as Steve notes. "Unlike *Out Run* which played it very straight (mostly!) it also had a very Japanese sense of comedy and look, which I love, but might not have been quite the taste of many western arcade operators!"

» [Arcade] The System 32 hardware pushed beautiful scenery faster than ever before in *OutRunners*.

Another factor might simply have been that fans weren't ready for a multiplayer *OutRun*. "No doubt it was a great game and the multiplayer was fun but it did not feel right to me," says Patrick. "I was pleased that it came back to a more traditional gameplay after *Turbo*'s complexity, but in my mind *OutRun* was a single player experience." But even when playing solo, *OutRunners* didn't always hit the spot. "I do remember playing it quite a bit on a Spanish holiday as a single player and enjoying it," Patrick recalls, "but some of the more wacky vehicles and drivers just grated a little." A ropey Mega Drive conversion failed to endear it to the home audience, too.

Following the relatively weak reception of *OutRunners* in both the home and arcade settings, the series went dormant for a full decade. The original game turned up in retro packages such as *Sega Ages Vol. 1* and as a bonus on *Shenmue II*, but it would be 2003 before a true new *OutRun* arrived. Luckily, the wait would be more than worthwhile.

Did you know?

■ *Out Run 3-D* includes support for the Japan-only Master System FM sound unit, despite not being released there.

» [Master System] US Gold's *Out Run Europa* was the first and only seafaring *OutRun* game.

"Four-player races still had that sense of calm I cherished from the single-player"

Patrick Michael

F50
Introduced: 1995

Handling ▪▪▪▪▪▪
Max Speed ▪▪▪▪▪▪
Acceleration ▪▪▪▪

F355 Spider
Introduced: 1995

Handling ▪▪▪▪▪▪▪
Max Speed ▪▪▪▪▪
Acceleration ▪▪▪▪▪▪

550 Barchetta
Introduced: 2000

Handling ▪▪▪▪
Max Speed ▪▪▪▪▪▪▪▪
Acceleration ▪▪▪▪▪

360 Spider
Introduced: 2001

Handling ▪▪▪▪▪▪
Max Speed ▪▪▪▪▪▪
Acceleration ▪▪▪▪

Enzo Ferrari
Introduced: 2002

Handling ▪▪▪▪
Max Speed ▪▪▪▪▪▪▪
Acceleration ▪▪▪▪

F430
Introduced: 2004

Handling ▪▪▪▪
Max Speed ▪▪▪▪▪▪▪
Acceleration ▪▪▪▪▪

Superamerica
Introduced: 2005

Handling ▪▪▪▪▪▪
Max Speed ▪▪▪▪▪▪
Acceleration ▪▪▪▪▪▪

Did you know?

■ The Mega Drive version of *OutRunners* includes the *Virtua Racing* car as a bonus, but only in Japan.

» Yu Suzuki was the creator of *Out Run*, as well as many other classic Sega games.

» Sean Millard was senior designer on the Xbox port of *OutRun 2*

» [PC] The brightly-lit streets of *OutRun 2 SP*'s Casino Town are clearly inspired by Las Vegas.

OutRun 2 was a first for the series – a direct, numbered sequel. It's a pretty bold name, when you think about it. Essentially, players were being told that a true successor had finally arrived after 17 years of waiting. But there was reason to believe it was going to deliver on that promise, because it was being developed by AM2 with Yu Suzuki as the producer. Even within Sega, expectations were high. "I had not long joined Sega when *OutRun 2* was first discussed," Patrick recalls. "I have to say I was pretty excited, especially as my new job meant the opportunity to not only play it before anyone else but more importantly for free."

In many ways, it was the old made new again. *OutRun 2* used Sega's Xbox-based Chihiro arcade board, the most advanced hardware on the market at that time, and looked beautiful as a result. It offered a variety of cars to choose from, accommodating for different driving styles – and for the first time ever, they were licensed Ferrari models. But beyond that, the *OutRun* mode was the classic game reborn, a race against the clock across branching stages. "Everything you wanted was there but better," remembers Patrick. "The music, the visuals, the drift mechanic and suddenly multiplayer just clicked into place. Four-player races still had that sense of calm I cherished from the single-player." There was also a new Heart Attack mode, in which you had to impress your girlfriend by completing challenges, alongside Time Attack.

"At the ATEI show when it was exhibited publicly for the first time in Europe there was never a free seat to play from the moment the show opened until the power was shut off at night, the response was sensational," recalls Patrick. Arcade operators pounced on the game and an Xbox conversion quickly went into production at Sumo Digital, where developers were keen to get to work. "I was over the moon! Not only one of my favourite games of all time, but a proper AM2-developed sequel that hadn't even hit arcades over here," recalls Steve. However, it was far from a simple conversion job. "Taking an experience that could be completed in minutes as a coin-op to something that took a few hours on console was the biggest deal design-wise," says Sean. "Coming up with engaging Challenges that felt appropriate to the brand and would enliven and grow an already almost-perfect experience was pretty tough." Steve recalls the technical challenge vividly, too. "Sega also wanted full online multiplayer! Plus we had to pull it into half the memory than the arcade machine had, plus get it all to load and run from a DVD. Did I mention

we had just over six months?" The tough job was pulled off well, though – with 101 missions, extra tracks based on the unconverted arcade games *Daytona USA 2* and *Scud Race* and an unlockable conversion of the original game, the Xbox version was an excellent package.

As good as *OutRun 2* was, it got even better in 2004 with the release of *OutRun 2 SP*. The game added rival cars to race against, as well as slipstreaming by driving behind other cars. But the biggest addition was a whole new set of 15 stages, based largely on locations in North America. "I think they nailed it so perfectly the first time, they wanted to look for improvements, but in a way that again sat with the whole mechanics of play rather than break the balance they'd achieved," says Steve. "All of the additions are natural and subtle ways for players to work on their techniques for better and better times. So picking when to overtake to get a boost from traffic, a brilliant risk/reward choice, the rivals were there to show you better lines and the new stages were sublime. The American road trip feel to *SP*, I think, gives the game a different feel, plus still plays the history of *Turbo OutRun*, but in a complimentary way." ▶

OutRun

Around The World

Your guide to the key locations you can visit in the OutRun series

TRANS-ALASKA PIPELINE SYSTEM
OUTRUN 2 SP

YOSEMITE NATIONAL PARK **OUTRUN 2 SP**

NIAGRA FALLS **OUTRUN 2 SP, OUTRUNNERS**

PRINCE EDWARD ISLAND **OUTRUN 2 SP**

SCOTTISH HIGHLANDS **OUTRUN 2**

WINDSOR CASTLE **OUTRUN 2**

HOLLAND **OUTRUN, OUTRUN 2**

LAS VEGAS **BATTLE OUTRUN, OUTRUN 2 SP**

WASHINGTON D.C. **TURBO OUTRUN**

MEMPHIS **TURBO OUTRUN**

PARIS **OUTRUN 2**

SAN FRANCISCO **BATTLE OUTRUN, OUTRUNNERS, OUTRUN 2 SP**

NEW ORLEANS **TURBO OUTRUN**

NEW YORK CITY **TURBO OUTRUN, BATTLE OUTRUN, OUTRUN 2 SP**

BENIDORM **OUTRUN 2**

HAWAII **OUTRUNNERS**

SAN DIEGO **OUTRUN 2 SP**

CAPE CANAVERAL **OUTRUN 2 SP**

LAKE GENEVA **OUTRUN 2**

ROME **OUTRUN, OUTRUN 2**

SEQUOIA NATIONAL PARK **OUTRUN 2**

MAYA CIVILIZATION **OUTRUN 2 SP**

ATLANTIC OCEAN UNDERWATER TUNNEL **OUTRUNNERS**

ATHENS **OUTRUN 2**

KENYA **OUTRUNN...**

GRAND CANYON **TURBO OUTRUN, BATTLE OURTUN, OUTRUN 2 SP**

MACHU PICCHU **OUTRUN 2 SP**

AMAZON JUNGLE **OUTRUN 2 SP**

EASTER ISLAND **OUTRUN 2 SP**

America

When Sega was researching new games it would often send developers out for location shoots. Due to being inspired by *The Cannonball Run* (starring Burt Reynolds), Yu Suzuki travelled to America in the hope of being suitably inspired by the country's vistas. He changed his mind upon realising how vast the country was, and switched to Europe. He returned to America for the 1989 follow-up, *Turbo OutRun*. America (along with locations such as Easter Island and the Amazon) would prove to be the inspiration for *OutRun 2 SP* when Sega AM2 created its follow-up sequel to *OutRun 2* in 2004.

BLACK FOREST OUTRUN 2

THE ALPS
OUT RUN, OUTRUN 2

CARPATHIAN MOUNTAINS OUTRUN 2

ROMANIA OUT RUN 2

PETRA OUTRUN 2

PYRAMIDS OF GIZA
OUTRUN 2

RUSSIA
OUTRUNNERS

CHINA
OUTRUNNERS

JAPAN
OUTRUNNERS

HONG KONG
OUTRUNNERS

AUSTRALIA
OUTRUNNERS

"I would use the newest technology to make the world's most pleasurable driving experience

Yu Suzuki

Did you know?

■ The Route 666 stage of *Bayonetta* includes an *Out Run* reference in the form of a *Splash Wave* remix.

Europe

Yu Suzuki moved away from his original idea to tour America and instead switched to Europe. He hired a car and spent two weeks driving around a large number of European locations with a video camera, taking as much test footage as possible. He visited a large number of cities, including Frankfurt, Monaco and Venice, soaking up the atmosphere and interviewing the locals to get a sense of place. The end results can be seen in the final game, and at the time it felt instantly different to other racing games. When Sega released *OutRun 2* in 2003, Europe once again featured heavily in the 15 available stages.

utRun 2 SP was made available in more cabinet configurations than the original version and was popular both as an upgrade and a standalone purchase, so it can still be found in many arcades. "The monster eight-player behemoth has yet to be surpassed by any driving game," says Patrick. "Walking up to one now you get a tingle of excitement. You look at those detailed rear mouldings and physically choose your ride. At release the cost to the operator was extraordinary but they hold their value because the income is still there, the draw is still as strong."

Sumo Digital again developed the conversion of *OutRun 2 SP,* which was titled *OutRun 2006: Coast 2 Coast* outside of Japan. The game built on the template of the original *OutRun 2,* with a variety of additional missions and unlockable content. Better yet, more players could get in on the act as PC, PS2 and PSP versions joined the Xbox version. A cut-down version called *OutRun Online Arcade* was released for Xbox 360 and PS3 in 2009, but this has since been removed from both services due to the expiration of Sega's licensing deal with Ferrari.

Since then *OutRun* has been put into the Sega vault, appearing in cameos and retro rereleases. There are no plans for *OutRun 3,* but Yu Suzuki knows how he'd approach it. "I would want to use the newest technology to make the world's most pleasurable driving game experience. It would, of course, have to be a convertible, and you would be able to feel the wind and fog and changes in the weather," he tells us. "And there would be a pretty girl in the passenger seat," he adds.

Despite being dormant, there's still a huge amount of love for the *OutRun* series, and its enduring appeal easy to explain. "It is the epitome of 'just one more go' – the turns you take at the game are tantalisingly brief. It's like reading a book with short chapters, you can't put it down," says Sean. "The structure works, the aesthetics work, the pace of the game is perfect – so many tiny things make a perfectly whole." For Patrick, it's all about the atmosphere. "You have the magnetism of Ferrari, the warmth of the sun, the music and a wide, open road with the incredible drift mechanic. What more do you need?" But we can't top Steve's succinct conclusion. "It's the freedom of driving expressed sincerely and perfectly," he opines – and there's no room for disagreement. ★

Special thanks to Steve Lycett for making this article possible.

» [PC] Drifting is crucial to success in the whole *OutRun* family of games, no matter which course you play.

» [Xbox] Coast 2 Coast is an excellent mode that's chocked full of challenges to complete.

UNIVERSAL HERO

1986 was the year that budget publisher Mastertronic began to shed its tag of low quality fare with a raft of excellent releases. Graeme Mason chats to the main man behind one of these notable games

IN THE KNOW

» **PUBLISHER:**
   MASTERTRONIC
» **DEVELOPER:** XCEL
» **RELEASED:** 1986
» **PLATFORM:** ATARI 8-BIT,
   ZX SPECTRUM

s a business model, the Mastertronic method was admirably effective. Established in 1984, the London-based software house initially focused on ensuring its products would be visible at a huge range of alternate outlets, such as newsagents and petrol stations. And, more importantly, once there, it predicted the price would sell each game, regardless of its quality. The resultant sales were promising, but the publisher's reputation not so; it was soon commonly assumed you got what you paid for, which wasn't much. But Mastertronic's publishing rivals didn't take long to emulate its success; even at pocket money prices, the increased competition from other budget ranges meant it needed to improve its quality of games, and fast, if it was to survive long term.

1985 saw a steady improvement, especially with £2.99-priced releases such as David Jones' arcade adventure *Spellbound*. But it was the following year that saw Mastertronic market a number of releases that proved exceptional value for money. *Molecule Man*, *Agent X*, *Kane* and *Pippo* were all games that would have made decent full-price releases, and all retailed for just £1.99. What's more, Mastertronic provided an outlet for those few amateur programmers still plying their trade from back bedrooms, and were able to take a punt on games when most other software houses

» [ZX Spectrum] Burt negotiates his way around more vegetation aboard the stricken freighter.

WHAT THE HELL IS THIS?
Universal Hero's most bizarre items

WATERING CAN
■ After gaining access to the potting shed Burt soon encounters all manner of fauna… and a watering can. That's got to come in handy, surely? Afraid not. Despite its apparent usefulness, this is a red herring. It can be used to obtain a nice flower, though. Aw.

PIECE OF GLASS
■ This is one of the first items that Burt will encounter, and he needs to hang on to it as it will prove vital later on. Upon reaching the stricken freighter, the shard needs to be inserted into a laser to produce the lens, which focuses the lasers and then activates the machine that powers the teleporter. Phew.

TALISMAN
■ As he nears the end of his important mission, Burt must find a way of combining several magical objects to return back to the freighter. After much trial and error, using the talisman on a ritualistic table will create an orb – which has been requested by the mysterious (and lazy) wizard.

DEAD COCKROACH
■ Um, lovely. One swift swipe of the swatter and Burt is faced with an ex-cockroach. But wait, there's more – he can pick it up! Surely that's no use? Nope – it actually takes care of two vicious plants that Burt needs to negotiate. Wow, deadly dead cockroach.

KNIFE
■ A nasty, if mundane item, true, but its use requires a fair dollop of lateral thought. Upon reaching the planet, Burt's way is blocked by another snapping plant. Using the knife on a nearby tree (along with a rock) catapults the missile towards the obstructive plant, thus allowing Burt access to the next section.

BENT KEY
■ What use is a bent key? Not a lot, really. However, grab a sledgehammer, find an anvil and the problem is solved. In reality the result would most likely be a broken and useless key, but in *Universal Hero*, it's a shining, useful and – critically – straight key. Now, where to use it…

MIRROR
■ Quick, check your hair, Burt! And when you've done that, have a shave! Actually, the mirror in *Universal Hero* is not for personal hygiene. It actually has a much more scientific use: it's used for reflecting a set of lasers in the far west of the space freighter. Crikey!

PASSPORT
■ Who needs a passport in outer space? Burt does. Having reached the freighter, he must return to the asteroid with 10p and use it on the telescope in order to pick up the radiation box so he can then safely pick up the plutonium. And to do that he needs to combine the passport with the ID card. Obvious, no?
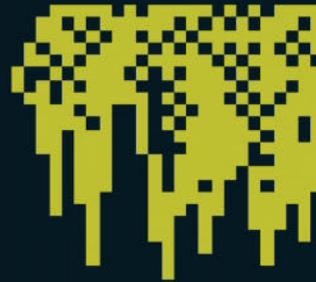
FLY SWATTER
■ This primitive extermination device appears not long after Burt has begun exploring the space freighter. There are no flies on our hero, though – the swatter is for despatching a rather large cockroach that patrols close by, thus creating a dead cockroach. Surely that can't be useful?
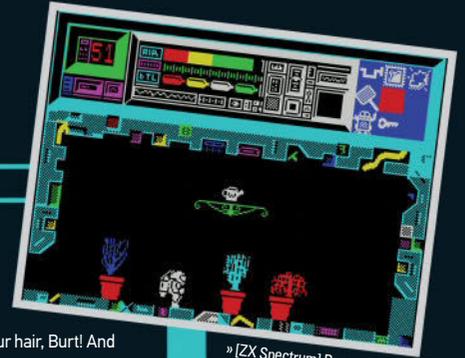
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deemed them too risky to publish. *Universal Hero*, however, wasn't quite the bedroom coder effort, with programmer and designer Stuart Middleton already in the industry. "I worked at Elite Systems," he begins, "although I'd started programming when I got a ZX81 for Christmas one year and bought a couple of magazines." Still at school, Stuart's plan had been to write a game and sell it before leaving his education. "One of the teachers at my school had written a game and my 15-year-old self saw it as a cool thing to do. Plus we also had Geoff Brown working as a teacher, so I was kinda inspired by him I guess." Stuart was fortunate to have attended Joseph Leckie School in Walsall where the Centresoft and US Gold founder often covered for his regular maths teacher.

Upon leaving school, Stuart quickly got an interview with the West Midlands company. "At the time they were working on *Commando*, and on my first day I was tasked with helping out on the Spectrum version, writing the fast graphics draw code for the backgrounds." While at Elite, Stuart began freelancing from home, specifically designing what would eventually become *Universal Hero*. "Elite was a great place to work," he recalls. "We had great fun – sometimes a little too much fun – and we felt we'd done a really good job on *Commando*."

*Universal Hero* is the story of Burt, a nerdy spaceman out to save not only his own skin, but also the inhabitants of a nearby planet. A massive space freighter has gone out of control and threatens to crash, but first Burt must repair and refuel a space shuttle so he can get off the asteroid he finds himself trapped on. "My friends and I used to play a role-playing game called *Traveller*," reveals Stuart, "and the stories were usually about exploring alien planets or space stations, and solving puzzles. We were heavily into sci-fi, and the idea of a space game with our kind of humour in it just evolved over many Friday nights." Stuart's friends included Lee Stevenson (who would help with the design of the game), his father Dave (graphics) and a few others 'chipping in'. "I remember a few friends helping out at the time," continues Stuart. "Ray Trudeux, Chris Harvey, Robert Burdon and Ade Carless were the main contributors. Ade did a few of the graphics, I'd gone to school with him and he used to come into Elite when I worked late nights to mess about drawing." Stuart's final namecheck is Jon Harrison, another Elite alumni. "He's an excellent artist, and he did the main character and a few other bits such as the spaceship. I can't help but see the huge difference between his stuff and the other art in the game when I look at it, but, in truth, it's all good." The team decided to call itself Xcel, after the spreadsheet rather than the Activision game.

But of course it wasn't just classic sci-fi board games that influenced *Universal* ▶
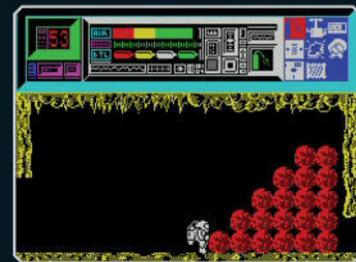
» [ZX Spectrum] Hmm, a rockfall, some dynamite and a plunger. What to do…
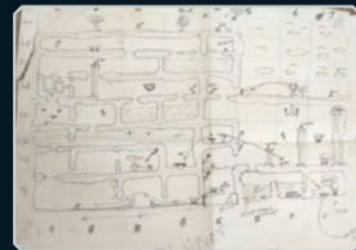
» As with many Spectrum games, the map originated on paper.

INVENTORY MANAGEMENT

Eight characters who had to juggle life's essentials

BALDUR'S GATE

■ Inventory management has always been a key part of RPGs, and the *Baldur's Gate* series is no exception. Using a combination of both weight and slots, the introduction of containers in the second game saved many item-juggling headaches. Fortunately, equipment could always be shared out among the player's entire party.

DEAD SPACE

■ Visceral's horror game wasn't a revolution in inventory management, but it utilised an immersive way of presenting the player's equipment – the game's UI was all present *on* the protagonist, not on a HUD. A press of a button would bring up the relevant screen superimposed over your character. The juggling of items was still obligatory, of course.

DIZZY

■ The Oliver twins hit the big time with this fondly-remembered arcade adventure. But what many may not recall in the dim fuzzy light of nostalgia is the relentless traipsing back and forwards across the landscape, as the ovular hero could only carry one item at a time. Luckily, this was changed for later games in the series, starting with *Treasure Island Dizzy*.

SPELLBOUND

■ David Jones' brilliant *Spellbound* introduced his 'Windimation' menu technique, and it's used extensively to pick up and manipulate Magic Knight's inventory. Able to carry five items at a time, they can be combined, given, used and discarded, and careful management of the required items is required in order to solve the game's many mind-bending puzzles.

FALLOUT 3

■ By *Fallout 3* in 2008, RPGs had begun to jettison realism in favour of convenience. With its inventory system based on 'weight' *Fallout 3*'s protagonist can haul a hugely unrealistic amount of ordnance and miscellaneous items with the actual size and bulk of items having no effect whatsoever. Which is just as well, one can never have too many rocket launchers.

MONTY ON THE RUN

■ It may have been part of a misguided attempt at preventing piracy, but *Monty On The Run*'s inventory selection, completed prior to the game, made it a tad tricky. Or impossible. Having escaped his prison, the subterranean burrower is on his way to France and needs the right five items of his escape kit. Choose wisely...

RESIDENT EVIL

■ The original *Resident Evil* is perhaps one of the most famous examples of inventory management in that it actually adds to the gameplay. Chris Redfield may be the tougher character, but, as he can only carry six items, considerably more negotiation of the Spencer mansion is required when playing as him. Now where did we put that bloody Ink Ribbon?

FAIRLIGHT

■ In some ways, inventory management has gone backwards since Bo Jangeborg's iconic 1985 adventure. Each item in the game's world has specific values that influence the hero's movement, and he can only carry a realistic five items. Pick items that are too heavy and his movement is restricted, which can be a pain as you avoid or fight the castle's denizens.

Hero. "The main style of the game, as if it wasn't patently obvious," grins Stuart, "was Douglas Adams and the *Hitchhiker's Guide To The Galaxy* series. We were all huge fans and tried to capture the humour and quirkiness of those books, which we'd all just reread. I'm not sure we managed it, but it felt like we had at the time." Adams' influence was never clearer than with the ID card Burt encounters early on in the game. Upon inserting the card into a ZX Spectrum-esque computer, the password 'Slartibardfast' (sic) gains access to the next required item. "Looking back, I think it was bordering on plagiarism in places," admits Stuart, "but I don't think Douglas Adams would've minded though."

Like many of his friends, Stuart was a gamer, so it was inevitable there would be related influences on *Universal Hero*. "The main design was me as I had it in mind what the game should be, and I wrote the initial prototype. I played a lot of games so the influence was probably several of them. I'd have to say I loved *Manic Miner* and *Jet Set Willy*, so that was likely what made me think of a flick screen puzzle game, despite having worked on *Commando*, where I came up with specific techniques for scrolling." Stuart's fellow coder, David Jones, had just completed the second in the *Magic Knight* series of games when Stuart visited the Mastertronic offices. "*Spellbound* looked great," recalls Stuart, "but I don't think I was aware of it before that visit, and *Universal Hero* was almost done by then."

Universal Hero took about nine months to complete, the elongated development time due to Stuart working on the game while still at Elite. "I was only 16, after all, and during the time working for Elite, I was also generally being a teenager. *Universal Hero* was an on and off sort of thing, with a big push at the end." At the start of development, the game was known by the title *Starman Jones*, an

» [ZX Spectrum] Burt encounters more plants around the doomed space freighter, these could be deadly, however!

"I put the sound effects in at the last minute"

Stuart Middleton

idea from Lee Stevenson. "He'd got it from a book he'd read," explains Stuart, "so just after getting in touch with Mastertronic about selling the game, we thought we'd better contact the author to seek permission to use the name." A very honourable notion, given many didn't bother back then. The book was by esteemed sci-fi author Robert A. Heinlein, and the reply from the writer's publisher, via telegram, was unsurprising. "We'd explained we couldn't pay for the name," says Stuart, "and they said no, I think because of something to do with movie rights. So we changed it to *Universal Hero*, although I can't remember where we got that from!"

However, name changes aside, the actual development of *Universal Hero* ran relatively smoothly. "I don't remember any issues with coding," recalls Stuart, "although I did spill a drink over my Tatung Einstein computer and had to give it a shower in the middle of the night." With little experience sonically at this point, Stuart sensibly opted to keep sound to a minimum. "I put the sound effects in at the last minute. I was tight on memory so only got a couple in at the end. I would have liked to put some music in, but time and hardware limitations were against me." Unfortunately this lack of time meant the latter stages of *Universal Hero* didn't quite match the earlier sections. "The last half of the game and the ending was rushed and I felt it just fizzled out and I wish I'd done more now," laments Stuart. "Up until then the whole thing seemed like fun, but when the deal was signed and I needed to add the planet section, it turned into work. I love coding, I'm addicted to it, but there's often a fine line between doing what's fun and what needs to be done to ship a product. The trick is to balance the two and not get lost in one or the other." *Universal Hero*'s beautiful content-heavy early sections contain logical puzzles and balanced gameplay where there is always something to do or look at. Sadly, by the time Burt reaches the planet, it's all guesswork and empty screens. "I'd decided to have a certain number of screens," continues Stuart, "and the asteroid and freighter were only half of them. So the last section was just as big with only a quarter of the puzzles. I regret not coming up with better ideas." Thankfully, Stuart resisted

» [ZX Spectrum] Thank goodness for names, we'd have no idea what they were otherwise.

the temptation to persevere with the shooting elements *Universal Hero* originally began with. "It was in a *Jetpac* style, but I felt it was not what the game was about," he reveals. "I kept thinking back to the *Traveller* role-playing game that initially gave me the idea, and that it was more about exploration and adventure, rather than battling against some alien foe. Having said that, I think the latter stages could have done with more enemies."

Something that Spectrum games are not renowned for in particular are end screens, and *Universal Hero* is no exception. After deactivating the rogue space freighter, the player is greeted with a disappointingly terse message. 'Well done. You have stopped a big disaster from taking place,' seems scant reward for saving the universe – but there was more. There followed an invitation to write to the developers and claim a prize. "We had quite a few letters," remembers Stuart, "many from the UK, several from Europe and one from Australia! I used to have a file full of them, and the first person to write in was sent a prize." For those of a code-cracking persuasion, Stuart left various Easter eggs hidden in the game, such as a recommendation to listen to the music of Prince (in lieu of any game music) and a bizarre reference to his 'sister' Dawn. "I don't actually have a sister," he admits, "I was very good friends with Dawn and it got tiresome explaining why I spent all my time with a girl who wasn't my girlfriend, so we just said we were brother and sister. Sounds strange now, especially reading back those messages, but I'm going to use the excuse that I was just a kid!"

Universal Hero received high praise upon release, with its outstanding value for money a predictably noted aspect. "At the time I didn't think anything of it," claims Stuart. "As I'd only ever worked on *Commando* at that point, which was really successful. I just assumed that this was the norm! How wrong I was!" *Crash* magazine in particular treated Stuart and Ray Tredoux to a slap-up lunch and a photoshoot, complete with an incongruous shopping trolley. Strangely, Mastertronic only chose to port the game to the Atari 8-bit, courtesy of programmer Steve Riding. Yet thanks to its quality and price, *Universal Hero* cemented Mastertronic's reputation and proved that it was possible to provide excellent games for £1.99. ✳

DEVELOPER HIGHLIGHTS

HOW TO BE A HERO (PICTURED)
SYSTEM: ZX SPECTRUM
YEAR: 1987

TANK ATTACK
SYSTEM: ZX SPECTRUM
YEAR: 1988

PANG
SYSTEM: AMSTRAD CPC
YEAR: 1991

» [ZX Spectrum] One of Burt's final tasks is to create and deliver an orb to this mysterious wizard.

Mr. Do!

One of gaming's biggest arguments has always been, 'Which is better, Dig Dug or Mr. Do?' While everyone has their own answer, Kieren Hawken went digging to see what everyone's favourite clown has to offer

» [Arcade] Sadly, there's no co-operative play in *Mr. Do!*

They say that in the videogame industry you just need one big hit to assure your success. Nintendo was on the verge of bankruptcy when *Donkey Kong* came along, Taito was far from a household name before *Space Invaders* and *Galaxian* was the game that sent Namco onto the path of success. Universal Entertainment hit the sweet spot itself when it came up with *Mr. Do!* in October 1982. Although the company previously had reasonable success with *Space Panic* in 1980 (regarded as the very first platform game) and *Lady Bug* the year after (an interesting *Pac-Man*

clone) it was struggling to break into the US market and needed something to grab people's attention, *Mr. Do!* did just that.

The name itself was both unique and memorable; short and snappy with a big exclamation mark to drive it home. Do himself was just as appealing; a fun and friendly clown adorned with lots of bright colours. Other operators had already found that bright and bold colours attracted a larger audience away from the standard demographic of arcadegoers, Atari's *Centipede* and Konami's *Frogger* have both used this to great effect and became very popular with casual players, Universal was very much trying the same strategy. In fact, programmer of the Atari 2600 version Ed English remembers the original *Mr. Do!* prototype that he was involved in testing was quite different to the final product. "I was the first person to receive an early version ▶

ALPHAMONSTER
■ Kill these guys to light each letter of the word 'EXTRA' and gain a bonus life.

MULTI-MONSTER
■ Watch out for these nasties as they will eat up all your fruit!

TOFFEE APPLE
■ These can be used to squash your enemies or to block their path.

BLUE MEANIE
■ These fearsome fellows only appear once you enter the bonus mode.

PIXEL PERFECT
It's amazing what you can find underground

BONUS
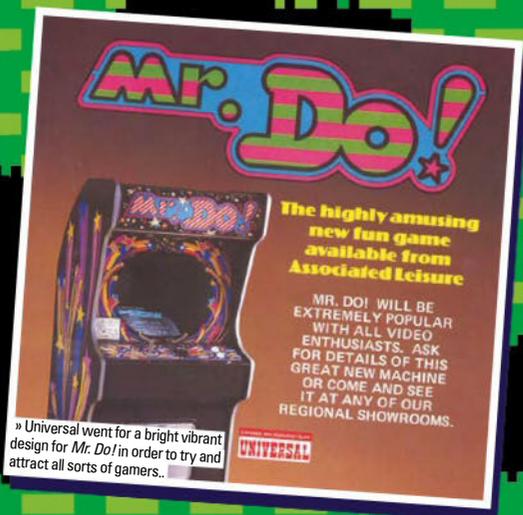■ Collect these objects to gain extra points and to enter the bonus mode.

CHERRIES
■ Collect all these as an alternative way of clearing the stage.

MR. DO!
■ Our hero: a dirt-digging clown armed with a lethal bouncy ball!

MONSTER
■ Your main foe, they will chase you until they are killed or kill you!

The highly amusing new fun game available from Associated Leisure

MR. DO! WILL BE EXTREMELY POPULAR WITH ALL VIDEO ENTHUSIASTS. ASK FOR DETAILS OF THIS GREAT NEW MACHINE OR COME AND SEE IT AT ANY OF OUR REGIONAL SHOWROOMS.

UNIVERSAL

» Universal went for a bright vibrant design for *Mr. Do!* in order to try and attract all sorts of gamers..

Mr. Do!

CLOWNING AROUND

We quiz Ed English about his 2600 conversion

How did you come to work on *Mr. Do!* for the Atari 2600?

After graduating with a Computer Science degree, I landed a job in Miami, programming embedded chess machines for Fidelity Electronics. There I learned game theory and was tutored by a chess grandmaster. The idea was he would teach me to play better chess so I could teach the computer to play better. Great fun! From there, Parker Brothers hired me to help reverse-engineer the Atari 2600 and to develop games for it. After disassembling some of the best game cartridges to learn how they programmed, I was ready for my first game assignment, converting the *Frogger* coin-op into an Atari 2600 cartridge. That took me 16 weeks and I made some good use of the Atari's limited capabilities to reuse sprites, while painting the screen, and to do two-part harmony music while doing sound effects. My *Frogger* cartridge sold four million copies the first year. I left Parker Brothers with another engineer, Ed Temple, and we started a game development company, Individeo. We liked to say, 'Two Ed's were better than one!' Individeo developed all of Coleco's Atari 2600 games for two years. *Mr. Do!* was the first Atari cartridge I programmed for Coleco. We also programmed *Front Line*, *Roc N' Rope*, *Cabbage Patch Kids* (never released), *Looping* and a couple others for Atari 2600 systems.

How hard was it back then to squeeze a state-of-the-art arcade game into the humble Atari 2600?

I always thought the programmers who worked at Atari were handicapped in a way; they had a manual that told them how the hardware worked. We had to try different things to figure out how the hardware worked. And no manual said, 'You can't do that.' So we did innovative techniques like reloading sprites and field registers (image blocks) mid-raster scan and interlaced the screen to get more graphics to display. It was uncharted territory and fun to explore what was possible.

Humble is being generous. The Atari 2600 did not have any operating system, Programmers had to write all the code on their own. 128 bytes of RAM, 4KB or 8KB of program ROM, and some registers you could write to make images display and sound effects. I worked with a four-byte stack. Slim pickings, but, like a puzzle trying to put it all together, it was a lot of fun programming.

Were you pleased how it turned out, are there any ways you wish had improved it?
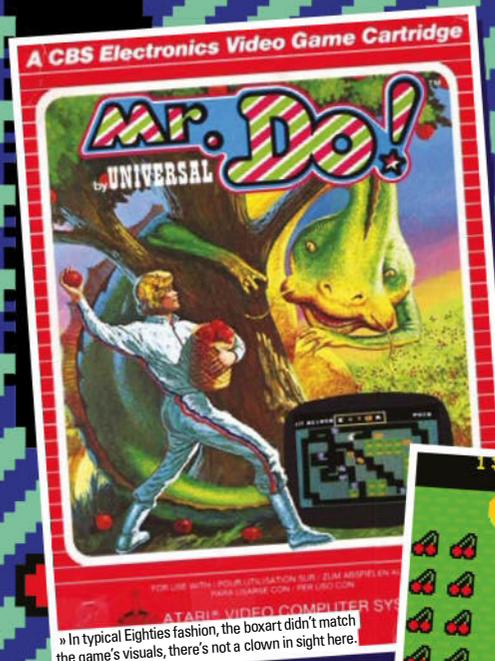
Overall, I was pleased with how *Mr. Do!* for Atari turned out. It had challenges in the game layout that required some clever coding to map onto the limited Atari 2600. Sometimes I had to interlace *Mr. Do!* and the cherries when they were on the same horizontal line, as there were only two sprites to work with. So, one frame I would show *Mr. Do!* and the next frame I'd show the cherries. It was done in a way to minimise the flashing of *Mr. Do!* to not be too tiresome on the eyes.

» In typical Eighties fashion, the boxart didn't match the game's visuals, there's not a clown in sight here.

» [Arcade] When you start a level a small tunnel has already been dug for you.

» Ed English programmed the Atari 2600 version of *Mr. Do!*.

» [Atari 2600] There's a lot less space to dig tunnels in this version.

ATTACK OF THE CLONES

It was the Eighties, so of course Mr. Do! had its copycats

FRUITY FRANK
AMSTRAD CPC

■ Programmed by Steven Wallis and published by Kuma Computers, you are not going to find many more direct *Mr. Do!* clones than *Fruity Frank*. The object of the game and how it plays is almost identical; dig through dirt, collect the fruit, kill the baddies with boulders or your ball and move onto the next level. The only real change is omission of the bonus letters to gain your extra life. One of the most pleasing things about *Fruity Frank* is how good it looks, utilising the CPC's full palette to great effect.

BOB'S GARDEN
AMIGA

■ A public domain game written by Justin Leck, *Bob's Garden* is very highly regarded among Amiga fans and we can see why. It almost perfectly copies across everything from the original *Mr. Do!* while adding a few small features of its own. The colourful graphics are really nice and the sprites in particular are very well animated. It really sings in the sound department too with a wide range of great tunes playing throughout the game. Add in some great presentation and you have a real winner.

"The final game changed the look of Mr. Do! to be more colourful"

Ed English

▶ of the *Mr. Do!* arcade game, which I still have," he remembers. "The final arcade game changed the look of *Mr. Do!* to be more colourful, to appeal to a wider audience, based on feedback Universal was given. The all-white clown character for the *Mr. Do!* prototype I was given was the *Mr. Do!* I became familiar with. It wasn't until after I completed the Atari 2600 version of *Mr. Do!* that the final changes were made." Interestingly Coleco, which Ed was contracted to, acquired the rights for the home console versions of *Mr. Do!* well before the game was even finished, just to stop Atari getting its hands on it.

Mr. *Do!* became part of a short trend of digging games, started by Namco's *Dig Dug* around six months earlier. Other arcade games that followed this lead were Taito's *The Pit* and Sega's *Thunderground*, albeit to far less success. Although, at a glance, *Mr. Do!* appears to be nothing more than a blatant clone of Namco's game, it does, in fact, play quite differently and requires a far more tactical approach. The basics of both games are very much the same: dig tunnels, kill monsters and score as many points as possible, however *Mr. Do!* adds so much more to the equation with more monsters to contend with, who are also of greater intelligence, and the need to collect fruit. Random tunnel-making won't get you anywhere in this game, you will need to plan your route from

the moment you start. This is because the monsters start chasing you from the moment they appear and can also move faster than our hero. Carefully-dug tunnels gain you valuable seconds and also allow you to create traps. The giant toffee apples in *Mr. Do!*, act much like the boulders in *Dig Dug*, in that they can be dropped on your foes to squash them, but be careful how you do it because you might end up squashing yourself! They can also be used tactically, too, to block a path behind you, for example. Although this does only work for a short time, as the enemies can eventually push them out the way. The level doesn't finish until all the fruit is harvested, or you kill all enemies.

Another key element of *Mr. Do!* is the Alphamonsters, these fellows are basically an enemy with one letter of the world 'EXTRA' pinned to them. When you kill them, you light up that specific letter, collect all the letters and you not only end the round early, but also get a neat little animation and an extra life. The latter of which is extremely useful as there are no continues in the game. From time to time a bonus item will appear in the centre of the screen, these are usually an item of food such as a cake or cheese. When you collect these, the screen turns red and all the enemies are frozen for a short time. This also calls out an Alphamonster and, after a short pause, a group of blue monsters who will not only come after you, but also eat your fruit. If you manage to kill the Alphamonster during this sequence the blue meanies ▶

» [Arcade] If you are clever you can take out all the enemies at once with a falling apple.

MR. EE!
BBC MICRO

■ Without doubt one of the most famous *Mr. Do!* clones out there, *Mr. Ee!* is so close to Universal's game that we're amazed the developer wasn't sued. Everything about this game is pretty much identical to the original coin-op from the graphics (including the actual *Mr. Do!* sprite) to the tunes and sound effects. The level layouts are the same, the bonus system's intact and even the vertical field of play has been ripped. There isn't a lot more we can say about *Mr. Ee!*, it's just *Mr. Do!*, but with a different name.

MR. DIG
ATARI ST

■ Published by leading PD label Budgie UK and programmed by Robin Edwards using the STOS game creator, *Mr. Dig* is a pretty lacking clone of *Mr. Do!* for the Atari ST. The graphics are average at best, the music has disappeared and the bonus system has gone walkies too. You also rarely get more than a couple of bad guys on screen at one time, making the game incredibly easy. *Mr. Dig* is definitely one of the poorest clones we tried out, which is a real shame as the ST has no decent alternative.

HARD CHEESE
ZX SPECTRUM

■ As you can imagine the Speccy has more than a few *Mr. Do!* clones in its library, but this is definitely the most interesting one. Published by dk'tronics (of *Popeye* and *Maziacs* fame) in 1983 it was programmed by the duo of Paul Johnson and Eugene Farrell. The first unusual element is that you are now a little guy in a bulldozer and you appear to be collecting cans of Coke, as opposed to fruit. Instead of a ball you now launch this flashing green block at the enemies. *Hard Cheese* is fairly basic, but a lot of fun.

MR. DOO
ACORN ARCHIMEDES

■ Published on the cover of *Archimedes World* magazine, *Mr. Doo* is a great clone for the acorn machine. Instead of a clown, though, you now control a wizard, but the core gameplay is exactly the same. The only real additions to the game are the power-ups that can be collected. These help you turn the tables on the enemy and complete the levels quicker. *Mr. Doo* has lovely colourful graphics, great digitised sound and addictive gameplay that will keep this game right at the front of your Archimedes disk box.
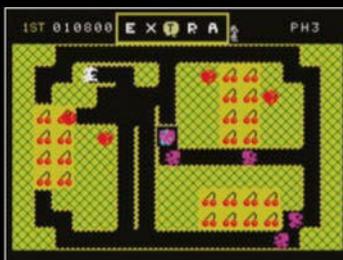
Mr. Do!

SHARP X68000
■ The Sharp X68000 version of the game was included on a double-disk set with the equally-excellent sequel *Mr. Do's Castle* (using the Japanese title *Mr. Do! Vs. Unicorns*). The X68000 version of the original *Mr. Do!* looks to be an exact port of the original coin-op's source code, so it is pretty much arcade perfect in every single way, including the use of the correct screen ratio.

ATARI 2600
■ As you can probably imagine, several sacrifices had to be made to port *Mr. Do!* to the Atari 2600. The biggest problem is the lack of resolution, which means you can't form any complex tunnel systems to escape the bad guys. It also plays a little on the slow side. It's a cut-down version, sure, but its flaws don't spoil the core game too much, thankfully.

COLECOVISION
■ Of the early ports, the ColecoVision iteration of *Mr. Do!* has always been the most highly regarded, and rightly so in our opinion. The colourful graphics certainly look the part and the developers did a great job of replicating the audio on Coleco's console, too. The only flaw with this version is the bland single-colour sprites, which look a bit naff next to the rest of the visuals.

APPLE II
■ The Apple II version was never going to be pretty, but its coders did a fairly decent job, all things considered – you can certainly tell what it is. Bar a few odd beeps here and there, the sound is almost non-existent, though: another flaw of the hardware, unfortunately. Thankfully, Apple II *Mr. Do!* does remain authentic in the all-important gameplay department.

NEO-GEO
■ Known as *Neo Mr. Do!*, this version for the powerful SNK console is more of a remake than a straight conversion. The most striking addition is the outlandish backgrounds, which can actually be quite distracting at times. The best new feature, though, is the power-ups, these add a whole new element to the already excellent gameplay.

ATARI 8-BIT
■ Programmed by DataSoft, the Atari 8-bit port of *Mr. Do!* very much rivals the ColecoVision port when it comes to the early conversions. While the colours are not as vibrant as its competition, the multi-coloured sprites are a huge improvement and the audio is far superior. This version also nails it in the gameplay stakes too.

GAME BOY
■ Ocean's Game Boy conversion of the game is another that takes a few liberties in order to suit the hardware better. The levels now scroll, instead of taking up a single screen and many of the layouts have changed. The Game Boy version also has in-game music and little animations after each stage. A fun, portable and very playable rendition.

COMMODORE 64
■ Another home computer conversion by DataSoft, it won't come as any surprise to learn that it's incredibly similar to its Atari 8-bit port. The only real differences coming in the form of a smaller range of colours and slightly less impressive sound effects. It cements itself as another very solid version of an already great arcade game.

» [Arcade] Once you have completed three consecutive stages you are treated to a short animation.

MSX
■ As you would expect, given the almost identical hardware, the MSX has many similarities with the ColecoVision port. Once again we have rather bland single-colour sprites mixed with otherwise attractive graphics and gameplay that stays very close to the coin-op. The addition of annoying in-game music is not so good though!

SUPER NINTENDO
■ Although THQ isn't a company renowned for its quality, this late 1996 SNES port is terrific. Why it came about so late in the system's life, though, is anybody's guess. It remains close to the arcade while adding a few minor enhancements in both the audio and visual departments. SNES owners should track this one down.

SEND IN THE CLOWNS
You might want to look away if you're scared of them

ATARI CLOWNS
■ Although they were never actually named, the two clowns that appear in the popular 1980 Atari 2600 game *Circus Atari* are among the earliest examples of clowns in a videogame (having first appeared in arcades in 1977).

KICKMAN
■ Kickman is the titular character from an obscure 1981 Midway arcade game. It plays a little like *Kaboom!* with your character trying to catch balloons in his hat while riding a unicycle. Interestingly it also features a cameo by *Pac-Man*.

CIRCUS CHARLIE
■ Another clown to feature in a game carrying his name, *Circus Charlie* is a hugely enjoyable 1984 Konami coin-op that was later ported to several home systems. The game is set over seven different circus-themed stages.

RONALD MCDONALD
■ More than just a videogame character, Ronald McDonald is known for his association with a certain fast food brand. He appeared in a wide range of different titles going right back to the Atari 2600.

KINKY PINKY
■ One of the most fearsome bosses from Eugene Levy's excellent 1988 Williams arcade game *Narc*, Kinky Pinky is the right-hand man of Mr. Big and responsible for running his hugely-profitable seedy porn business!

BONKER
■ Bonker The Clown appeared in three of the four *Clay Fighter* games, a popular series of fighting games by Interplay that originated in 1993. The game was notable for its use of rendered clay models and comical interludes.

MAD CLOWN
■ Mad Clown is one of the opponents from the 1994 SNES game *Super Punch-Out!!*. He is the third fighter you face on the world circuit and utilises his circus skill of juggling balls to great effect along with his oversized fists.

SWEET TOOTH
■ Markus 'Needles' Kane, (or Sweet Tooth, as he's more commonly known) is one of the popular characters from the *Twisted Metal* series. He's the definition of killer clown and got more darker as the series progressed.

ADAM
■ Anybody who's played Capcom's 2006 zombie slash-'em-up *Dead Rising* will be very familiar with Adam. One of the most annoying and downright violent characters in the game, his twin chainsaws cause some real damage.

DROPSY
■ The newest entry in our gallery of clowns, Dropsy is the star of last year's fan-funded PC game of the same name. A traditional point-and-click adventure, it was ported to iOS shortly after, with an Android port currently in the works.

» [Arcade] Be very careful dropping apples, as you can easily squash yourself.

▶ are turned into toffee apples. On very rare occasions dropping an apple on an enemy will cause a diamond to appear, if collected this will not only reward you with 8,000 points, it will also complete the stage for you and give you a free game, this was a very unique feature for an arcade videogame in the early Eighties.

Mr. Do! ended up being the most successful game released by Universal by quite some margin. Although it spawned numerous sequels, including the excellent platformer *Mr. Do's Castle*, none of them quite captured arcade audiences in the way the first game had. We had to know if Ed English knew if it was a winner from the day he first got to test it "As soon as I saw the *Mr. Do!* arcade game I knew it was a winner. Colourful animated graphics, intuitive, addictive gameplay, increasing challenges, with fun sounds and music. As a player/programmer exploring the arcade prototype game that was sent to me, I always felt I could do better next time I played it. *Mr. Do!* would get trapped or have an apple fall on him and it was always my mistake. The acceleration

of the difficulty was well paced so you could gradually improve your skills and reach higher levels. It had a fun, carnival-like theme with simple but rewarding gameplay. Overall it was a great orchestration of gameplay, audio and visuals. A real gem was created!"

Mr. Do! had a real lasting impression on Ed. "When my partner, Ed Temple, and I left Parker Brothers to start a game development company, we rented a small three room office in Massachusetts," he remembers. Us two 'Ed's' ended up programming all of Coleco's Atari 2600 games for two years and they would always ship the arcade games to our offices. It was a small building and the other tenants were mostly accountants and lawyers who would knock on the door to see what all that noise was. It was nearly always *Mr. Do!* blaring out the music and sound effects. I still have that very same arcade cabinet in my house to this day, in fact I even called my cat *Mr. Do!*." We couldn't let Ed go without asking one last question, though, which one is better – *Mr. Do!* or *Dig Dug*? "*Mr. Do!* makes *Dig Dug* eat dirt!" Ed laughs. ✱

Special thanks to Ed English.

Turbo Esprit

WHO'S MORE DANGEROUS: COPS OR CRIMINALS?

RETROREVIVAL

» **AMSTRAD** » **DURELL SOFTWARE** » **1986**
**As a kid, I never really got the concept of going out for a drive.** To my mind, driving had always been a very purposeful activity – something you did because you had a particular destination in mind. Of course, I was looking at it as a passenger, the only perspective my age afforded me (and the only one my lack of a driving licence allows today), but videogames didn't offer me any further insight. Sure, *OutRun* offered pretty scenery, but you still had cars to overtake and a clock to beat. If you didn't have a purpose, why bother?

The idea of driving itself being fun had never really crossed my mind, and it wouldn't do so until I got the chance to experience an open-ended driving game for the first time. Suddenly, it all made sense. *Turbo Esprit* was about catching drug smugglers – that's what the inlay said, at any rate. For a child with a terrible grasp of the controls and a love of causing chaos, the open world offered far more fun. I could drive on the wrong side of the street, wedge my car into narrow roads and stop traffic, and generally ruin the day of every virtual commuter in the city. Did I have a particular goal? No, but I was definitely having fun. I'd finally learned the point of going out for a drive.

And dear reader, you've learned something new today as well – specifically, the reason why the government won't licence me to drive. ✳

PENALTY : 00023

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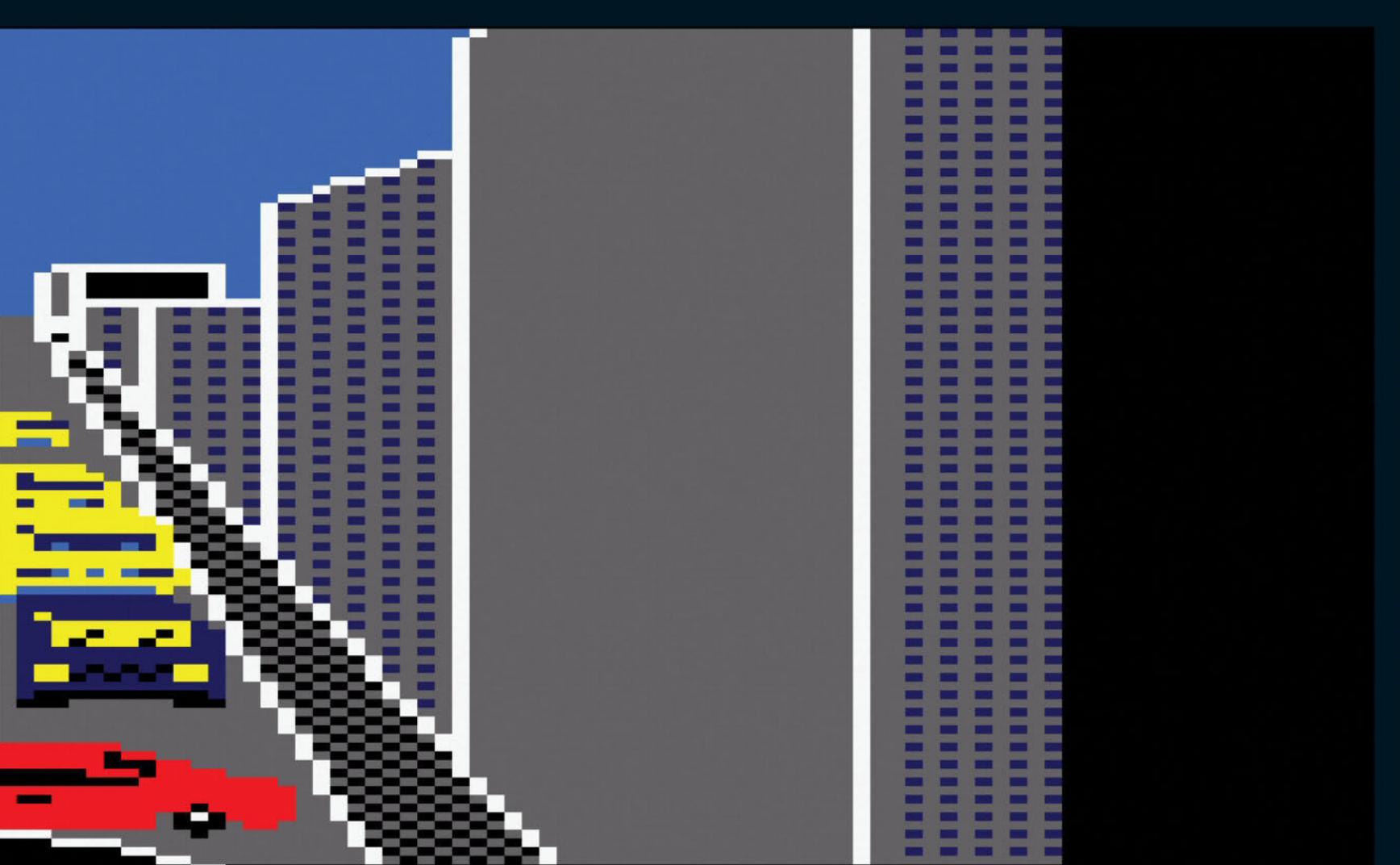
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probe SOFTWARE

The story of Probe is the story of the late Fergus McGovern, who sadly passed away this year. Andrew Fisher talks to former colleagues to build up a picture of the company and the man himself

Fergus McGovern was just 18 years old when he formed Probe Software with Vakis Paraskeva in 1984. Vakis programmed the company's early games, starting with *Alcatraz* on the C64, then *Dirty Den* and *Defence 16* on the C16. Then came an unusual licence – *The Adventures Of Basildon Bond*, based on the Russ Abbott character. Programmer Carl Muller, a long-term Probe employee, says, "Fergus started off with *Basildon Bond*, so he clearly saw licences as a way forward." *The Devil's Crown* on Spectrum and Amstrad turned a corner for Probe in terms of quality.

THE CHANGING FACE OF PROBE

How the company evolved over the years

With a cash flow from compilation appearances and budget games, Probe started to concentrate on arcade conversions. Probe would commission a freelance team, with Fergus managing and keeping the project on track. Working with US Gold gave access to Sega titles, including *Golden Axe* and *Turbo Outrun*. Licensed products brought their problems, though, as Carl explains. "You could be weeks into programming a game and then find out you didn't *actually* have the licence. But Fergus was willing to take a punt on a phonecall and a prayer – some successful licences were signed when the game had reached alpha status, Fergus having self-funded them for several months."

David Leitch ended up at Probe after Mirrorsoft's collapse. "When Tony Beckwith moved to Probe he started offering me stuff to do for them." But what was working at Probe like? "The office had a real 'boy's club' kind of atmosphere, more so than anywhere else I've been in the industry. It also came with a tremendous can-do attitude. People took their jobs seriously and things progressed at a cracking pace. It felt like a productive place to be."

Fergus himself left a big first impression, as Carl tells us: "He was very approachable. You could always pop into his office. The atmosphere was fun. We had producers Jo Bonar and Neil Young (later of EA LA and ngmoco) and

a wide range of freelancers as artists, coders and musicians. Loyalty to friends was always a watchword for him. He was very good at bigging up his friends, less good at briefing people about important meetings!" Freelancer Mark Greenshields agrees. "He was friendly, fair but didn't bend. If you did not deliver you did not get paid."

David Leitch also has fond memories of Fergus. "Ferg was a really unique character, more than a bit of a rascal and a very effective businessman. I've never met anyone else quite like him. If he knew he could rely on you, he was loyal and generous. And he was usually good at treading the fine line between being the boss and being one of the lads. I've always had a huge amount of respect for what he achieved."

Simon Pick, who worked on several games for Probe, recalls his first meeting with Probe's boss. "I was introduced to Fergus at a games show in 1987. I thought he was another coder and asked him what he was working on, he smiled and said, 'I'm sorry I can't talk about that.' I thought that was very

strange, until Colin Fuidge told me who he was and that he had a lot of games in development for publishers under NDA. So my initial impressions were that he was a mysterious character working on lots of top-secret games!"

In terms of original games, Probe's biggest hits were *Trantor The Last Stormtrooper* and *Savage*. "It was the late Eighties and I was making games as a hired gun, working on some projects for Elite Systems, recalls David Perry. "I met Fergus and saw *Trantor* on Spectrum; he wanted a version for Amstrad CPC. Fergus was energetic, had a great personality and really cared about the games business."

> ## "Fergus started off with Basildon Bond, so he clearly saw licenses as a way forward"
>
> Carl Muller on Probe's licensed games

» [Amstrad] *The Adventures of Basildon Bond* was a surprisingly oddball licence.

INSTANT EXPERT

■ Probe started life in south London, nestled in Croydon, and then moving between premises in that area throughout its existence. HotGen is still based there.

■ Between 1984 and 1994, Probe estimated its revenues as $1.4 billion from 400 titles (counting versions for each format as one title).

■ Fergus received a Lifetime Achievement Award at the 1995 Golden Joysticks.

■ Probe's budget games included the likes of *Harvey Headbanger* (Spectrum version), Pogostick *Olympics*, *Mr. Wino*, *Stunt Bike Simulator*, *Turbo Boat Simulator* and *Ninja Scooter Simulator*.
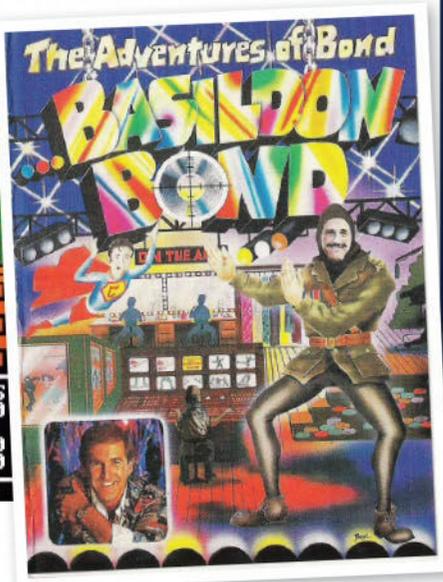
■ David Perry remembers *Crazy Jet Racer*. "That was just a fun idea that Nick Bruty and I were working on, the press started to report on it when *Dan Dare III* fell in our laps. We felt that adding the brand might give the game a better chance. We were using a lot of tricks to push the Spectrum pretty hard at that point."

■ Acclaim paid over $40 million for Probe, making Fergus a multi-millionaire and earning him a position on the Sunday Times 'Rich List'.
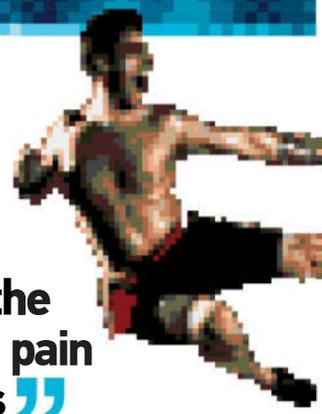
■ For his charity work, Fergus was given the freedom of the City Of London.

TIMELINE

Before long, Probe expanded into the burgeoning console business. "*Judge Dredd* on SNES [was my favourite project], since I have a soft spot for platform games," Carl Muller recalls. This used digitised backgrounds from the Sylvester Stallone film. Did the licence affect how Carl worked? "There was always wiggle room. For *Judge Dredd* you had a Stallone movie (far superior to the first draft of the movie script, but not as good as the Karl Urban one) that we put as the first half of the game, followed by a second half inspired by the comics."

In 1992 came 'Mortal Monday' (or the release date for *Mortal Kombat*) – with Probe creating ports of the original *Mortal Kombat* ready for simultaneous worldwide release. Paul Carruthers

» [SNES] The first half of *Judge Dredd* was inspired by the Stallone film.

» [Mega Drive] Probe's Mega Drive port of *Mortal Kombat* was well received.

> ## "It was all pranks. All the time. It took some of the pain out of long crunch nights"
> Paul Carruthers

regards the game as a career highlight. "The Mega Drive version ended up playing very closely to the original. I derived a lot of nerdy pleasure from this.

"Fergus was pretty much always in his office (when he was in the country) so we never saw that much of him on the shop floor," Paul continues. "It was the sociable end of things where he was most visible. He would always put his credit card behind the bar on a Friday evening, and then it was usually on for a curry or down to Joe Bananas for a late one. He'd never let anyone else pay for anything." What about office life? "There were a lot of very good people

there who were motivated and great fun to work with, and Friday evenings in the pub were the cathartic end to the week. It was all pranks. All the time. It took the pain out of long crunch nights."

With recent debate about the merits and horrors of crunch time, what was it like at Probe? "[There was] always massive crunch at the end of projects, but that was down to standard-industry practices," explains Simon. "If we did work late, or come in at the weekends, Fergus would supply pizza and would come in to the office when we were working late to thank us for going the extra mile." David Perry says, "We turned into a game factory for Probe, they would hand us a project and in a short amount of time they would have a game to sell. It really helped my career having a number one game like the *Teenage Mutant Hero Turtles*."

Conversions were important to Probe as David Leitch points out. "Conversion work was always a deadline-driven affair, especially on the sort of high-profile titles Fergus was bringing in, and that's a useful discipline to get in to." Mark Greenshields chips in, "I always delivered on time and to budget and quality so it was fine. I got paid and Fergus got the game!" Nick Baynes says, "There was one infamous occasion where a

DEFINING GAMES

DIE HARD TRILOGY

■ **Retro Gamer** has heaped praise on this game before, but it was a key title for Probe as a developer in the PlayStation era. Issue 69's Making Of article reveals how the team grew to cope with 3D, even to the extent of building a motion-capture studio. Simon Pick says, "We massively overstretched ourselves and only avoided complete disaster by sheer good luck." Across Saturn and PlayStation this game was well received and still holds up as a fun portrayal of the first three films with three different game styles.

MORTAL KOMBAT II

■ Probe handled all the Sega versions as well as DOS and Amiga ports, while American developer Sculptured Software was responsible for the SNES conversion. Following the controversy over the gore in the first game, the blood and guts were there from the start in the sequel – with a warning on the box, as the industry was preparing its self-regulating age ratings. The Fatalities from the first game were joined by Babality and Friendship finishing moves, and five new playable characters in the line-up. Make sure you play the original versions, not the poorly-emulated *Mortal Kombat Arcade Kollection*.

» It was hard to forget this freakish-looking advertisement for *Savage*.

programmer was locked in the office to make sure he couldn't go home. Generally the team spirit and camaraderie saw us all pulling together, working ridiculous hours to hit our deadlines."

Nick joined in 1992, aged 17. "It was a harsh environment for someone new to the industry. The main thing that held it together was the team spirit. We worked together and spent our social lives together, so it was a close-knit group and you knew that someone had your back." What did he think of Fergus? "He was already an industry legend, and such a big personality in the office – he *was* Probe. Another word would be generous – in the pub he would always make sure the Probe boys had a beer in their hands."

By 1995 Probe had built up a good relationship with Acclaim, and Fergus accepted a takeover bid. Mark says, "I remember spending a lot of time with Fergus after he sold Probe and had to spend the year outside the UK. I was living and working in Paris so we met up there many times." David Leitch adds, "I visited him when he had a year out in Ireland after leaving Acclaim. This is still,

I am very glad to say, the only time I have ridden a horse or fired a shotgun. Both ill-advised activities really, considering the amount of booze we'd put away the night before!"

Probe's work appeared on PlayStation, Saturn and Nintendo 64, although *Ultra Soccer* on the N64 was cancelled during development. Carl remembers, "For the N64 hardware launch in Tokyo I got invited to a meeting with Kemco – a company that made videogames because the boss liked them. I had no briefing before the dinner but as soon as Fergus went to the loo they started quizzing me! It seems my (clearly bad) answers led to *Extreme-G* not being a Kemco game. Yet they were the model of politeness and showed me around Hiroshima. And *Extreme-G* was a hit for Acclaim and lucrative for the team so it all worked out all right in the end."

Die Hard Trilogy and *Alien Trilogy* were Probe's biggest hits in the Nineties. Simon was in charge of *Die Hard*. "I made a number of risky suggestions which Fergus was happy to support. Turning *Die Hard* into three separate games was one such risk; the *Alien Trilogy* team made a single game and it would have been a safer bet to follow that route, but Fergus was happy to let us try. Fergus was very willing to throw money at a problem to fix it. He flew art director Dennis Gustafsson over to New York to take reference photographs. He set up a motion capture studio to generate all the animation we needed. If you could demonstrate that you needed more people to hit some deadline Fergus would supply them."

Everyone seems to have their own favourite Fergus anecdote. ▶

PLASTERED

Nick Baynes was a budding games journalist before joining Probe, and those skills were used when he became responsible for *Plastered*. "Fergus had wanted an in-house magazine for some time. Somehow it became a regular part of my job for a couple of years, morphing into a bi-monthly magazine. Some stuff we put in would be in breach of a million HR laws – when the latest issue came out I'd sit at my desk waiting for the phone to ring and be told I'd gone too far this time!

"It was a mix of company news, project updates, and slanderous pub tittle-tattle. Unfortunately the latter was the easiest thing to source so it tended to lean too much in that direction. I was relieved to go back to just making games once it was over. *Plastered* typified the 'work hard, play hard' attitude at Probe at the time."
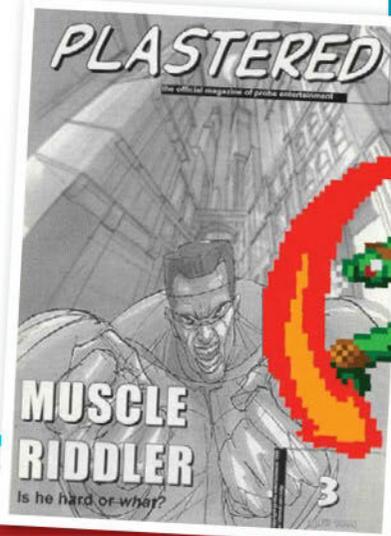
RE-VOLT
■ A racing game based on remote-controlled cars, *Re-Volt* included a track editor on console and PC (with the PC version featuring extra cars, tracks and a stunt arena). Spin-off *RC Revenge* and its sequel bought the racing action to PlayStation and PS2, while an Xbox beta version and an arcade version also existed. The Dreamcast and PC versions, produced by Nick Baynes, were the best-received at the time. Fans are determined not to let the PC version die, creating an open-source server and community (RV House) allowing online multiplayer games to continue and new tracks to be shared.

SAVAGE
■ Big, bold and brash sums up *Savage*, designed by David Perry and Nick Bruty – with Firebird's memorable advertising campaign featuring a bespectacled nerd going 'savage' (pictured at the top of this very page). Level 1 saw the barbarian fleeing a dungeon packed with hazards and bosses to defeat. Level 2's fast-moving 3D action threw giant monoliths and enemies at the player. In level 3, the smoothly-animated eagle flew around a tricky maze. With large player sprites and great music from Maniacs Of Noise, it is still fun to play. Of course the barbarian was doing all that work in order to rescue a princess from a castle...

T2 – THE ARCADE GAME
■ This refers to the lightgun game, featuring voice samples and neat digitised graphics. Paul Carruthers says, "Arnold Schwarzenegger's agent had to personally approve every image of him that appeared in the game – standard procedure for Arnie. There were only a few changes to be made but it was a slow turnaround, and most changes were demanded right at the end when time was in short supply." The SNES and Mega Drive versions supported the Super Scope and Menacer respectively to recreate the feeling of aiming at the screen in a first-person view, scrolling horizontally in an *Operation Wolf* style.

WHERE ARE THEY NOW

CARL MULLER
■ Carl's career stretches from the humble C64 to more current devices and operating systems such as iOS. Carl followed Fergus to HotGen and continues to work there today, making plug and play television games.

DAVID LEITCH
■ David worked on projects for HotGen. "I had a little development company but we shut it down in 2010. I had planned on taking a bit of a break, which has turned into a long break. The industry's much tougher these days."

DAVID PERRY
■ David went to the States and formed Shiny Entertainment. "I'm currently CEO of Gaikai, a company owned by Sony; my team is responsible for PlayStation Now and works on technology like Remote Play and Share Play."

MARK GREENSHIELDS
■ "I currently run Firebrand Games, based in Florida since 2003. Firebrand is responsible for many successful racing franchises including *Cars 2*, many *Need For Speed* games, *Trackmania* and others."

NICK BAYNES
■ Nick moved to Climax Racing as development director. The firm was acquired by Disney to become Black Rock, with Nick directing *Split/Second*. In 2014 he joined Gunjin. Its first game *Auto Warriors* is set to release this year.

SIMON PICK
■ Simon was the subject of issue 145's In The Chair. He set up PictureHouse Games and created *Terracon*, worked on the *Burnout* series and *Harry Potter*. He is currently at Google, working on the Chrome browser for Android.

▶ Carl says, "There was that time he tried to take an Acclaim producer into a Croydon nightclub but they were refused due to US designer denims not being 'dress code'." Simon's story involves money: "When I was negotiating with Fergus to work on *Die Hard* he would never discuss money out loud. We would talk for a bit, he'd write a number on a piece of paper, fold and slide it across the table to me and say, 'I was thinking this much…' I thought, 'Wait! What? People actually do this?' It was like being in a spy thriller!"

David Perry remembers cars. "I needed a car badly and he had a black Volkswagen Sirocco, so I offered him my project for it. He handed me the keys. I *loved* that car! He ended up in a Ferrari." Simon also recalls the status symbol: "Fergus loved his Ferrari. He would take any visitors to the office out for a drive. It was a symbol of his success." Nick sums it up: "There are so many stories that you could fill a book with them."

So what did everyone learn from their time at Probe? "Probe shaped my entire

> ## "Ferg was a really unique character… I've never met anyone else quite like him"
> David Leitch on Fergus McGovern

career, explains Nick. "We always felt like underdogs, even at our largest there was always a sense of camaraderie – us against the world. I learned a lot about myself and life in general. I learned a huge amount about game design and production in my time there."

Carl explains, "Fergus's primary skill was in detecting falsehoods, and in hiring people around him who could make a positive contribution to the project; for a long time we were mostly freelancers but as we aged this changed. And success is built primarily on relationships over the long term, not short term politics or technical gifts." Simon was grateful for Fergus's advice when he was setting up PictureHouse Games; Fergus offered to fund Simon and his partners but suggested Simon retained 100 per cent of the company himself.

David Leitch says, "I got to meet and work with a lot of smart and focused people, on both the development and business sides of the company. It's impossible for that not to rub off on you and I got a lot better at many aspects of my own job." David Perry concludes, "Fergus taught me that anything is possible, to think like an entrepreneur."

After selling Probe, Fergus initially formed HotGen as a software label, before expanding into a range of plug and play TV games produced with toy manufacturer Jakks Pacific. Carl Muller programmed many of them.

"At HotGen we are between the games industry and the toy industry at the moment," he says, "creating toys and gadgets and pretty apps (with gameplay) to control them. The app side requires traditional game design and art skills. The embedded firmware side requires the skills we used in 8-bit

» [PlayStation] *Alien Trilogy* remains a surprisingly atmospheric first-person shooter and should definitely be picked up.

h e a d l i n e s

F1 TERRORISTS HIJACK OCP TOWER
F2 CRAZED PUNKS
     terrorise neighbourhood
F3 POLICE STRIKE
     stolen vehicle epidemic
F4 ROBOCOP GYROPACK TRIALS
F5 ANDROID v CYBORG DUEL

» [Master System] Probe would turn its hand to anything, but was best known for its licensed games.

PLAYER 1 SELECT

USE SPACE TO MAKE SELECTION
THEN PRESS ENTER

» [Amstrad] Probe managed surprisingly solid conversions of Konami's arcade hit.

days, combined with faster development equipment. The toys sell in numbers that previous titles just hadn't seen. Going from a Game Boy Advance game that sold derisory numbers to a multi-million selling toy was great fun."

Carl fondly remembers particular HotGen titles. "The *Golden Tee* TV game – we squeezed a top-end PC into the original Amiga-style arcade game. Decoding the logic of the Namco games was quite rewarding; on *Pac-Man* I was disassembling the work of genius. Writing a traditional platform game (*Aladdin* in the Disney pack) was really fun. When you hear of indies going to the wall every week and the triple-A studios sacking 10-20 per cent of their staff every Christmas we got thankful for straddling the toy and game boundary."

Crystal Palace announced the death of Fergus McGovern, an associate director of the club, on the 28 February 2016. An outpouring of memories on social media followed. Friends and colleagues joined family at a moving service.

Carl was shaken up by the news. "I am sure that most people could not believe it. He was out partying as usual with his industry mates the week before." David Leitch echoes the disbelief. "I heard about it the day it happened, but I don't think I really believed it till the second or third message came through. He was only a few years older than me." Paul says, "It was a huge shock, as it was to all who knew him. You always felt with Fergus that he was planning some sort of big new venture in the industry, so I'm sad that will never happen."

Mark says, "He was a good guy, gone too soon. He was around early in my career and helped mould my outlook." David Perry says, "[I was] incredibly sad, as Fergus was a family man and left a *ton* of friends behind. He impacted the business and will never be forgotten."

Nick Baynes reflects on his long friendship with Fergus. "It's no exaggeration to say that he changed my life and many others like mine. While he's gone far too young, he's left a legacy that won't ever be forgotten." Simon Pick says, "Fergus and Probe software were instrumental in forming the games industry that exists in the UK today. He was always positive and happy, always planning the next "big thing" and telling you how great it was going to be. He has influenced and touched the lives of an enormous number of game developers over the years. He will be missed." ✱

THE DNA OF PROBE SOFTWARE

FERGUS MCGOVERN
■ He was the heart and soul of the company from day one, and his name appeared on many high score tables. The tributes on his recent death showed how much esteem and respect he earned from others in the software industry.

CHEAT MODES
■ Fergus enjoyed making fun of himself, as shown by the many cheat modes he featured in. He made appearances in both *Mortal Kombat* games, *Die Hard Trilogy*, *J-League Super Soccer* and more.

LICENSED PROPERTIES
■ With Acclaim's access to licensed properties, Probe was responsible for several famous names appearing on computer and console. This built on Probe's experience dealing with licences including *Teenage Mutant Hero Turtles*.

CONVERSIONS
■ Arcade conversions needed a skilful team and hard work. Probe proved time and again that it could produce a high quality of work. Mark Kelly and Steve Crow's famous C64 ports included *Golden Axe* and *Turbo Outrun* (pictured).

FREELANCERS
■ Many Probe projects were undertaken by freelance teams, with Fergus and Probe directing and managing efforts. Fergus rented houses for his freelance teams up and down the country, giving them a base to work in.

Kempston Competition Pro

» PLATFORM: VARIOUS **»RELEASED:** 1983 **»COST:** £25 (LAUNCH), £10+ (TODAY, UNBOXED), £20+ (TODAY, BOXED)

» It's said that imitation is the sincerest form of flattery, and if that's the case then some designers at Kempston Micro Electronics must have been very flattered indeed, as the Competition Pro joystick was one of the most frequently imitated pieces of hardware during the Eighties. The distinctive layout features a rectangular base, with a red pommel joystick protruding from a square platform. At the cable end of the base two circular, bright red fire buttons with the same function offer a comfortable experience for both left-handed and right-handed players. A standard DE9 connector ensured compatibility with the majority of systems that were on the market at the time,

including Atari and Commodore computers as well as the Kempston Joystick Interface for the ZX Spectrum.

The popular design was soon copied – imitators differentiated their products from Kempston's by altering the buttons with different colours and shapes, but the basic layout was retained. Over the years, the original Competition Pro sticks would be replaced with the Competition Pro Extra series, which replaced leaf switches with microswitches. Of course, these were no longer produced by Kempston – the Competition Pro far outlived its originator, appearing on all types of accessories up until the early part of this decade. ✱

ESSENTIAL GAME Combat School

Sometimes a keyboard just doesn't do the job you want it to do, and that's often the case when it comes to button-bashing athletics games. Of course, computer versions typically substitute button presses for joystick movements, severely testing your stick's durability – and *Combat School* requires a particularly rigorous technique, so you'd need something stronger than your hand to stop the base moving as you rotated the stick. Secure it however you think is best, but please don't just shove it between your legs – we've seen enough joystick-based double entendres about games like *Track & Field* to last a lifetime.

Kempston Competition Pro fact

■ The classic black-and-red colour scheme was eventually supplanted by a range of different casing options, including some rather nice transparent ones during the 16-bit years.

GRAVITAR

Following an unexpected transfer from Atari's pinball group to its coin-op division, Mike Hally was teamed up with Rich Adam. Mike and Rich tell Rory Milne how Lunar Lander and Asteroids inspired their vector shooter, Gravitar

It's easy to forget that pinball dominated amusement arcades before the arrival of coin-op videogames in the early Seventies, and that even towards the end of the decade companies like Atari Inc. was still developing new tables. Mike Hally got his start with Atari working in its California-based pinball division, and he remembers its downsizing and repurposing as an R&D unit at the dawn of the Eighties. "*Superman* pinball was the last production machine produced in our facility in Sunnyvale, CA. Pinball engineering was then reduced to a much smaller R&D group tasked with cost-reducing the product and looking to relocate production in the Chicago area."

After a year of researching cost-reductions on *Superman* pinball, Mike arrived one morning to find an empty workplace. "Pinball R&D was going through a layoff, and employees would have an exit interview with HR to wrap up their employment with the company. I was never told anything, so I just kept working. One day I came to work, and I noticed that I was alone in my office cube. Finally, someone from the coin-op division told me that I had been transferred. I remember being very excited, grabbing my personal stuff and moving to another location in the same building!"

Following work on an unreleased prototype, Mike was made a project leader and coder Rich Adam was assigned to his team. "I was a new project leader in need of a game to work on and a team to join me," Mike says. "The way it worked was kind of a revolving

GRAVITAR 101

■ Despite its simple-sounding premise – blast stationary bunkers on alien planets while avoiding airborne defenders and collecting fuel – *Gravitar*'s implementation of gravity transforms it into a challenging prospect. Unlike most other shooters, if you ease off on your thrusters for too long you risk plummeting to your death.

» [Arcade] A docked space ship prepares to leave its base to explore *Gravitar*'s first solar system.

THE EVOLUTION OF GRAVITY GAMES

Five key titles in the subgenre
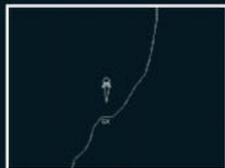
LUNAR LANDER

■ As notable for its pseudo-realistic physics as for its gameplay, Atari's vector moon-landing simulation still delivers compulsive gaming. That said, *Lunar Lander* is probably best remembered for bringing the concept of fighting gravity with thrusters to arcades.

GRAVITAR

■ A spiritual successor to *Lunar Lander* – to the point where it was originally called *Lunar Battle – Gravitar* jettisons the landing objective in favour of fuel collection and bunker blasting. *Gravitar* also introduces reverse gravity to the subgenre.

THRUST

■ Jeremy Smith took the *Gravitar* formula and ran with it when devising his slick tribute, *Thrust. Gravitar*'s shields, fuel pick-ups and bunkers are all present, but the BBC Micro title adds tractor beam pod collection, bunker deactivation and laser-activated doors.

OIDS

■ As well as boasting more colourful graphics, this Atari ST original also bolts on a rescue mission to the basic template: similar, mechanically, to the heroics demanded by *Choplifter. Oids* also features a broader range of opponents to dispatch.
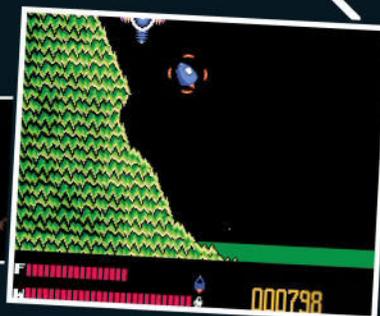
SOLAR JETMAN

■ The Pickfords took inspiration from all of the former games when developing *Solar Jetman*, but their NES title has deeper gameplay. There are *Gravitar*-type shields and bunkers, but also a *Thrust*-like tractor-beam used to collect fuel, power-ups and ship parts.

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door; programmers, hardware engineers and technicians would finish a project and then enter a talent pool. Management would try to get new projects greenlit as soon as possible based on the available talent pool and projects they liked. Employees had some say as to what they wanted to work on, but in reality it came down to a best fit with who was available."

Rich's memories of joining the team are of leaving a stalled project and discussing a new one. "*Missile Command 2* was not working as a two-player concept for a number of reasons. It did not earn on field tests so the game was killed. At that point, Hally and I were put together and we discussed what project to do."

The two developers soon found inspiration in a binder of game ideas, one of which Mike theorises may have come from the developer of Atari's *Lunar Lander*. "The coin-op division had yearly brainstorming sessions where game ideas were developed and prioritised by the engineering department. It might have been Rich Moore that pushed for the *Lunar Battle* concept."

While the brief for *Lunar Battle* showed promise, some changes were required to deepen its gameplay, as Rich explains:"The idea was to try to land on the surface of the moon while fighting your way down to the surface past land-based enemies. We changed it from the landing objective to using a tractor beam to retrieve fuel, which allowed you go as deep into the game as fuel or lives allowed."

In terms of what influenced the reimagined *Lunar Battle*, Mike cites two Atari vector hits, plus a hit movie. "I liked the gravity function from *Lunar Lander* – and the landscapes. I also liked the *Asteroids* controls for moving and shooting. But I wanted the player to feel like he was travelling in space from one planet to another vs. more of a static *Asteroids* screen. We were all fans of *Star Wars* at the time; I am sure it rubbed off to some degree as to the decisions we made."

When asked for the game's inspirations, Rich agrees with Mike on the influence of the sci-fi classic. "*Star Wars* – as evidenced by the warp planet where you had to shoot the reactor and get out before it blew up!"

In terms of devising *Lunar Battle*'s gameplay, Mike describes an organic process. "During these years of game development, we did not spend huge amounts of time developing detailed storyboards and massive documents. Games were developed by programmers, for the most part, and we were just moving toward a designer having major input into the playability."

In the absence of a designer, Mike defined a draft for how *Lunar Battle* would play while he designed the game's visuals. "I plotted out the wraparound landscapes on graph paper and placed the fuel cells and bunkers with firing angles and range. The landscape dictated the bunkers firing angle. I tried to draw different shapes that would require different flying patterns to kill bunkers and pick up fuel. I went straight from graph paper to data entry based on a starting position. I believe we had scale factors so that I could draw it in one scale and then display it at any adjusted scale in the game. As I turned out more and more landscapes, we would reorder them based on perceived difficulty. We had to either add or remove bunkers and cells for proper difficulty ramping. The firing range was tuned in the game during play. We ▶

> ❝We were all fans of Star Wars at the time; I am sure it rubbed off❞
>
> Mike Halley

» [Arcade] Accuracy is vital when targeting *Gravitar*'s bunkers; firing from the wrong position just wastes ammo.
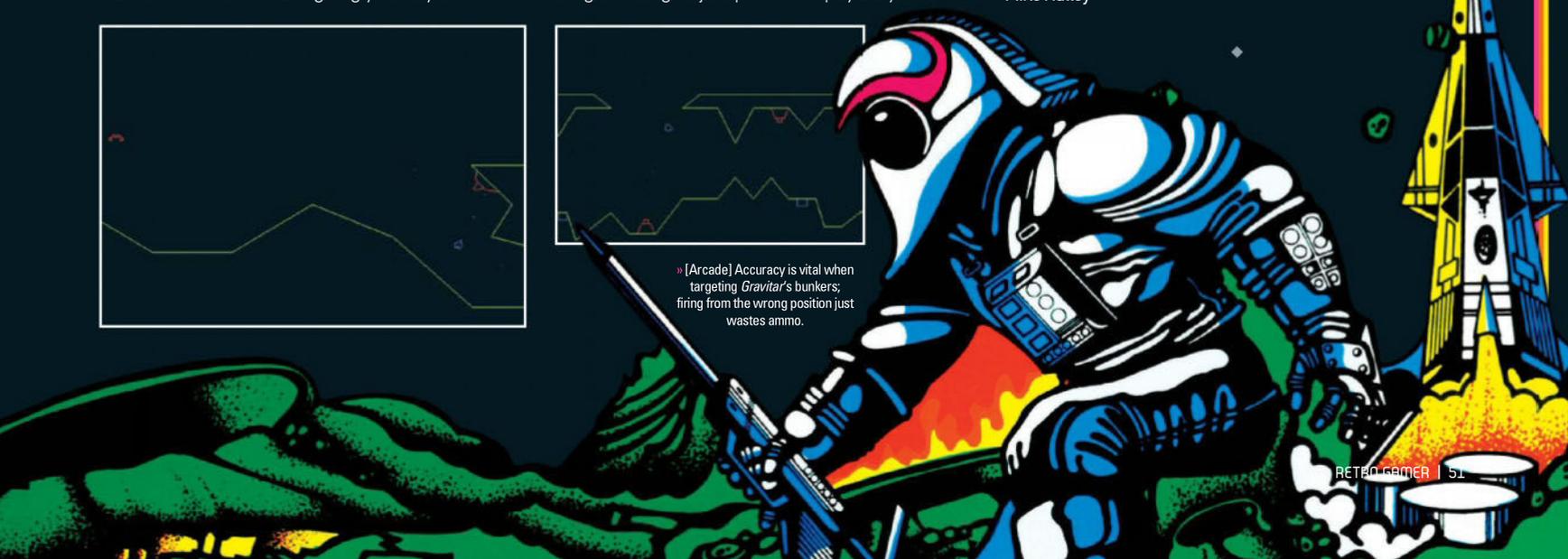
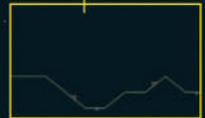# GUIDE TO THE GRAVITAR UNIVERSE

A planet-by-planet tour

8000

2000

■ A real challenge on the first few attempts, the surface of the North-West planet reverses gravity when you're below it rather than above.
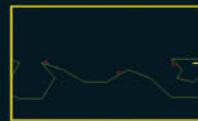
9000

FIRST SOLAR SYSTEM

■ The least taxing planet in *Gravitar* has a relatively flat surface and just two bunkers and fuel cells. Twin airborne defenders provide its main threat.

6000

■ Navigating the confined subterranean caves of the first system's South-West world requires honed hovering skills and a proficiency in bunker-blasting while in motion.

■ Sporting four bunkers – two side-facing, and therefore tricky to hit – the first system's South-East world represents quite a steep difficulty spike.

4000

9000

■ Hard-to-reach bunkers aside, the stiffest test set by the second system's North planet is a cavern entered from below via a narrow entrance.

9000

■ Deceptively difficult despite its simple design, system two's East world demands perfect positioning and a good aim in order to take out its bunkers.

SECOND SOLAR SYSTEM

9000

9000
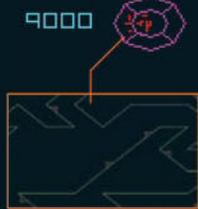
■ The second system's merciless West planet combines bullet storms in narrow spaces with fiendishly-angled, awkwardly-placed bunkers.

■ System two's cave-based offering features tight bends that have to be slowly negotiated under heavy fire – which burns through fuel.

9000

■ Survival in the twisted, narrow tunnels beneath the surface of the third system's North-East planet depends on ace piloting and precision blasting.

■ Reverse gravity shields the entrances of system three's South-West world's caves, the toughest of which contains rapid-fire bunkers.

9000

9000

THIRD SOLAR SYSTEM

9000

9000

■ It feels wrong having platforms in a shoot-'em-up, but the third system's East planet pulls it off. Its main hazard is getting caught in crossfire.
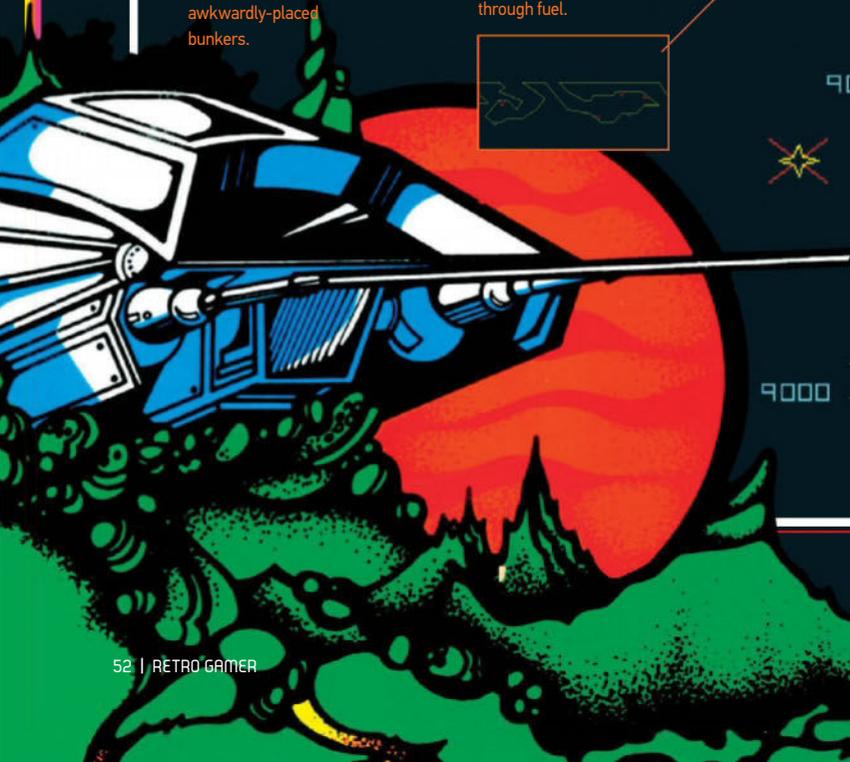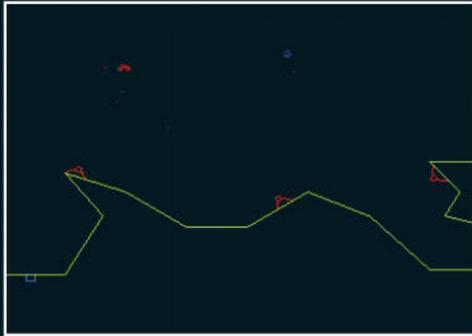
» [Arcade] Storming a heavily-armed enemy stronghold may seem suicidal, but it's all part of your mission.

» Rich Adam is CEO of a technology consulting firm providing software development and support.

» Mike Hally is responsible for software quality assurance for a slot machine firm in Atlanta.

DEVELOPER HIGHLIGHTS

MISSILE COMMAND
SYSTEM: ARCADE
YEAR: 1980

STAR WARS
SYSTEM: ARCADE
YEAR: 1983

S.T.U.N. RUNNER
(PICTURED)
SYSTEM: ARCADE
YEAR: 1989

just played it over and over again, adjusting the level of gravity and bunker firing frequency."

While Mike managed the design of *Lunar Battle*'s planet surfaces, the game's hardware enabled Rich to code zoom sequences triggered by approaching those surfaces. "The zoom feature in the vector generator was cool. I felt that it was a feature that had not been exploited by previous vector games, *Battlezone* notwithstanding," Rick reasons. "I thought it would be a cool effect to descend to the surface while zooming, so I coded that up. It took a while to tune it to feel convincing." Mike adds: "The scaling was implemented in the gameplay to give the player an experience of travelling in a real world versus a 'cut screen'. It also gave the player time to see the reveal of the landscape to then make a decision on how to attack the level."

A further addition saw Mike designing planets that warped players to challenging solar systems when their reactors were blown up. "The red planet was added as a method to skip rounds of planets that you had played before. You were awarded a specific bonus for a successful red planet exit that was greater than playing through the four [standard] planets."

Ideas for making *Lunar Battle*'s advanced planets more challenging followed the game's invisible landscapes were added thanks to Rick talking shop with Atari colleagues after hours. "We had been in the back patio drinking beer and talking about game design, and something in that discussion made me think: 'Whoa! I could set the colour gun to black for the surface for the extreme difficulty levels of the game.' I went to the lab and coded up a test, just to see what it would play like, and it was obviously going to be a cool feature." Mike says of the enhancement: "It was a great feature. The

fuel cell and bunker placement gave the player a good idea of the landscape, and then when the player crashed we turned on the landscape for a short time."

A gameplay evolution provided a second difficulty bump for *Lunar Battle's* later levels, which Mike considers to have been an obvious move. "Once we finished all the gravity levels, it was a no-brainer to give the player a [new] experience with the reverse gravity."

The difficulty of the game's easier worlds was also cranked up, which Mike attributes to misassumption. "Game times seemed to be way too long so we kept making it more difficult. I figured that everyone who played *Asteroids* already was accomplished with the controls. I was very wrong in this thinking, as the gravity made the controls very different."

Before release, the fine-tuned *Lunar Battle* went through extensive testing, after which, a developer tool was removed and its name was changed. "Our initial field-test had a debug feature left in by mistake where you could freeze frame the game with the start button," Mike admits. "A second player would use this before a crash to regain control. Later, the team put together a list of names and had engineering vote on them. Marketing seemed to have other ideas, [but] I liked the *Gravitar* name." Rich was less keen, but concedes that he didn't have a alternative. "I was not enthused about the name. I had tried to come up with some names and did not produce anything magical. I was very excited about the name *Fire Power* at one point, but it was taken. I never felt that *Lunar Battle* was a strong name either."

Contentions aside, *Gravitar* soon went into production and out to arcades, where it met with slightly less success than had been anticipated. Mike blames over-production and challenging gameplay. "The production run went smooth, the buzz was very good, but I believe Atari over-produced the product. The game ended up

> ## "The zoom feature in the vector generator was cool"
> Rich Adam

with a strong 'cult' following, but it was too difficult for the masses." Rich's thoughts on *Gravitar*'s reception are downbeat but ultimately philosophical. "It was disappointing; I had worked hard to make that game and wanted it to succeed at the level of *Missile Command*. It was a hard pill to swallow, but I had to move on to another project so I accepted the market's decision."

Given the status *Gravitar* now has as a classic, Rich is content with its legacy and would only tweak it slightly in hindsight. "I would make it easier, [and] it might have been fun to let you glance off of the terrain if your ship's angle of collision was low enough to make a bounce-off believable. But I have always thought that the game is fun and I am glad that others share that sentiment."

The final say on *Gravitar* goes to Mike, who has nothing but warm words for the shooter. "*Gravitar*'s success was the start of my Atari career, and had influence on every game I was involved in. I think *Gravitar* is a wonderful game just as it is, and I am so proud to be a part of it." ✱

Many thanks to Mike Hally and Rich Adam for revisiting *Gravitar*.
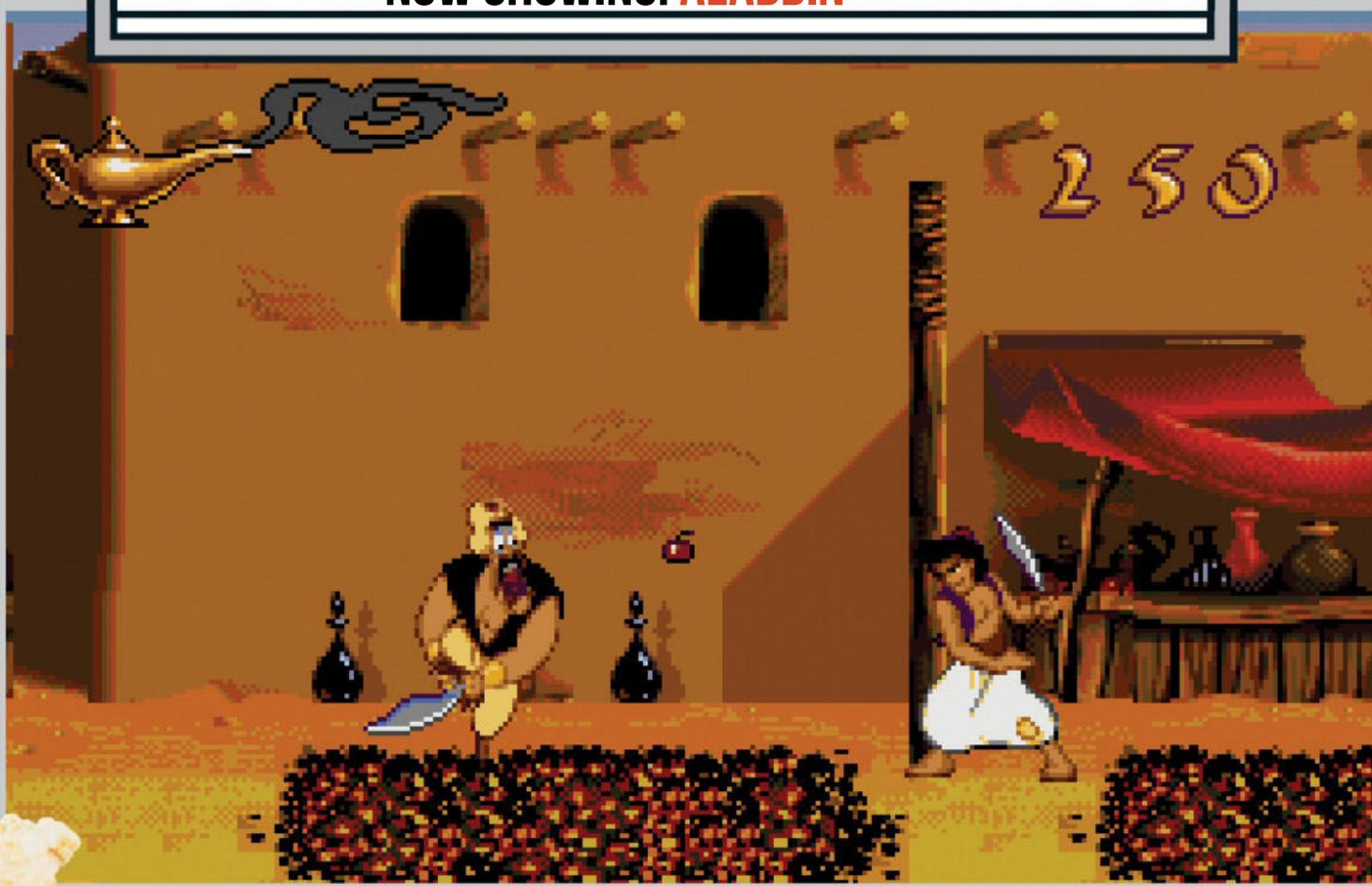

» [Arcade] Getting too close to alien ships while travelling between planets is settled with one-on-one combat.

LICENCE TO THRILL
NOW SHOWING: ALADDIN

Disney's Aladdin broke box-office records, and it had a similar impact on the videogame market. Nick Thorpe makes three wishes and looks back at three different takes on the film…

If you're a fan of the family-friendly fun of Disney's animated films, you'll undoubtedly remember the early Nineties with a great deal of fondness. Having recovered from the commercial disappointments of the Seventies and Eighties, as well as the blow of losing Don Bluth and a number of other animators, the company had entered a renaissance period of critically and commercially-successful films. *The Little Mermaid* had done well with both critics and the cinema-going public, and *Beauty And The Beast* had blown it out of the water in terms of box office takings. Not to be outdone, the directors of *The Little Mermaid* returned with

an adaptation of the Arabian folk tale *Aladdin* and managed to take the record for the highest-grossing animated film of all time.

While *Aladdin* featured all the hallmarks of a great Disney film, from beautiful animation to memorable songs, the film was able to draw on star power that hadn't been available to its predecessors. While Aladdin, his love interest Jasmine and the dastardly Jafar all had actors who weren't well known, the genie of the lamp was played by Robin Williams – a huge deal at a time when actors would rarely cross over from live-action roles to voice acting. With over $500 million taken at the box office, it wasn't a question of if the tie-in merchandise would arrive, but just how much of it.

For gaming fans, that meant licensed games, and there was cause

to be excited about that – the last few years had seen a number of excellent Disney licensed games on consoles, including the likes of *DuckTales* and *Castle Of Illusion*. Recognising the value of the *Aladdin* licence, Disney did something unusual and split the rights amongst a number of parties. Three companies ended up with the rights to publish games; Sega was granted the right to publish games on

» [Master System] Many of the early stages in the SIMS version are forced-scrolling obstacle courses.

» [SNES] Bouncing on the heads of enemies – a typical platform trope, but fitting for Capcom's athletic Aladdin.

> **"At least some good will come of my being forced to marry. When I am Queen, I will have the power to get rid of you"**
>
> Princess Jasmine

its own platforms, Capcom got the licence for the SNES, and Virgin had the option to produce versions for other computers and consoles.

First out of the blocks was Sega. The company initially assigned the project to BlueSky Software, which had previously delivered *Ariel The Little Mermaid* for the publisher. However, progress was slow as the small team was also working on *Jurassic Park*. With no easy way to prioritise either project and Disney growing displeased with the lack of progress, the plug was pulled on BlueSky's version. Luckily for Sega, which had lost a lot of time, Disney had a preferred partner which was willing to do business in the form of Virgin Games. It helped that the company's president, Martin Alper, had a previous relationship with Sega from his time at Mastertronic, which had distributed the company's

hardware and software in Europe until 1991. What's more, Virgin had a team capable of delivering high-quality Mega Drive games, as it had proven itself with *Cool Spot*.

The resulting three-way deal saw Sega handle publishing duties, Virgin Games taking on development and Disney providing animation and licensing rights. Animation cels would be hand-drawn by Disney's own animators, then sent to Virgin for digitising and programming into the game. The result was striking – other games had skilful imitation of Disney animation, but *Aladdin* had the real thing. Enemies lost their trousers when hit and danced painfully across hot coals in the streets of Agrabah, ▶

» [Mega Drive] We're pretty sure this bomb-headed bonehead doesn't appear in the film.

MOVIE TO GAME COMPARISON
How Aladdin fared from moving from the silver screen to the humble CRT

ONE JUMP AHEAD OF THE LAWMEN
Every version of *Aladdin* sees the titular hero escaping this burly guard – SIMS' version puts you in a simple chase, Capcom's version prefers you to beat him with your agility and Virgin Games' take allows you to get into a swordfight with him.
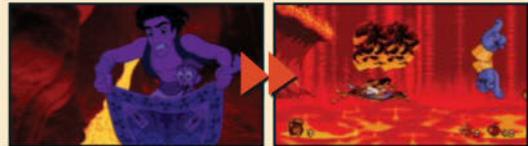
RUG RIDE
Escaping from the Cave Of Wonders on your new friend, the Magic Carpet, should be perilous – and Virgin Games' version absolutely nails it, delivering a white-knuckle ride that tests your reactions to the limit. Neither of the other renditions capture the same intensity.
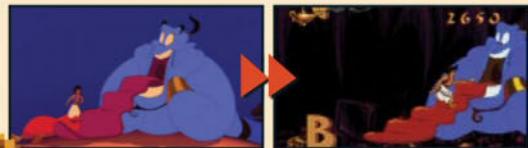
NEVER HAD A FRIEND LIKE ME
This level in Virgin's version takes one of the most memorable musical numbers from the film and turns it into a full level, complete with those odd A and B pillars, floating cushions and of course, the Genie's tongue staircase. Would that be pleasant to walk up?

A WHOLE NEW WORLD
On other platforms, we get the beautiful carpet ride of the A Whole New World sequence. While Capcom sensibly opted to make this a bonus stage, SIMS actually made it into an obstacle-dodging test in which you have to avoid flying birds and falling fruit.

SNAKE? SNAKE?! SNAAAAAAAAKE!
Jafar's transformation into a snake serves as the climactic scene for each of the three games, and he's a suitably tough presence in each. Unfortunately, you can't knock him out of the palace like Aladdin does in the film. Notably, it's the only time you get a sword in the SIMS version.
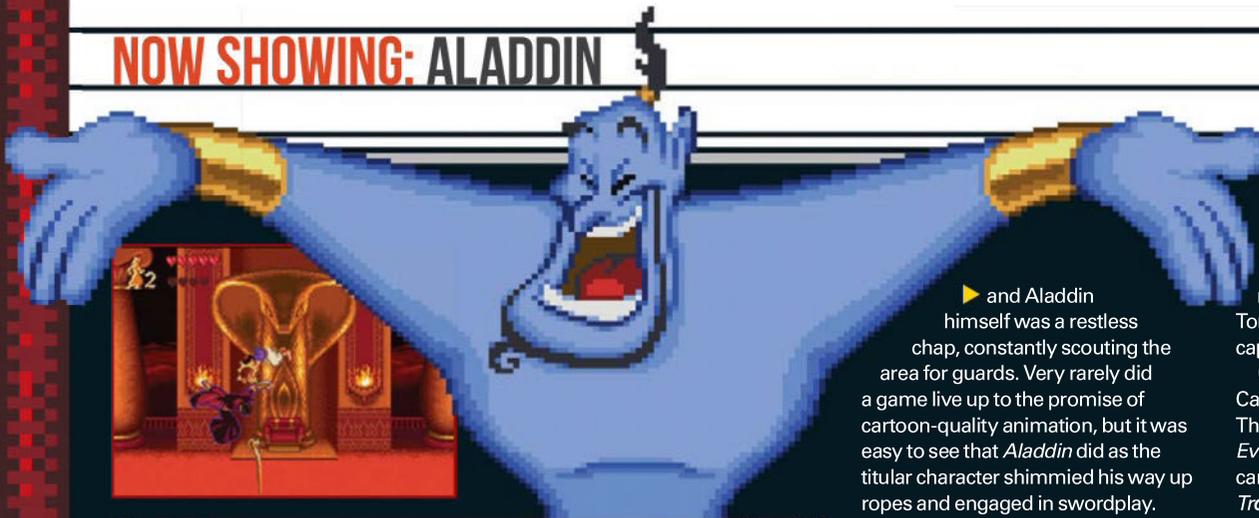
▶ and Aladdin himself was a restless chap, constantly scouting the area for guards. Very rarely did a game live up to the promise of cartoon-quality animation, but it was easy to see that *Aladdin* did as the titular character shimmied his way up ropes and engaged in swordplay.

The game wasn't just visually stunning. As programmer and project manager, David Perry delivered his best platform game yet. *Aladdin* felt like *Cool Spot* in his movements, particularly when jumping around, but the game was a step ahead in terms of level design – in part, just because the film offered so much inspiration. Aladdin's acrobatic escape from Agrabah's guards, the magic carpet ride from an exploding Cave Of Wonders and even the song *Never Had a Friend Like Me* all provided ideas for stages. Additionally, attacking enemies was fun. You could lob apples if you liked, but there was more fun in sidling up to an enemy and swiping with a sword. Excellent

renditions of the film's music from Tommy Tallarico and Donald S. Griffin capped the whole thing off.

On the SNES side of things, Capcom took a different approach. The planner was a pre-*Resident Evil* Shinji Mikami, whose previous cartoon licence work included *Goof Troop* and *Who Framed Roger Rabbit*. Capcom's game was amongst the most aesthetically pleasing on the console, with excellent visuals and audio, but Disney's lighter level of involvement showed – the sprites all looked beautiful, but the refined shading ensured that they didn't quite look like Disney's work.

Other changes were afoot, too. While *Aladdin* didn't look as close to his film counterpart as in the Mega Drive game, he acted a lot more similarly. His athletic abilities were heavily emphasised, as he could clamber up platforms, vault over posts, swing from poles and a lot more. Everyone's favourite street rat could still chuck apples, but swordplay was off the menu. Instead, he was able to jump on the heads of enemies in the traditional platform game style.

Mikami has famously said that he'd have bought the Mega Drive version if he hadn't made the SNES version, as he liked that game's swordplay. We'd say that downplays the quality of his own game, though. Capcom's *Aladdin* is an excellent platformer in its own right, featuring a different style of gameplay and some top class level design. These days, you don't have to

» [Mega Drive] A big enemy, lobbing barrels from the upper corner of the screen – where have we seen that before?

» [Mega Drive] Even the backgrounds of Virgin's version were full of additional Disney touches.

» [Mega Drive] Aladdin's thieving little monkey Abu takes centre stage in Virgin's bonus games.

» [Master System] Aladdin meets the Magic Carpet in the Cave Of Wonders

Q&A: DAVID PERRY
The former Virgin Games programmer talks about the creation of the Mega Drive version

How did you come to work on *Aladdin*?
Our team made *Global Gladiators* for McDonalds on Mega Drive, it was published by Virgin and then Sega gave it a Game Of The Year award. Sega then wanted us to make and copublish *Cool Spot*, a game for 7-Up. Sega liked that as well, so they offered our team Disney's *Aladdin*, it was under development elsewhere but Disney wasn't liking the progress. I have to say, I felt really lucky to be at Virgin, it was definitely the right place at the right time and we had a good team that had earned the respect of Sega.

The animation throughout is outstanding, did you receive help from Disney at all?
We had an incredible internal animation team lead by Mike Dietz, however Jeffrey

Katzenberg asked what Disney could do to help, the answer was, 'Can Disney Feature Animation in Florida work under Mike's leadership on the game?' Only Katzenberg could make that happen and he over-delivered. The quality of the animation was incredible and every animation frame they made had to be treated with incredible respect as it was so valuable.

What was the biggest problem you faced?
How the heck do we get all that incredible Disney animation into a Sega Genesis? We came up with a very custom compression system and added another team member (Andy Astor), he did an incredible job of finding clever ways to crowbar more and more frames into the game.

How did you decide what parts of the movie would make good levels?
David Bishop worked on the original design of the game and filtered the script down into the select, key levels. We had a nice blend of gameplay for a side-scroller. I like it when you can't predict what's coming next, a theme we carried into games like *Earthworm Jim*.

Where did the idea for the Abu mini-game originate from?
We were inspired by all kinds of past experiences, a good example was the little Nintendo Game & Watch games.

What do you feel is the best level?
I liked the desert level as our level designer Bill put a lot of effort into hiding secrets. I also

loved seeing kids reactions when the camels in the game would spit.

The music is extremely accurate, how did you accomplish this?
Tommy Tallarico was incredibly passionate about raising the bar on videogame music. He worked closely with Disney to make sure the music was as authentic as possible.

Were you aware of Capcom's game at the time and how it was progressing?
No, I didn't have any access to that so we were really on our own. It's fun to see people comparing them online.

IT'S NOT MUCH, BUT IT'S GOT A GREAT VIEW.

> **"You are a worthless street rat. You were born a street rat, you'll die a street rat, only your fleas will mourn you"**
>
> Prince Achmed

pick and we'd argue that both games are well worth playing – indeed, some will prefer the agility-focused SNES game over the more combat-oriented Mega Drive one.

Of course, back in 1993 that wasn't the case. Both games arrived in November 1993, shortly after the home video release of the film. *Aladdin* did well for Capcom on the SNES, but didn't hit the million sales mark – thus falling a long way short of the Mega Drive version, which came out a couple of weeks earlier and was given Sega's full marketing support. Between retail sales and console bundle deals, *Aladdin* shifted a massive 4 million copies and became the Mega Drive's third highest-selling game ever, behind only the first two *Sonic* games.

The Capcom version of the game only reappeared once, for the Game Boy Advance in 2003, so it was the Mega Drive version that would go on to have a greater legacy. Thanks to Virgin Games' publishing rights for other platforms, conversions of *Aladdin* made their way to the PC,

Amiga, NES and Game Boy in 1994. The game was also reconverted to Game Boy Color by Crawfish for Ubisoft in 2000.

In 1994, Sega published *Aladdin* for the Master System and Game Gear. Rather than going with Virgin again it assigned the game to its subsidiary SIMS, which had previously designed *Tom & Jerry: The Movie*. It ended up with a whole new design, and much like the team's previous game it was one of the best-looking games ever to appear on Sega's 8-bit formats, but didn't have the gameplay to match the gorgeous looks.

Aladdin was a much less combative protagonist in SIMS' game, with limited attacking opportunities meaning that he spent most of his time running from hazards instead. This in itself wouldn't be a problem, but the game wasn't particularly interesting or challenging – beside a poor jumping mechanic, the game offered too many bland forced-scrolling levels. Unsurprisingly, this version never received any new conversions after 1994.

» [SNES] Aladdin can't use a sword in the SNES version, so it's probably a good thing that he's hiding here.

Still, these lesser versions did nothing to tarnish *Aladdin*'s name, as Virgin Games had stolen all the headlines. Disney established Disney Interactive Studios in 1994, a move that would have been inconceivable prior to *Aladdin*. Just as it was a watershed moment for animated films with the unprecedented involvement of a celebrity actor in a voice role, the most-played version of *Aladdin* marked a turning point for licensed games with the unprecedented involvement of a rights holder in doing its videogame justice. ✳

ARTISTIC LICENCE

These weren't in the film…

GAZEEM GRIEF
■ In the film, Jafar's Henchman, Gazeem, only shows up at the very beginning of the film, before meeting his demise by being swallowed up by the Cave Of Wonders. In Virgin Games' rendition of the film, he has a swordfight with Aladdin for little reason at all.

GETTING LAMPED
■ We're not sure what film Capcom's development team was watching, but it was evidently a completely different cut of the film than the one we saw – the inside of the lamp didn't look much like this cloudy landscape filled with bottomless pits.

MAKE WAY! …OR NOT
■ In the film, becoming a prince means that Aladdin blags a free pass into the palace to see Princess Jasmine. In the SIMS version of the game, he has to avoid the guards while sneaking into the palace in full prince regalia. We're not entirely sure why, though…

NOTABLE VERSIONS OF ALADDIN

MEGA DRIVE
■ Virgin Games' Mega Drive version is the one that most others are based on, and you can tell it's the original platform – the visuals look their best here, and the control scheme is tailored to Sega's three-button pad. It doesn't sound nearly as good as its computer counterparts, though.

SNES
■ Capcom's take on *Aladdin* is a great game, which looks lovely and plays very well. However, it's ever so slightly more of a cookie-cutter platformer than the other versions – jumping on the heads of enemies, and that odd cloudy stage makes it feel slightly further removed from the feature film.

GAME BOY COLOR
■ Crawfish did an excellent job with this Game Boy Color version – it's bright and exciting to look at, and plays much more faithfully than the old monochrome Game Boy version. You still need to switch between apples and the sword, but that's a minor drawback in an otherwise good conversion.

MASTER SYSTEM
■ You've got to hand it to the artists at SIMS – *Aladdin* is an extraordinarily attractive 8-bit console game. Unfortunately, the gameplay doesn't match up to the graphical excellence. The jumping mechanics are stiff, the level design is dull and the game is just too easy on the whole.

AMIGA
■ The Amiga version only catered for owners of AGA machines, but you can see why. It's incredibly attractive and marred only by the odd bit of slowdown. The proper sampled sound is excellent, too. Switching between sword and apples on the joystick is a slight pain, though.

THE A-Z OF JRPGs

Despite a storied history, it's amazing how many people don't realise how much more there is to Japanese role-playing games. Genre expert Luke Albigés runs down 26 need-to-know things

ARC THE LAD

FIRST RELEASE: **ARC THE LAD (PLAYSTATION, 1995)**

■ Almost spinning the near-inevitable gaps between Japanese and Western releases as a positive, *Arc The Lad* is a curious case indeed. This great strategy-RPG series, published by Sony in Japan, managed to hit three releases and a spin-off before it was picked up for a Western release, although its treatment there was outstanding... well, so long as you didn't live in Europe. SCEA localised all four games, releasing the whole lot as *Arc The Lad Collection* in PlayStation's twilight. The package served to highlight both the impressive strides made by each game both in terms of content and presentation, as well as how well the games flowed into one another and offered genuine continuity. Europe finally saw *Arc* for the first time with middling PS2 release *Twilight Of The Spirits*, although earlier games eventually made their way to PS3 as PSone Classics.

A IS FOR...
Amnesia
Attack
Auto

BREATH OF FIRE

FIRST RELEASE: **BREATH OF FIRE (SNES, 1993)**

■ Dragons tend to be the enemy in RPGs, so Capcom's decision to grant the lead character in this popular franchise the ability to turn into one was a smart way to give the series a true USP. Sadly, this never truly helped it emerge from the shadow of genre leaders like *Final Fantasy*, with Capcom's games always unfortunate enough to be just downwind of other, bigger budget classics. While *BOF III* and *BOF IV* can duke it out for the title of 'series high point', even they couldn't help but draw unfavourable comparisons to the fully-3D *FF* games that launched just before them. Still, *Breath Of Fire* cemented its status as a cult favourite, and we'd argue that the fifth game, *Dragon Quarter*, was ahead of its time in how it handled Ryu's transformations – abusing this power would result in the game ending early, placing greater emphasis on using it only as a last resort rather than a crutch.

B IS FOR...
Battle
Boss
Buff

CHRONO TRIGGER

FIRST RELEASE: **CHRONO TRIGGER (SNES, 1995)**

The product of Square assembling a team comprising three of the most important people in shaping the genre – *Final Fantasy* and *Dragon Quests* creators Hironobu Sakaguchi and Yuji Horii respectively, plus renowned manga artist Akira Toriyama, famed for both his work on *Dragon Ball* and *Dragon Quest* – *Chrono Trigger* was always going to be something special. While it employed a similar Active Time Battle system to *Final Fantasy* games of the time, a twist on the norm meant that battles weren't entered into at random. Enemies could be seen in the overworld with combat initiated by making contact with foes and played out where it was triggered rather than cutting away to a separate standalone battle scene.

As if that wasn't enough of a leap for the genre, *Chrono Trigger* also had another up its sleeve – a *quantum* leap, if you will. To this day, the game sits among the elite few videogames to actually employ time travel well rather than just using it as an excuse or workaround. Square presented a single world across seven very different time periods, affording players the luxury of skipping between these pretty much at will and enabling decisions and events from the past to affect how things played out in the future. This freedom offered a number of ways to reach and confront the final boss, resulting in no fewer than 13 possible endings and promoting replayability better than any other example of the genre at the time. To this end, Square also pioneered another new feature, New Game+, to allow players to dive back into the game for another run without giving up the experience or items they had accrued.

As was par for the course for Square at the time, however, glowing reviews and commercial success did nothing to open the RPG superpower's eyes to the fact that Europe existed and it was a case of import or go without for many of us. It did see light of day on our shores, albeit not until *14 years* after its release and only on DS. Its sequel, *Chrono Cross,* wouldn't even have that luxury, however – to this day, it has only seen NTSC releases.

Lower thine guard and thou'rt allowing the enemy in.

OUTTATIME   Four other JRPGs that wear their Flux Capacitors on their sleeves

FINAL FANTASY XIII-2
YEAR: **2011**
■ A direct response to criticisms that the original was too linear, *Final Fantasy XIII-2* featured a time-hopping structure where Noel and Serah could visit various locations in different eras and even break time itself to cause paradox endings.

STAR OCEAN (SERIES)
YEAR: **1996-PRESENT**
■ While not technically time travel, the series revolves around using space travel to visit planets which are in varying states of technological advancement, with some feeling almost medieval while others are suitably sci-fi.

DARK CHRONICLE
YEAR: **2002**
■ The two protagonists in the excellent sequel to Level-5's PS2 debut *Dark Cloud* come from completely different time periods, with the duo eventually working together to complete the Ixion, a time-traveling train.

EARTHBOUND
YEAR: **1994**
■ It opens with a visit from a time traveler and features elements of time travel later on, so it'd be rude not to extend love to this cult classic. Europe was once again screwed over at launch, but a Virtual Console release followed years later.

What a horrible nightmare. I somehow woke up.

DRAGON QUEST

FIRST RELEASE: **DRAGON QUEST (NES, 1986)**

Widely regarded as the bedrock upon which the modern JRPG template was built, Enix's seminal *Dragon Quest* series would become the publisher's biggest brand.

Creator Yuji Horii struck gold by fusing the storytelling template he had laid out in PC murder-mystery title *The Portopia Serial Murder Case* with more 'traditional' role-playing game elements. The concept was nothing new, technically, but Horii's vision to bring this style of gaming to an unaware console audience really brought this series off the ground.

By today's standards, the first few *Dragon Quest* games seem primitive, but it's important to remember that these games were innovators. Freedom of exploration meant that only enemy difficulty served as an indicator that you might have wandered a little too far from the correct path. With only a single party member taking on one enemy at a time, a heavy hit could wipe out an unprepared hero. Thankfully, this wasn't as ruthless as some of its peers in terms of punishment for death – rather than being thrown back to the title screen, you'd simply be revived in town at the cost of half your gold. Interestingly, the original release didn't even have the ability to save your game, instead relying on passwords. This was updated when the game was released in the US as *Dragon Warrior*.

This name change was due to an existing western trademark of *DragonQuest* (an established tabletop RPG series), a situation that wasn't rectified until 2002 ahead of the release of *Dragon Quest VIII* – not only the first to carry the original name globally, but also the franchise's European debut.

D IS FOR...
Dungeon
Dragon
Debuff

E IS FOR...
Equipment
Encounter
Ellipses

PLAYER — DP — ENEMY

ENIX

FIRST RELEASE: **LOVE MATCH TENNIS (PC, 1985)**

■ The crucial difference between Enix and its Golden Age rival Squaresoft is a surprisingly simple one – Square was always both a publisher *and* a developer, while Enix was purely a publisher. This explains a lot, when you think about it – how Enix was able to beat Square to the punch with *Dragon Quest* (publishers are always looking for the next big thing, and dedicated ones have more time to do so), why Square was better able to tailor its games for and deliver them to a global audience via closer communication between publishing and development teams and, more recently,

why the merger was such a solid idea. Not only did this bring many of the major brands in the genre under the same umbrella, it was also a chance for the unique skills of each side to shine... the best of both worlds, if you will. It wasn't just *Dragon Quest* that Enix had going for it, either. *Star Ocean* and *Valkyrie Profile* both helped form a bond with developer tri-Ace (which continued to work with the publisher, among others), plus there were classics like *ActRaiser*, *Soul Blazer*, *Terranigma* and *Illusion Of Time* that sadly wouldn't really make it out of the 16-bit era.

FINAL FANTASY

FIRST RELEASE: FINAL FANTASY (NES, 1987)

F IS FOR…
Fetch-quest Family Farm

The most successful global RPG brand outside of Nintendo's more recent pocket-sized monster, Square's series is also among the most prolific. On top of 14 mainline games (with another due later this year), there are entire subsets within the genre – *Crystal Chronicles*, *Tactics*, *Chocobo*, *Theatrhythm*, *Dissidia* and a whole bunch on one-offs, direct sequels and oddities to boot. The key hook here is that, for the core games, at least, there's rarely any kinds of continuity between releases outside of genre. Characters, worlds, scenarios, battle systems… it all changes completely every time, effectively meaning that the core fanbase knows roughly what they'll be getting each time and buys in, while those unaware of the series or disenfranchised by the last release can jump in the next time around and see how they get on with the new chapter.

While Square's formula for the series stuck fairly rigidly to the tried-and-tested for the first ten mainline entries, it was here that the team – like others heavily invested in the genre – started looking for ways to change things up in order to avoid stagnation when other types of game were clearly and rapidly evolving. In turn, these attempts, to varying degrees of success, saw the famed franchise veer all over the place – we saw a direct sequel for the first time (*FFX-2*), a bold stride into the online RPG field (*FFXI*), a logic-driven massively single-player RPG (*FFXII*) before Square managed to try three very different things in the space of a single trilogy (*FFXIII*, *FFXIII-2* and *Lightning Returns*). Even *FFXIV* saw changes made within the lifespan of a single game – the initial release was panned, leading the team to rethink and reinvent it for relaunch as *A Realm Reborn*, today one of the leading subscription MMOs on the market. With the upcoming *Final Fantasy XV* evidently a leap even further into action-RPG territory than *Lightning Returns* was willing to take (it's more in line with games like *Kingdom Hearts* in terms of combat), fans of turn-based brawling have two options – replay the older games or enjoy the wave of new titles like *Bravely Default* that have emerged in the wake of the former regent abdicating its ATB throne. Which, presumably, one can only sit in when one's ATB gauge is full.

FINAL FANTASY'S GREATEST HEROES
Meet the stars from the series' golden age

TERRA *Final Fantasy VI* 1994

CLOUD *Final Fantasy VII* 1997

SQUALL *Final Fantasy VIII* 1999

ZIDANE *Final Fantasy IX* 2000

TIDUS *Final Fantasy X* 2001

G IS FOR…
Game Over Grind Gold

GRANDIA

FIRST RELEASE: GRANDIA (SATURN, 1997)

■ The major innovation of Game Arts' beloved RPG comes in its battle system, greater visibility of attack timings for both enemies and allies bringing with it a whole new level of depth and strategy. Landing a hit while an enemy is charging their own might delay or outright cancel the incoming blow, and manipulating this skilfully is key in the game's tougher fights. We saw an evolved version of this system in the sequel, as well as in other titles – many have riffed on this idea over the years, with various degrees of depth and success. That said, even Game Arts itself didn't have much luck after that one great sequel – *Grandia Xtreme* and *Grandia III* never made it to Europe and failed to live up to previous games, and the company was acquired by GungHo during production of an ill-fated *Grandia* MMO, now working on all kinds of odds and sods rather than the franchise it shot to fame with.

FURTHER READING
GOLDEN SUN, GROWLANSER

HYDLIDE

FIRST RELEASE: HYDLIDE (PC, 1984)

■ Perhaps the earliest example of what we now know as a JRPG, albeit one that falls more on the action side of things than the turn-based classics that truly established the genre. Even this early in the development of the eastern RPG, late localisation was already causing issues – *Hydlide* first arrived in the US with a NES port five years after its original PC release, inevitably falling into *The Legend Of Zelda*'s shadow as a result and seeming dated by comparison because… well, it was. As such, the series was never really all that well received outside of Japan, and only a couple of its sequels were localised after.

H IS FOR…
Healer Hero HP

I IS FOR...
Invasion
Items
Inn

IGA
FIRST RELEASE: DETANA!! TWINBEE (ARCADE, 1991)

■ Having joined Konami several years earlier, Koji 'IGA' Igarashi is best known for being a key figure in turning *Castlevania* from a traditional action game into a free-roaming 2D RPG with the sensational *Symphony Of The Night*, on which his credits included assistant director, scenario writer and programmer. He would later rise to a producer role on the GBA and DS titles that built on *SOTN*'s RPG fundamentals, making him a key figure in the evolution of the genre. Recently, having parted ways with Konami, IGA launched a Kickstarter campaign for a game entitled *Bloodstained: Ritual Of The Night* – a modern *Castlevania* follow-up in all but name – and its funding goal was smashed 11 times over, with the game due for release in 2017.

FURTHER READING
ILLUSION OF TIME, INFINITE UNDISCOVERY, IZUNA

JADE COCOON
FIRST RELEASE: JADE COCOON: STORY OF THE TAMAMAYU (PLAYSTATION, 1998)

■ Nobody was especially surprised to see the explosive success of *Pokémon* lead to an onslaught of similar titles, and this was the best of the 32-bit era. Whereas Nintendo's game (which actually belatedly released the same year outside of Japan) had a clearly defined roster of possible monsters, however, Genki's more rustic offering allowed players to fuse beasts to create powerful new ones and inherit abilities they may not otherwise be able to use. Combat admittedly lacked the complexity and depth of *Pokémon* – it had just three elements working as a rock/paper/scissors triangle of strength and weakness compared to the 15 types present in Game Freak's title – but this was offset by how cool it was to breed and improve generations of your own creations, something that has actually since found its way into the *Pokémon* series as well.

J IS FOR...
Jokes
Jobs
Jail

K IS FOR...
Key Item
Kefka
King

KINGDOM HEARTS
FIRST RELEASE: KINGDOM HEARTS (PLAYSTATION 2, 2002)

Dropping an assortment of original characters and *Final Fantasy* stars into a collection of different Disney worlds could have been a complete disaster but somehow, Square was able to marry these disparate elements with an incredible degree of finesse. Each themed world you visit is a loving recreation of the source material and there's a great level of diversity both in terms of style and gameplay. This is evolved even further in the sequel, where the likes of *Tron* and *Pirates Of The Caribbean* worlds sit neatly alongside more traditional cartoon-themed areas and other worlds are tapped for the unique breaks from usual gameplay they offer, such as the musical silliness of *The Little Mermaid*'s Atlantis or Hercules' gladiatorial arena.

As you may expect from a series that pulls together content from across nearly 100 years of a prolific studio's work, though, *Kingdom Hearts*' overarching plot has grown so convoluted as to be almost impenetrable to newcomers. In truth, the intricacies don't matter all that much – you can make sense of each game's path from start to finish even if the deeper relationships between and origins of the original cast do elude you. Moreover, it's a blast purely from a fan service perspective. Combat is tight, plus there are few games out there where you can be talking to a JRPG legend one minute, then fighting off hordes of enemies alongside Aladdin the next. A guilty pleasure, almost, but a pleasure nonetheless.

RPG'S GREATEST CROSSOVERS

NAMCO X CAPCOM
■ Only released in Japan, this twin-studio mash-up took the form of a tactical RPG akin to *Fire Emblem*, only with battles played out as action-based 2D showdowns with some cool team moves on display.

PROJECT X ZONE
■ Effectively a sequel of sorts to *Namco X Capcom*, this globally-released 3DS SRPG added even more fan service by bringing Sega characters to the party and pushing the crazy combat even further.

TRINITY UNIVERSE
■ Bringing together characters from the *Disgaea* and *Atelier* franchises alongside an original cast, this three-developer curio had great potential but sadly didn't manage to live up to it.

LUNAR
FIRST RELEASE: LUNAR: THE SILVER STAR (MEGA-CD, 1992)

■ Few games truly took full advantage of the potential offered by the Mega-CD, but *Lunar*'s status as the bestselling game for the platform in Japan (and second best globally, just behind *Sonic CD*) is testament to how well it did just that. CD audio, anime-style cutscenes and voiced characters were all fresh and exciting for a console RPG, these beautiful distractions drawing eyes away from the fact that it was actually fairly typical in terms of gameplay and setting. Saturn and PlayStation updates to the game improved both presentation and content and such remakes and rereleases are a prominent feature of the series – there have been ten *Lunar* games released, yet only four are original games.

L IS FOR...
Limit Break
Legend
Loot

MARIO

FIRST RELEASE: SUPER MARIO RPG: LEGEND OF THE SEVEN STARS (SNES, 1996)

Over the years, we've seen that Mario can do just about whatever he likes and generally be pretty good at everything. But back at the end of the SNES era, the idea of letting teams outside of Nintendo handle *Mario* games didn't inspire confidence thanks to a slew of ill-conceived spin-offs. Still, there were few safer sets of hands than those of Square when it came to role-playing games, and Mario's RPG debut turned out as well as anyone could have hoped.

Isometric visuals and prerendered 3D characters both did their part to set *Super Mario RPG* apart from his more traditional platforming adventures, but it was the novel battle system that won the day. Bringing the constant action of core *Mario* games into battle worked out surprisingly well, with attacking, defending, and skills and items use all requiring timed inputs to enhance performance. Blindly mashing through menus simply wasn't possible, and the introduction of skill elements to turn-based battles remains a staple of *Mario*'s RPG spin-offs to this day.

While there's been no direct sequel to *Legend Of The Seven Stars*, Mario's RPG adventures have forked off into two distinct franchises – *Paper Mario* and *Mario & Luigi*. Each has its own flavour, with *Paper Mario* incorporating many elements that riff on its papercraft world and *Mario & Luigi* feeling like a more direct follow-on from the SNES original, albeit with a different art style and a quirky sense of humour. Quality remains high throughout and a few stumbles aside (such as recent 3DS *Paper Mario* release, *Sticker Star*), this once-unexpected new direction for Mario is now another feather in his iconic cap.

M IS FOR...
**Mini-games
Monsters
Magic**

OTHER UNLIKELY RPG HEROES

CHARLES BARKLEY
BARKLEY, SHUT UP AND JAM: GAIDEN
■ A freeware RPG sequel to a 16-bit sports game (and *Space Jam*, apparently), this tasks former NBA star Charles Barkley with saving the world with the power of mad dunks.

PECO
BREATH OF FIRE III
■ Since we can't think of another game with a playable onion, Peco's inclusion here is justified. He's sort of a comic relief character but even all these years later, he still creeps us out a little.

KOROMARU
PERSONA 3
■ The odd thing about Koromaru isn't just that he acts almost human-like a lot of the time – it's that others also seem to treat him as such as well, despite the fact that he's a dog.

QUINA QUEN
FINAL FANTASY IX
■ Just as *FFVII* had a cat riding a toy, *FFIX* has its own curveball – a genderless qu in a chef's outfit with a limited grasp of language and a taste for frogs, Quina will eat just about anything.

NIHON FALCOM

FIRST RELEASE: GALACTIC WARS (PC, 1982)

■ Founded in 1981, Nihon Falcom specialised in PC development and even before it effectively defined the genre with *Dragon Slayer* and *Xanadu*, it had started incorporating many elements of RPGs into its games. But while its more well-known peers built their franchises on consoles, Falcom's growth was hindered by the fact that PC didn't offer the level of uniformity or the captive audiences of console development, though this didn't stop it developing something of a cult following in the Western world. Audio is also a major factor in the studio's reverence, importance, and popularity, with a young Yuzo Koshiro responsible for scoring the early *Ys* games before going off to do his legendary work on *Streets Of Rage*, *ActRaiser* and so many other classics.

N IS FOR...
**New Game+
Narrative
NPC**

ORESHIKA

FIRST RELEASE: ORE NO SHIKABANE O KOETE YUKE (PLAYSTATION, 1999)

■ Most RPGs do everything in their power to form a bond between player and cast, the hope being that the person holding the controller will eventually feel like they're part of the story. The *Oreshika* games, of which there are only two, spit in the face of this convention – its heroes all have an extremely limited lifespan, meaning you need to pair them off with gods to produce offspring who can take their place. These younglings, who inherit not just abilities but appearance as well from their parents, need to keep this cycle going until their clan's mission of vengeance is done. That sense of attachment isn't lost, though, rather enhanced – to lose a character in battle can actually be to lose an entire bloodline, so the stakes are always incredibly high.

O IS FOR...
**Overworld
Optional
Overkill**

PHANTASY STAR

FIRST RELEASE: PHANTASY STAR (MASTER SYSTEM, 1987)

Dragon Quest and Final Fantasy led to all kinds of fantasy-themed imitations, which only helped Sega's sci-fi series carve a niche for itself. Between a smart title that conveyed its space-age take on traditional fantasy fare and generally solid mechanics, the franchise quickly built a strong fanbase. But after it moved on from Master System to Mega Drive, a steady procession of other sci-fi-inspired games would bruise its novelty value and leave the Mega Drive trio, while still great, feeling less and less exciting each time around. As a result, Phantasy Star skipped the Saturn (barring a Japan-only compilation) but its comeback on Dreamcast was a revelation – a trailblazer in the online scene, Phantasy Star Online laid out the template for console-scale MMO-style player interactions still used to this day by games like Monster Hunter, White Knight Chronicles and even new franchises such as Destiny.

P IS FOR...
Protagonist
Potion
Party

POKÉMON

FIRST RELEASE: POCKET MONSTERS RED/GREEN VERSION (GAME BOY, 1996)

Phantasy Star's two-time major innovation meant it had to make it onto this list but at the same time, we can't exactly ignore what has become the most successful RPG in the world and one of the best-selling gaming franchises of all time. Wrapped up as it was in a garish blanket of anime and cheap toys in the early years, you'd be forgiven for falling into the trap of assuming Pokémon is a game for kids. Sure, that's the target audience, but for older players, digging into the series' deep mechanics reveals the true nature of Pokémon, showcasing one of the most complex, personal and near-limitless RPG systems in gaming history. Its ability to be enjoyed at both extremes of this spectrum – inviting players to tackle as much complexity as they're comfortable with – is largely responsible for its success, although its adorable cast and merchandise certainly don't hurt, either.

FURTHER READING
PERSONA, PARASITE EVE, POPFUL MAIL, PANZER DRAGOON SAGA

Q IS FOR...
Queen
Quirks
Quest

QUEST 64

FIRST RELEASE: QUEST 64 (N64, 1998)

■ Despite being almost exactly as good as you'd expect an game where the main character is called Brian to be, Quest 64 is interesting and notable for several reasons. For one, it was the first RPG to be released on the N64, and one of only a handful of similar games to grace the system at all. Secondly, at a time where most Japanese games were localised and released much later outside of their home territory, Quest 64 was notable for flipping this trend on its head – it released in Japan almost a year after its launch in the rest of the world, oddly. Quest 64 does some interesting things (such as the novel way it handles magic) but other than that, it's a generic and really quite ugly RPG designed around players new to the genre.

RESONANCE OF FATE

FIRST RELEASE: RESONANCE OF FATE (PLAYSTATION 3, XBOX 360, 2010)

■ Not all JRPGs follow the sword-swinging, stereotype, though few deviate from genre conventions quite so violently as tri-Ace's superb effort. While technically sci-fi, its depiction of a future Earth wracked by pollution and general reliance on realistic or believable tech allows it to stand out from the aliens and lasers that so often populate the subgenre. An interesting concept (where humanity is forced to live on towers, with social standing dictated by how high up people live) and smart map and exploration solution (a hex-based grid must be filled in to allow passage between locations) work in its favour, but the battles are the highlight, with the three heroes using all kinds of firearms and making leaping, bullet-spraying runs in strategic encounters that bring the excitement of sequences from The Matrix, Max Payne or any John Woo movie you might care to name to a genre that had never seen their like, and probably never will again.

R IS FOR...
Random Encounters
Revive
RNG

2%

SOUL BLAZER
QUINTET, SNES, 1992

6%

SHADOW HEARTS
SACNOTH, PS2, 2001

12%

SKIES OF ARCADIA
OVERWORKS, DREAMCAST, 2000

3%

SWORD OF VERMILLION
AM2, MEGA DRIVE, 1991

10%

STAR OCEAN
TRI-ACE, SUPER FAMICOM, 1996

2%

SAGA
SQUARESOFT, GAME BOY, 1989

23%

SECRET OF MANA
SQUARESOFT, SNES, 1993

■ This ARPG slayed the competition and it's easy to see why. *Mana* boasts interesting characters, it has an excellent inventory system, some fantastic-looking locations and one of the best soundtracks around. It even caters for three-player co-operative play – a rarity for the time.

7%

SHINING
CLIMAX ENTERTAINMENT/ CAMELOT SOFTWARE PLANNING, MEGA DRIVE, 1991

4%

SWORD ART ONLINE
AQURIA, VITA, 2014

9%

SHIN MEGAMI TENSEI
ATLUS, SFC, 1992

S
IS FOR...
Spiky Hair Summon Status

12%

SUIKODEN
KONAMI, PLAYSTATION, 1995

10%

SOULS
FROMSOFTWARE, PS3, 2009

THE BATTLE FOR S

While most other categories offered a clear frontrunner for us to focus on, the letter S present so broad a selection of options – all important for very different reasons – that it proved impossible to narrow it down. Here's how you voted.

TALES OF...

■ Taken at face value, Bandai Namco's long-running franchise is about as typical as JRPGs come – it's all anime heroes, spiky hair, ellipses, world-saving quests and the rest of the cliche cabinet as well. Despite this, the series delivers a respectable message of equality between races and cultures, all packaged up as one of the leading action-RPGs in its home territory and a popular one around the world to boot. Just like genre leaders *Dragon Quest* and *Final Fantasy*, each game visits new worlds and recruits new heroes along the way, though themes and gameplay remain at least similar across the board, typically employing a battle system that plays like a hyperactive 2D fighter. Recent games have moved into full-3D, although the constant is that despite elements that riff on turn-based RPG staples, you always have complete control over character movement and actions. Probably third in the popularity stakes behind the big two – *Final Fantasy* and *Dragon Quest* – in Japan, although after years of the west only seeing select titles, Bandai Namco has made more of a push in recent years to turn *Tales* into a global brand.

T IS FOR...
Turn-based
Thief
Tank

FURTHER READING
TERRANIGMA, TEARS TO TIARA,
THE GUIDED FATE PARADOX
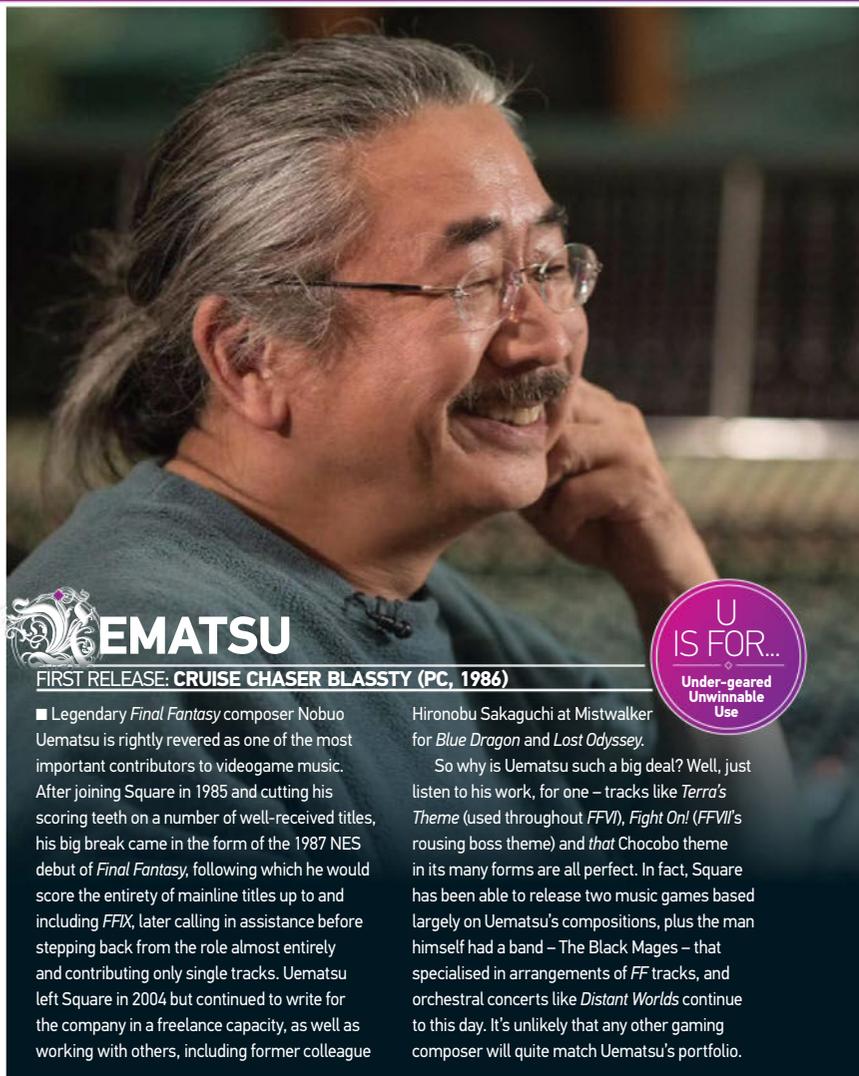
UEMATSU

■ Legendary *Final Fantasy* composer Nobuo Uematsu is rightly revered as one of the most important contributors to videogame music. After joining Square in 1985 and cutting his scoring teeth on a number of well-received titles, his big break came in the form of the 1987 NES debut of *Final Fantasy*, following which he would score the entirety of mainline titles up to and including *FFIX*, later calling in assistance before stepping back from the role almost entirely and contributing only single tracks. Uematsu left Square in 2004 but continued to write for the company in a freelance capacity, as well as working with others, including former colleague Hironobu Sakaguchi at Mistwalker for *Blue Dragon* and *Lost Odyssey*.

So why is Uematsu such a big deal? Well, just listen to his work, for one – tracks like *Terra's Theme* (used throughout *FFVI*), *Fight On!* (*FFVII*'s rousing boss theme) and *that* Chocobo theme in its many forms are all perfect. In fact, Square has been able to release two music games based largely on Uematsu's compositions, plus the man himself had a band – The Black Mages – that specialised in arrangements of *FF* tracks, and orchestral concerts like *Distant Worlds* continue to this day. It's unlikely that any other gaming composer will quite match Uematsu's portfolio.

U IS FOR...
Under-geared
Unwinnable
Use

VAGRANT STORY

Yasumi Matsuno's next project after finishing work on *Final Fantasy Tactics*, *Vagrant Story* stands as one of Square's most interesting and original RPGs and few games push the PlayStation harder. The unique painterly art style, immaculate detail and classical writing and themes give it a feel that's almost theatrical, although its rich combat system – effectively that of a complex tabletop RPG, albeit with dice kept behind a screen at all times – and simple puzzle and platforming elements ensure player interaction is always the main priority. By granting different enemies extreme resistances to different damage types and elements, Square made it crucial for hero Ashley Riot to lug around and switch between a host of different weapons, either those looted from fallen enemies or treasure chests, or those he has pieced together himself from various scattered components. As such, combat is kept fresh, helped by the fact that it doesn't outstay its welcome – the game can be clocked in less than ten hours, leaving plenty of time to jump back in for the real challenge that is New Game+.

V IS FOR...
Vehicles
Victory
Versus

FIVE THINGS YOU DIDN'T KNOW

IT'S SECRETLY FRENCH
■ Much of the game's design and architecture is informed by the Saint-Émilion region of France – after being tipped off about the area, famous for its vineyards, by a colleague, Matsuno and the team visited the area while settling on the artistic style.

IT'S NOT SHAKESPEARE
■ While their names are taken from *Hamlet*, Rosencrantz and Guildenstern bear no resemblance to their namesakes. Their first names are nods to The Bard, however – Romeo (obvious) and Jan, a reference to scholar and Shakespeare expert, Jan Kott.

NO DEMOS FOR EU
■ The game came bundled with a second disc in Japan and America, featuring seven demos for upcoming Square games. As four of these (*Chrono Cross*, *Threads Of Fate*, *Chocobo's Dungeon 2* and *Legend Of Mana*) weren't planned for European release, the extra disc was dropped.

TOME SWEET TOME
■ Weighing in at just shy of 500 pages, the *Ultimania* guide book to the game – a hybrid of strategy guide, art book and behind-the-scenes access – is a gorgeous beast. It's a pity, then, that it fails to cover the game's optional NG+ dungeon, the Iron Maiden.

WHICH WAY NOW?
■ The notoriously horrible maze area Snowfly Forest seems like something that can be blitzed through once you know the way through it, but it really isn't. Of the 26 total confusingly similar areas, only eight of them are skipped if you take the quickest possible route.

WILD ARMS

FIRST RELEASE: WILD ARMS (PLAYSTATION, 1996)

■ Notable as one of precious few RPG series to use a Western theme rather than traditional fantasy or sci-fi settings, *Wild Arms* showed that the power of PlayStation could be used not just to throw polygons around and dazzle with fancy 3D effects, but to deliver more interesting and colourful worlds as well. The early games, despite forging new ground thematically, played out somewhat traditionally for the genre, but it later evolved its mechanics to innovate in all fields – the hex-based structure of later games sets the series apart from its peers, while the tool system allows for combat items to be used during exploration and traversal in order to overcome obstacles. Also, it's one of the few RPG series from the era where the majority of the games have been treated to a global release.

W IS FOR…
… Whatever
World Map
Warrior

X IS FOR…
X-Potion
Xanadu
XP

XENO SERIES

FIRST RELEASE: XENOGEARS (PLAYSTATION, 1998)

■ Tetsuya Takahashi originally pitched what would become *Xenogears* as an early concept for *Final Fantasy VII* but, after being written off as too great a tonal shift for Square's flagship series, it was instead greenlit as its own project. An interesting fusion of sci-fi themes and surprisingly deep philosophical discussion referencing the likes of Freud, Jung and Nietzsche (whose works lend subtitles to the PS2 *Xenosaga* trilogy), it also mixed things up with its combat systems. Traditional combat isn't dissimilar to *Final Fantasy*'s ATB system, but it also allows for jumping into huge mechs for spectacular robotic showdowns that feel far more weighty and empowering than you might think turn-based battles could be. The series runs the spiritual successor model rather than purely relying on direct sequels, leaping from *Xenogears* to *Xenosaga* to *Xenoblade* with similar themes running through each.

YS

FIRST RELEASE: YS: THE VANISHED OMENS (VARIOUS, 1987)

One of the founding fathers of the genre, Falcom's action-RPG series was, like *Hydlide* before it, offering computer players similar adventuring experiences to those Square and Enix were creating on console. Accessibility was key here, so while *Dragon Quest* was busy laying out the foundations of the genre as we know it today, Falcom managed to find a way to retain the amassing of treasure and trinkets and the character interactions of traditional role-playing games while simplifying combat just about as far as it could go – attacking enemies was as simple as walking into them, not even requiring a single button press, a system established by earlier Falcom games, yet clearly refined for *Ys* and its sequels. This would go on to become a defining feature of the series, although it's something that has

since been phased out as controls and options in battle grew more complex, plus the wider uptake and understanding of gaming meant that old mechanic would probably make *less* sense to players at the height of the 16-bit era than hitting a button to attack.

The series' popularity outside of Japan has always been limited yet devout, a hardcore following doing great work on fan translations for the games that weren't localised. More recently, there's been no need for those developers to do their thing, however – publisher XSEED purchased a fan translation of *The Oath In Felghana* to give the game a western release on PSP five years after the PC version launched in Japan and the team continues to help popularity grow outside of its home territory with rereleases and new titles.

Y IS FOR…
"YOU DEFEATED"
Younglings
Yggdrasil
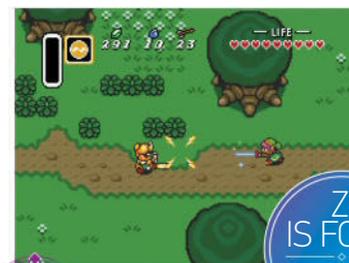
Z IS FOR…
Zantetsuken
Zodiac
Zenny

ZELDA: THE GREAT DEBATE

FIRST RELEASE: THE LEGEND OF ZELDA (NES, 1986)

■ Is it, or is it not, an RPG? Players have been bickering about this old chestnut for the best part of three decades, and it isn't hard to see why. With its fantasy themes, arsenal of tools and powers and upgradable health, mana and attack power, it's not too much of a stretch to count Nintendo's oh-so-popular franchise under the RPG banner. The argument against that is that it's purely an action-adventure game brushed with light RPG mechanics, with similarities in setting and tone to genre keystones misleading people into categorizing it incorrectly.

Ultimately, it doesn't matter how you personally choose to define this (or indeed any other) series – while it clearly doesn't have the in-depth stats of your usual JRPG, it's certainly closer to the pen-and-paper definition of an RPG, placing players in the shoes of a hero and sending them off on epic quests against stacked odds, so there are solid cases to be made both ways of the argument. ✱

Samurai Shodown II

A SUPER SEQUEL IN EVERY POSSIBLE WAY

Ever since *Barbarian* appeared in 1987 I've been obsessed with fighting games that feature swordplay. While few brawlers have been brave enough to simply stop a fight by letting you chop off your opponent's head, the *Samurai Shodown* series at least captured the vicious brutality that fighting with a sword offers. The original game, released in 1993, was solid, but SNK really upped the ante for its sequel and it remains one of my favourite entries in the franchise.

Everything about SNK's sequel was massively superior. Graphically, it was a huge step up with delicious-looking animation, some truly stunning backgrounds and masses of detail. The first *Samurai Shodown* was no slouch, but the sequel delivered environments that were bursting with colour and glorious imagery. It was a delight for SNK fans, too, with many classic characters from other franchises being hidden in the elaborate-looking backgrounds.

Four additional playable characters were introduced, including the catlike Cham Cham (who replaced her brother Tam Tam from the original game), Genjuro Kibagami, who would become the Yang to lead Haohmaru's Ying, a Prussian knight called Neinhalt Sieger and the hilariously-named monk, Nicotine Caffeine. Two new bosses were added too, including Rashojin Mizuki, the first female mayor of the series and the only one to have help from an animal companion.

For all its improved aesthetics and colourful character roster, it's the gameplay that receives the biggest overhaul. As well as adding forward and backward rolls and pulling off small hops to avoid low attacks, SNK's sequel also featured a solid parry system. Yes, it was extremely difficult to pull off, due to the split-second timing that was required, but that only made a successful parry all the more sweeter. Add in far tighter and more responsive controls and SNK's sequel took some beating. In fact, I still play it on Xbox 360 some 22 years later. ✱

RETROREVIVAL

NICOTINE

3

POW

CREDITS 07

EL=0

This is
Puzzle Island.

TIME

LAP 1/3

06

5

6th

GAME BOY A
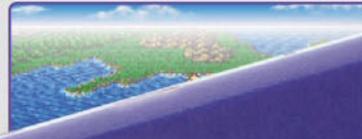
Nintendo

GAME BOY

ADVA

With Nintendo's Game Boy Advance turning 15 years old this year, Damien McFerran takes a look back at the innovative 32-bit handheld which delivered arcade and console-standard gaming on the go

The problem with runaway commercial success is that it's often tricky to repeat the magic a second time, but Nintendo is a company which has a track record of bottling lighting on multiple occasions. The Game Boy – and its sibling, the Game Boy Color – managed to shift a staggering 118 million units worldwide, effectively ensuring Nintendo's dominance of the portable gaming arena for over a decade. Carrying that success into a new generation of hardware was never going to be easy, especially as Nintendo was feeling pressure at the close of the millennium from mobile gaming rivals such as SNK, Bandai and even mobile phone stalwart Nokia. The Nintendo faithful needn't have worried, though – the console which the company pushed to market to deal with these threats was capable of effortlessly securing another half-decade of near-unchallenged triumph, even if it did take a couple of timely hardware revisions to become the truly definitive article.

Rumours regarding a successor to the monochrome Game Boy appeared in the press as early as 1996. Dubbed 'Project Atlantis', this mythical 32-bit system was RISC-based and boasted a colour screen, and it was later assumed that this is what eventually ▶

became the Game Boy Advance. However, a rumoured 1997 release date (a year before the Game Boy Color arrived) and the promise of N64-level visuals would suggest that this was not the console that would find its way to market in 2001. When Nintendo did eventually release a 'proper' successor to its Game Boy, it was rather more conservative than the rampant speculation would suggest. "There were rumours, even back then, that Nintendo was working on a mobile phone and handheld console hybrid," elaborates former *C&VG* editor Paul Davies. "I think we knew that the new Game Boy would be at Space World that year, so we made sure to book tickets. I just wanted something that was as good as SNES but portable, if I'm honest."

That's pretty much what we got. The Game Boy Advance may have utilised a 32-bit CPU, but it remained a 2D machine at heart and employed many of the same technical tricks which had been so effective on the SNES. "The hardware specs were great – relatively speaking – so it was a really nice system to develop games for," recalls former Probe, Crawfish and Hotgen staffer David Leitch, who worked on both the Game Boy Advance and its forerunner the Game Boy Color. "The biggest change was that it was also powerful enough to write most – if not all – of the game in C, whereas on the Game Boy Color and earlier handheld systems you were pretty much obliged to use assembly language. [Nintendo] enhanced the aspects

that seriously limited what you could do on the Game Boy Color. For example, there were more sprites, more playfields, more background characters. It had hardware scaling and rotation, transparency effects and probably some more stuff that I've forgotten. It was kind of like having a SNES or Mega Drive in handheld form."

The Game Boy Advance made its Japanese debut in March 2001, sporting a landscape screen orientation which set it apart from Nintendo's previous handhelds, but wasn't without precedent – the company's Game & Watch handhelds often used this form factor. French designer Gwénaël Nicolas and his Tokyo-based design studio Curiosity Inc. were employed to come up with the design, which combined elegant grey lines with an ergonomic body. Compared to the boxy Game Boy and more compact Game Boy Pocket and Game Boy Color, the Game Boy Advance was quite a departure from an aesthetic standpoint, but it retained the toy-like charm that had made the range so iconic. Beating inside the console was a 32-bit ARM7TDMI CPU heart, clocked at 16.8 MHz, while the 2.9-inch TFT screen showcased the system's impressive visuals. Launch titles like *F-Zero: Maximum Velocity* and *Castlevania: Circle Of The Moon* were certainly a step-up from what players had become accustomed to on Nintendo's previous handhelds, but the company was keen to maintain a link between the generations so the Game Boy Advance boasted backwards compatibility with Game Boy and Game Boy Color games. This proved to be instrumental when it came to selling the new machine to concerned parents, as it avoided the problem of an expansive library of games becoming surplus to requirements overnight. By keeping the name and maintaining support for older games, Nintendo was sending the message that this console was an inclusive upgrade.

For all of the refinements that the Game Boy Advance brought to the table, it had its shortcomings. That otherwise-striking TFT screen lacked a light, which made it hard to play the console unless you were directly underneath a source of illumination. "You had to sit under the best light source possible to even see what was going on," says Paul. "I played loads of *Castlevania* and *Metroid* on it and took it everywhere with me, but

» [GBA] *Metroid Fusion* was a stellar addition to the *Metroid* series, it's also notable as, to date, it's the last game in the *Metroid* timeline.

when visiting my parents' house the only room I could really play was the kitchen, sat on a dining chair under the fluorescent light!" Some early Game Boy Advance games – the aforementioned *Castlevania: Circle Of The Moon* being a notable example – were rendered almost unplayable in dimly-lit environments due to the dark nature of the visuals. To combat this issue a series of bulky bolt-on peripherals were produced by third-party manufacturers which aped the equally laughable add-ons that typified the Game Boy era in the early Nineties. Another negative was the lack of a rechargeable power source; like its aging forerunners this new system was reliant on AA batteries, which did at least last for an impressive 10 to 15 hours before replacements were needed. Even so, there was a feeling within the industry that it was high time that rechargeable batteries were incorporated into handheld consoles; the rise of the mobile phone proved conclusively that the technology existed to create such power cells and place them in small pieces of technology.

BEGINNING TO BLOOM
Despite its shortcomings, the Game Boy Advance continued the commercial success of its predecessors and although quality original software was rather slow to appear, it began to build up a formidable selection of games. Early remasters, such as *Super Mario Advance*, *Final Fight One* and *Super Ghouls 'N Ghosts,* certainly scratched a nostalgic itch and were impressive for

» [GBA] Some Game Boy Advance titles are almost unplayable on the original model, as the lack of screen lighting made dark visuals hard to see.

HARDWARE VARIANTS The many faces of the Game Boy Advance

GAME BOY ADVANCE
■ Launched in 2001 and offering a landscape rather than portrait orientation, the Game Boy Advance was a significant step-up from the Game Boy Color, Nintendo's previous handheld console. However, the lack of an illuminated display and the reliance on batteries held it back somewhat.

GAME BOY ADVANCE SP (AGS-001)
■ Two years after the launch of the original GBA Nintendo released the SP, offering a rechargeable battery, front-lit LCD screen and compact clamshell design which made it even more portable. The only real omission was the removal of the 3.5mm headphone jack – an accessory was released to cover this.

GAME BOY ADVANCE SP (AGS-101)
■ 2005 saw a largely under-the-radar revision of the GBA SP in the form of the AGS-101. The LCD screen was backlit, offering better brightness than the original AGS-001 model. It was also possible to adjust the backlight intensity with the brightness button – on the AGS-001, this button simply switched the frontlight off.

"I played loads of Castlevania and Metroid on it"

Paul Davies

on-the-go gaming, but it was original releases such as *Advance Wars*, *Mario Kart: Super Circuit*, *Golden Sun*, *Metroid Fusion* and *WarioWare Inc*. which truly illustrated what the hardware was capable of. This, combined with a more enthusiastic marketing spend, ensured that the system began to gather momentum all over the globe, and when it became apparent that challengers like the Tapwave Zodiac and Nokia N-Gage posed no immediate threat to Nintendo's market share, the console settled down into a period of complete control, attracting robust third-party support due to the fact that it was essentially the only handheld in town. "I was a really late starter in terms of when I got my first game out on the system," recalls David, who had early access to a Game Boy Advance development kit. "The project I had the prototype dev kit for didn't crystallise, so I carried on with the Game Boy Color work and some home console stuff before getting involved with *Medal Of Honor: Infiltrator* in 2003." The story behind this likeable Electronic Arts-published title typifies the changeable nature of third-party development – something which, arguably, hasn't changed right up to the present day. "That project was one of the
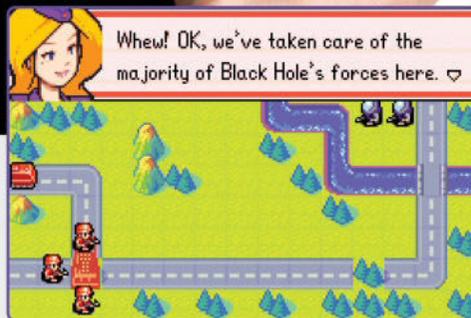
» [GBA] Like *Fire Emblem*, *Advance Wars* took its western bow on Nintendo's 32-bit portable console.

most enjoyable things I've worked on, and not just on the GBA," says David. "Great team, great game, great results; but the company I was doing it for – Hotgen – went bust close to the scheduled end. We finished it off working out of a function room in a Croydon hotel."

Putting aside the shaky nature of third-party development, it was clear that despite ruling the entire handheld sector, Nintendo wasn't content to take its foot off the gas. In 2003, the Game Boy Advance SP was launched and to many, it proved to be the machine the original should have been from day one. While some grumbled about the overhaul appearing so quickly, faithful fans had no qualms about upgrading. "Nintendo is always about the hardware," says Paul. "After a million different versions of Game Boy, it wasn't even an issue, at least not for the ▶

GAME BOY MICRO
■ Released alongside the Nintendo DS, the Game Boy Micro is a miniaturised edition of the Game Boy Advance hardware which lacks backwards compatibility with Game Boy and Game Boy Color titles. It's the smallest Game Boy ever made, and reinstates the 3.5mm headphone socket removed on the SP model.

GAME BOY PLAYER
■ Essentially a GBA which fits under the GameCube, the Game Boy Player allows you to play GBA, Game Boy and Game Boy Color software on the big screen. A boot disc is required to use the peripheral, and not all GBA titles are compatible with the device, mind.

UNIQUE EXPERIENCES
The console had a diverse – and sometimes odd – library of games

WARIOWARE: TWISTED!
■ Motion control isn't a new thing these days as most smartphone games showcase it, but this 2004 release – which featured a gyro sensor in the cartridge – was a revelation. Mini-games based around tilting and turning the console make this a classic. It also had a rumble feature.

BOKTAI: THE SUN IS IN YOUR HAND
■ Produced by Hideo Kojima and employing a light sensor in the cart which was used to charge your vampire-slaying in-game weapon, *Boktai* has to stand as one of the most unique titles in the Game Boy Advance library. An excellent sequel arrived in 2004.

Tilt until Yoshi stands straight, then press the A Button.
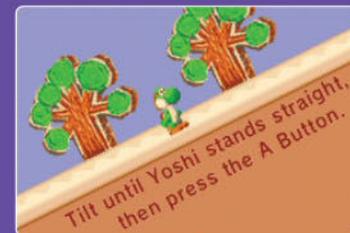
YOSHI'S UNIVERSAL GRAVITATION
■ Known as *Yoshi Topsy-Turvy* in North America, this 2D platformer made use of a tilt sensor in the cartridge, similar to *WarioWare Twisted*, to allow the player to manipulate the in-game environment, causing enemies and items to move and shift as the console is turned.

DRILL DOZER
■ One of only two Game Boy Advance titles to use a built-in rumble feature (*WarioWare: Twisted* was the other), *Drill Dozer* was developed by Pokémon studio Game Freak. A 2D action platformer with gameplay based around using a massive drill, the title was a late classic for the console.

KORO KORO PUZZLE HAPPY PANECHU!
■ This 2002 Japan-only puzzle title was the first game to use the tilt sensor, and is built around grouping coloured blocks to remove them from the play area. Produced by Masayuki Uemura – who designed the Famicom – it's a shame this unique title never made it to the west.

SPECS SHOWDOWN

THe GBA was toted as a portable SNES, let's see if it was…

GAME BOY ADVANCE

» **CPU:** 16.8 MHz 32-bit ARM7TDMI, 8-bit Z80 coprocessor for Game Boy backward compatibility

» **MEMORY:** 32 kilobyte + 96 kilobyte VRAM (internal), 256 kilobyte DRAM (external)

» **MAXIMUM RESOLUTION:** 240×160 pixels

» **COLOURS:** 512 simultaneous colours (character mode), 32,768 simultaneous colours (bitmap mode)

» **SOUND:** Dual 8-bit DAC for stereo sound

SNES

» **CPU:** Ricoh 5A22 @ 3.58 MHz

» **MEMORY:** 128KB System RAM, 64KB video RAM

» **MAXIMUM RESOLUTION:** 512×448 pixels

» **COLOURS:** 256 on-screen from a palette of 32,768

» **SOUND:** Nintendo S-SMP, 8-channel ADPCM audio

PLAYSTATION

» **CPU:** 32-Bit RISC CPU MIPS R3051 at 33.8688 MHz, 32-bit Sony GPU

» **MEMORY:** 2 MB main DRAM

» **MAXIMUM RESOLUTION:** 640×480 (interlaced)

» **COLOURS:** 57,344 (256×224) to 153,600 (640×240) from a palette of 16,777,216

» **SOUND:** 16-Bit Sony SPU, 24-channel sound

hardcore fans. I guess we all saw it as Nintendo kindly attempting to improve the experience." Taking cues from the Game & Watch dual-screen range, the SP's clamshell design not only made it more portable, but also protected the screen when in transit. The display now had illumination – albeit of the rather dim front-lit variety (a superior backlit SP model would appear later) – and that all-important rechargeable battery meant having to buy a constant stock of AAs was to become a thing of the past. It's easy to overlook this feature today when practically every portable device sold has its own internal power source, which can be topped up at any available wall socket, but back in 2003 it was something of a minor revelation. The Game Boy line had truly come of age, not only allowing users to game in the dark, but also freeing them from the archaic shackles of battery-buying. However, Nintendo giveth and Nintendo taketh away, and in streamlining the hardware the Japanese giant had to make some sacrifices. The 3.5mm headphone socket – an essential feature for those long and crowded car journeys – was removed entirely, and could only be obtained via the purchase of a special adaptor that connected to the console's charging socket. This meant that it wasn't possible to charge the console and listen via headphones at the same time – a minor inconvenience, but an inconvenience all the same.

» [GBA] A new *Pokémon* generation arrived on the GBA, as well as enhanced remakes of *Pokémon Red & Green*.

» [GBA] RPGs flourished on the GBA – *Final Fantasy Tactics Advance* being one of several Square Enix classics.

The release of the SP coincided with a fresh batch of solid-gold classics, such as *The Legend Of Zelda: A Link To The Past*, *Mario & Luigi Superstar Saga*, *Advance Wars 2: Black Hole Rising*, *Final Fantasy Tactics Advance*, *Metroid: Zero Mission*, *Super Mario Advance 4: Super Mario Bros. 3*, *Golden Sun 2: The Lost Age*, *Pokémon Ruby & Sapphire*, *Shining Force: Resurrection Of The Dark Dragon* and many more besides. The machine was entering what was arguably its zenith, with a steady stream of software arriving on a regular basis.

GETTING CONNECTED

While the Game Boy Advance perhaps wasn't as groundbreaking as the touchscreen Nintendo DS which would succeed it in 2005, it introduced its fair share of innovations, largely via bolt-on devices which were aimed at expanding the connectivity of the device. Out of the box the GBA maintained the link cable functionality of the original Game Boy system, where consoles could be connected for multiplayer gaming using physical wires. The big difference was that the GBA supported multiple consoles using a special hub, which meant that local multiplayer titles like *The Legend Of Zelda: Four Swords* (included with *Link To The Past*) were possible, making the experience even more social. However, the need for additional hardware limited the impact of this feature. "I don't think I've ever met a real, game-playing consumer that used the Game Link cable for more than five minutes," laughs David. "Unfortunately, publishers loved that feature because Nintendo did, and it was a real pain in the arse to develop for."

While Nintendo released several variants of the link cable throughout the lifespan of the Game Boy Advance hardware, the real step forward for connectivity was the wireless adapter released alongside *Pokémon Fire Red & Leaf Green* in 2004. Ushering in the wireless revolution which started in earnest with the Nintendo DS and Sony PlayStation Portable, it supported around 30 games but sadly wasn't backwards-compatible

with old-fashioned link cable software, which would have made it even more impressive. Despite its limited scope, the adapter was yet another example of Nintendo's uncanny ability to predict industry trends; these days, we take wireless local multiplayer as a given.

It wasn't just connectivity with other Game Boy Advance consoles that Nintendo was concerned with during this time; the company's desire to innovate was seemingly boundless and it made excellent use of its handheld when it came to expanding gameplay possibilities on its domestic system, the GameCube. In recent times the rise of tablets and smartphones – as well as the introduction of the Wii U – has brought 'second screen' gaming to prominence, but Nintendo flirted with the idea over a decade ago. Granted, while a lot of link-up functionality unlocked little more than bonus content, some titles – such as *The Legend Of Zelda: Four Swords Adventures*, *Pac-Man VS* and *Final Fantasy Crystal Chronicles* – made use of the GBA in inventive ways, turning the system into a controller for the GameCube or using the console's screen to manage inventory. "The only thing I worked on that used the GameCube hook up was *Medal Of Honor: Infiltrator*, but it wasn't a multiplayer feature," says David. "What it did was turn your Game Boy Advance into a map viewer for *Medal Of Honor: Rising Sun*." While it might have passed under the radar of many consumers back then, given the current rumours surrounding the forthcoming Nintendo NX console – which is speculated to be a fusion of portable and domestic hardware – it's fascinating to note that Nintendo and the third-

THE BEST PORTS
The home console or arcade games that shone on the GBA

SUPER GHOULS 'N GHOSTS
■ While it doesn't quite match the SNES original in terms of visual and aural spectacle, this pint-sized port is still incredibly playable and benefits from a new 'arranged' mode, additional levels which reference previous games in the series and the ability to save your progress.

FINAL FIGHT ONE
■ Capcom's classic brawler was denied a complete port on the SNES so it was nice to see Capcom rectify this oversight by releasing one on the GBA. *Final Fight One* had scaled-down visuals but everything else was in good order, including a two-player link-up mode.

STREET FIGHTER ALPHA 3 UPPER
■ Arguably the most ambitious port in the history of the Game Boy Advance, Crawfish's work on *Street Fighter Alpha 3* is remarkable. The studio was able to include all of the characters and moves from the arcade game, as well as add in three extra fighters.

THE LEGEND OF ZELDA: A LINK TO THE PAST
■ The fact that very little has changed in this port of the 1991 SNES classic is reason enough to hail it as a must-have on GBA – owning one of the best games of all time in portable form was massive news back in 2002. A multiplayer-focused offering – dubbed *Four Swords* – was also included on the cart.

METROID: ZERO MISSION
■ Okay, so this isn't a straight port in the strictest sense – it's a remake of the original *Metroid* – but *Zero Mission* is easily one of the best games on the GBA, so it deserves a mention. The original *Metroid* is remastered and enhanced to exploit the advancements seen in *Metroid Fusion*, and the end result is a true gem. Unmissable.

THE MISSING LINK

Notable GameCube games that were made better by using a GBA

ANIMAL CROSSING

■ The Game Boy Advance's screen can be used to design patterns for your furniture in the game, as well as grant access to a special secret island. There's also a virtual pet mini-game to play, and, if you are tired of Tom Nook's nonsense, you can use the Game Boy Advance to play unlockable NES games.

PAC-MAN VS.

■ One of the most unique uses of the Game Boy Advance-to-GameCube link cable, *Pac-Man Vs.* has three players assuming the roles of *Pac-Man*'s antagonistic ghosts and looking at the TV screen while the Pac-Man player uses the handheld and is able to see the entire map. A great party game, even now.

FINAL FANTASY CRYSTAL CHRONICLES

■ Another title built around the idea of multiplayer, this *Final Fantasy* spin-off title enables each player connected to a Game Boy Advance to control their in-game character on the TV and access menus on the handheld without pausing the gameplay.

THE LEGEND OF ZELDA: FOUR SWORDS ADVENTURES

■ Arguably the biggest title to harness the power of the link cable, *Four Swords* not only makes use of the Game Boy Advance in its single-player mode – allowing the handheld to be used as a controller – but also permits additional Game Boys to be hooked up for multiplayer.

METROID FUSION / METROID PRIME

■ This link-up between two *Metroid* games is a good example of how content could be unlocked using the cable. It was possible to access the hidden version of the NES *Metroid* and gain access to the Fusion Suit for use in *Metroid Prime* – plenty of incentive to make the effort.

> ## "It was like a handheld SNES, and that was a big deal"
> Paul Davies

▶ parties who worked on its hardware were dabbling with such groundbreaking concepts 15 years ago.

STAYING RELEVANT

While its forerunner managed to last a decade the Game Boy Advance had a surprisingly short lifespan – which makes its total sales of over 80 million units even more impressive. By 2004 Nintendo was set to release a new handheld, but interestingly it didn't initially position the Nintendo DS as a successor to the GBA. Instead, it was officially referred to as a 'third pillar' and to reinforce this stance the Game Boy Advance hardware was refreshed a third time in the form of the Game Boy Micro. Cheap, compact and well designed but lacking support for monochrome and Game Boy Color cartridges, the Micro has the distinction of being the last console to feature the Game Boy branding. When the DS became a runaway hit the writing was on the wall for the Micro – especially as the DS was backwards-compatible with GBA software, making the smaller console redundant. It sold less than three million units and was quietly retired.

Even if the Micro had been a success, the issue for Nintendo was that developers were flocking to the DS and leaving the GBA in the dust. While some late releases proved that the hardware was still capable of delivering amazing experiences – *The Legend of Zelda: Minish Cap* being one example – it was obvious that the DS had picked up the slack and Nintendo's early insistence that the DS and Game Boy Advance could happily coexist began to sound alarmingly naive. Third-party studios switched focus to the newer system and Game Boy Advance titles began to dry up.

» [GBA] *Astro Boy: Omega Factor* was released in the West to coincide with a new *Astro Boy* TV series.

The retirement of the Game Boy name was significant at the time. For Nintendo, the brand had been its equivalent of the Sony Walkman – a 'catch-all' name which had become a byword for handheld gaming. However, the moniker had connotations that Nintendo was perhaps eager to move away from; it suggested the product was focused at children, while the DS would achieve commercial success by catering not only for children, but also adults, thanks to its *Brain Training* series. "My guess is that the branding went because Nintendo wanted the DS to appeal to a much wider audience," says David. "Given how successful the DS was, I wouldn't like to argue against that decision." Indeed, the results speak for themselves – the DS has sold over 150 million units worldwide since launch, and is the best-selling handheld of all time, and the second-best selling videogame system ever, after the PlayStation 2.

Even so, the Game Boy Advance has an important place in gaming history. It was arguably the first handheld to deliver an experience which wasn't held back by hardware limitations. "The GBA was the first handheld system that allowed you to make authentic versions of the types of games people had been playing in the arcades and on consoles up to, say, the mid-nineties," David says. "That was a major change of scope compared to Nintendo's previous handhelds. There are lots of fantastic games for Game Boy and Game Boy Color, but the ones that work best are tailored to the format – and the format was so limited that not everything was going to work," Paul agrees. "It was like a handheld SNES, and that was a big deal. It proved to be a strong platform in itself, and is fondly remembered for having substantial titles, similar in scope to the best of 16-bit era." While Nintendo has seemingly retired the Game Boy brand, David has a hunch that we've not heard the last of it. "Successful brands do tend to have an inherent value. The Game Boy name could well return at some point, or maybe they'll reinvent the Virtual Boy for a face-off against Oculus Rift?" ✱

» [GBA] The *Super Mario Advance* series spanned four games and updated some of the Italian plumber's finest 8-bit and 16-bit titles.

Future Classic

Modern games you'll still be playing in years to come

INFO

» **Featured System:** Wii
» **Year:** 2007
» **Publisher:** Nintendo
» **Developer:** Nintendo EAD Tokyo
» **Key People:** Yoshiaki Koizumi (director), Shigeru Miyamoto, Takao Shimizu (producers)

GO DEEPER

» *Super Mario Galaxy* holds the highest rating of all games on GameRankings, surpassing the previous holder, *Ocarina Of Time*.

» The game had a Latin American score, but long-time *Mario* composer Koji Kondo rejected it in favour of an orchestral style.

55.

»[Wii] Many galaxies saw Mario hopping between a series of small planets.

SUPER MARIO GALAXY

Mario's adventures are often stellar, just take a look at Super Mario 64, but his Wii debut was completely out of this world. Nick Thorpe looks back at one of the best platform games in the universe…

THE BACKGROUND

Super Mario Sunshine was considered to be a disappointment by some players. The GameCube's *Mario* adventure was relatively conservative, borrowing much of its predecessor's excellent design and reframing it around Mario's new F.L.U.D.D. abilities. However, the truth is that it had an impossible act to follow – *Super Mario 64* is the kind of game that comes along once in a generation, at most, such was its impact on platform games and 3D game design. To live up to the reputation that the N64 classic had established, a new *Mario* game would have to offer an experience that had never been seen before.

The newly-established Nintendo EAD Tokyo team had only one game under its belt when it started work on the next major *Mario* game. However, *Donkey Kong Jungle Beat* had demonstrated the team's ability to innovate in a well-explored genre – the bongo-controlled 2D platformer was more than a gimmick, offering a pleasing level of physicality. What's more, director Yoshiaki Koizumi already had an idea of how to add to *Mario*'s 3D adventures. His *Super Mario 128*

tech demo for the GameCube had featured a spherical platform, taking full advantage of 3D space. At Shigeru Miyamoto's suggestion, Koizumi and his team revisited the idea for Mario's Wii debut.

THE GAME

Peach has, unsurprisingly, found herself kidnapped again, and Mario's been flung into outer space by Kamek. Finding himself on the Comet Observatory, a spaceship owned by the mysterious Rosalina, Mario has to recover stars to get the ship moving and defeat Bowser.

In gameplay terms, this means that Mario has to take on another set of 3D platforming challenges to collect 120 stars – a familiar set of requirements. As in previous games, you'll have to hunt for hidden areas, defeat bosses and collect objects in order to earn stars. However, the space setting means that Mario spends much of his time on small planets with their own gravity. For the first time, this means that Mario can run around every side of a platform, exploring the underside and other unseen areas. These spherical platforms are employed in a variety of ways – some will provide a

»[Wii] The comparatively-limited Wii was pushed hard to make *Super Mario Galaxy* look positively awesome.
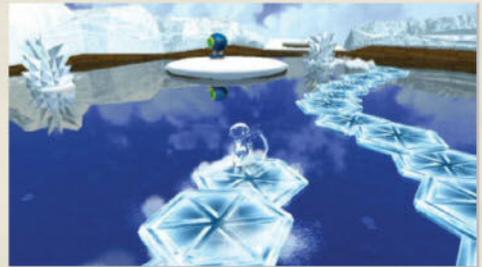
»[Wii] New abilities like Ice Mario gave the portly plumber access to a wide range of new moves.

»[Wii] Enemies standing out of Mario's range of attack can still be shot with Star Bits, stunning or defeating them.

Things of note

TWIN GALAXIES
Although you can complete the game with 60 stars, fanatics will want to get 120 to play as Luigi – his running and jumping are different to Mario's, he's a game-changer.

KAMEK'S REVENGE
Galaxy was the first appearance of Kamek the Magikoopa for years, and he's seen frequently throughout. It clearly had an impact, as he's stuck around ever since.

2D OR NOT 2D?
Spurred on by the success of *New Super Mario Bros.*, *Super Mario Galaxy* includes a selection of 2D-esque platforming sections – much like *Crash Bandicoot*.
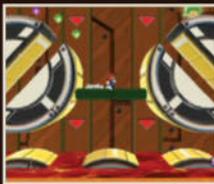
STAR LINES
If you're having trouble navigating between planets, take note of the lines connecting them – they denote routes you've already travelled across.

CRATERED
Gravity can't save you from bottomless pits – holes in planets often lead to a black hole at the centre, preventing you from falling through and emerging on the other side.

"Small planets are a refreshing way to bring a little linearity back to Mario"

wraparound arena for boss fights, others are repurposed into cylindrical 2D platform challenges, and others are just small parts of a larger scene. The game effortlessly flits between strings of small planets, each offering a challenge connected by the Star Slings that Mario uses to travel between them, to larger and more involved areas reminiscent of *Super Mario 64* and *Sunshine*, changing the structure of 3D Mario in the process.

All of this is achieved with little modification to the controls – the main new addition is a spinning punch, activated with a shake of the Wii remote. This might seem odd considering that the Wii's selling point was its motion-sensing remote, but the game does make some interesting use of this capability. You'll have to use it to steer a manta-riding Mario during races, as well as guiding him while balanced on top of a ball by holding the remote like a joystick. These are limited interludes, with most of the game being controlled traditionally using the Wii remote and its Nunchuk attachment.

Galaxy's innovations aren't limited to the level design, though. Mario has a variety of abilities to help in his adventure. Ice Mario can skate across water; Boo Mario is able to drift through walls and float about; Spring Mario can jump ridiculously high, and Bee Mario gains limited flight powers and can climb sticky surfaces. As often as you'll be surprised by some twisted stage design or an unusual solution to a classic problem, you'll use these powers to beat challenges in the traditional *Mario* way.

WHY IT'S A FUTURE CLASSIC
It's a game that single-handedly justifies owning a Wii. *Super Mario Galaxy's* presentation shows off what the console's hardware could do in the hands of a top-class development team, with some impressive visuals and an amazing soundtrack, but that's not all. The Wii is often derided for offering gimmick-driven games, and *Super Mario Galaxy* is the game that shows exactly what it has to offer to even staunch traditionalists – it's a substantial and well-designed game which doesn't rely heavily on motion controls.

Simply changing the types of platforms that Mario runs around on seems like it shouldn't make much of a difference to Nintendo's game design, but the truth is that it did. After the large, open stages of *Super Mario 64* and *Super Mario Sunshine*, small planets are a refreshing way to bring a little linearity back to Mario – and in limiting your space to run, Nintendo makes once laughable enemies a little dangerous once again. What's more, the new level design means that you begin to think differently about how to approach challenges as a player. You'll find yourself considering strategies like exploring the underside of platforms that would have been inconceivable in prior games. For that reason alone, it deserves a place in the pantheon of future classics – there aren't many games that can make a gamer think differently, and *Super Mario Galaxy* stands alongside the likes of *Portal* in doing so. ✱

»[Wii] Larger planets had atmospheres, ensuring that the regular space backdrop doesn't become dull.

»[Wii] *Super Mario Galaxy's* weird gravity allowed levels to include some truly twisted architecture.

By the late Nineties, racing games had conquered land, air, and to a much lesser extent, sea. Mitch Wallace rides waves with the team responsible for bringing extreme speedboat competition to arcades everywhere

When lead programmer and project lead of *Hydro Thunder* **Steve Ranck left his job to pursue a career in games at Midway in San Diego, California, he took a cut in pay, incurred a 70-mile commute, and traded in his cushy office for a shared cubicle underneath collapsing ceiling tiles.** But there was never any doubt that he'd made the right decision, he had dabbled in programming as a child, teaching himself to create games on his Apple II computer, so this was the opportunity of a lifetime.

His first task was porting *Cruis'n USA* to the Nintendo 64, but it wasn't long before inspiration for something brand new began to take shape. "Towards the end of that project I was vacationing with my family at Lake Powell," Steve remembers. "I remember hearing the reverberation of a super boat that was approaching us. It was only going like five miles an hour, because Lake Powell is twisty and quite narrow. But I thought to myself, 'It's kind of a shame that he has to go so slow. How fun would it be to go full speed through these canyons?'"

Convinced that he was on to something, Steve wrote down his thoughts, and after returning from vacation he approached Midway's management. "I pitched this game idea of super boats in different venues around the world," he says. "The idea wasn't received very well. The thought among management at the time was that boat racing games had never done well, that they probably would never do well. But I knew that if they weren't excited about it I just wasn't doing a good job conveying what was in my head."

Determined to bring his idea to life, Steve offered a trade of sorts to some of his peers. "There was another team in our building working on a game called *Off Road Challenge*," Steve recalls. "They needed some help with multiplayer logic. I had some hardware experience, so I raised my hand and said I'd help those guys out. In return I asked for a couple [of them] to work on building a demo for *Hydro Thunder*, which at the time was called *Hydro Extreme*."

Running the demo was an engine Steve put together in his free time using a borrowed 3DFX card. "We built three different environments," Steve says. "One was Lake Powell during the day, one was Lake Powell at night with fires lighting the canyon walls, and then one was this stormy ship graveyard. It was not playable. It was more of a real-time render of what the game could look like."

Now that there was something tangible to show higher-ups, it was time for a proper pitch to Midway CEO Neil Nicastro, who would travel from Chicago to San Diego every three months or
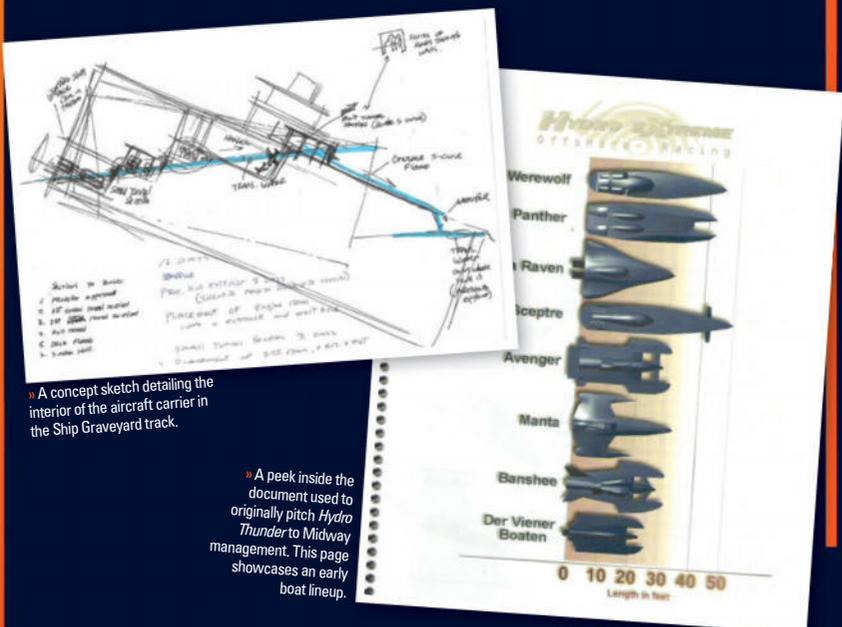
» A concept sketch detailing the interior of the aircraft carrier in the Ship Graveyard track.

» A peek inside the document used to originally pitch *Hydro Thunder* to Midway management. This page showcases an early boat lineup.

Werewolf
Panther
Raven
Sceptre
Avenger
Manta
Banshee
Der Viener Boaten

0 10 20 30 40 50
Length in feet

"He greenlit it on the spot! As soon as the door closed, we were high-fiving and cheering"

Steve Ranck

so to check on the progress of current projects. "He didn't know that we were going to pitch *Hydro Thunder*," Steve remembers. "But management told us he was coming into town, so we worked night and day getting everything all polished and ready to go."

When Neil finally showed up, it was all hands on deck. "Nobody had yet seen what we had developed," Steve recalls. "We finished the presentation, and there was this pause as Neil was thinking. He stood up from his chair, looked at us, slapped the table and said, 'Great, let's do it.' And he walked out of the room. He greenlit it on the spot! As soon as the door closed, we were high-fiving and cheering, and then reality set in. We were like, 'How on Earth are we going to make this game?'"

The process began with research trips to local racing events and lengthy brainstorms. A racing game is nothing without its courses, and *Hydro Thunder* would go on to offer an impressive array of locales. The tracks were imaginative, created through extensive and focussed

iteration. "One of the philosophies we had was that we wanted the experience of racing on these tracks to feel like a Disneyland ride adventure," project artist Brian Silva explains. "So the tracks have narrative in them; they tell a story. Things usually start off very calm, get sketchy in the middle, and the ending is a big drop-off or big slide or huge jump."

Accompanying those intense drops was a dynamically shifting perspective. "That was a new type of camera that was designed to induce a stomach drop or a little bit of vertigo," Brian explains. "The camera pulls away a little bit. It has a loose sort of hand cam feel to it to give you that 'holy crap' sensation."

The boats in the game were just as interesting as the tracks, sporting fun names like Miss Behave, Tidal Blade, Chumdinger and Tinytanic (conceived after the team spent time on the set of *Titanic* – Steve's mother is good friends with James Cameron). "We designed the boats to have personality," Brian says. "We wanted them to feel like

fighting game characters, like picking your character in *Street Fighter*."

While progress on the game was fundamentally solid, it started to become apparent that *Hydro Thunder* was missing one important ingredient. "I'd say about halfway through the project, even though we had figured out the curvature of the tracks and how fast the boats were going to travel, the game really wasn't fun at all," Steve confesses. "It just didn't have that 'magic'."

The realisation led to a gathering of minds around the conference table, which in turn gave way to the introduction of several key features that would come to define the quintessential *Hydro Thunder* experience. "That's when we came up with the idea of putting ramps in the game," Steve recalls. "We actually ended up doing some interesting things. As you hit the ramp, we ▶

» Concept art of a scrapyard location.
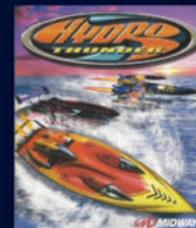
HYDRO THUNDER 101

■ A wild speedboat rush through various themed water environments, filled with vertigo-inducing drops, incredible set-pieces, and cinematic sound design. Arcade racing at its white-knuckle finest – loud, over-the-top and relentlessly playable. Also its the first of Midway's bold *Thunder* offerings, which included *Arctic Thunder*, *4 Wheel Thunder* and *Offroad Thunder*.

GREAT EASTER EGGS

We plunged into the depths of Hydro Thunder to find these treats

» [Dreamcast] The soundtrack on Arctic Circle is a variation on the theme from *The Hunt For Red October*.

» [Dreamcast] The police chaser boat on the Greek Isles is voiced by project artist Brian Silva.

» [Dreamcast] Lying in shambles and buried in sand at the end of N.Y. Disaster is the Statue Of Liberty, a small nod to *Planet Of The Apes*.
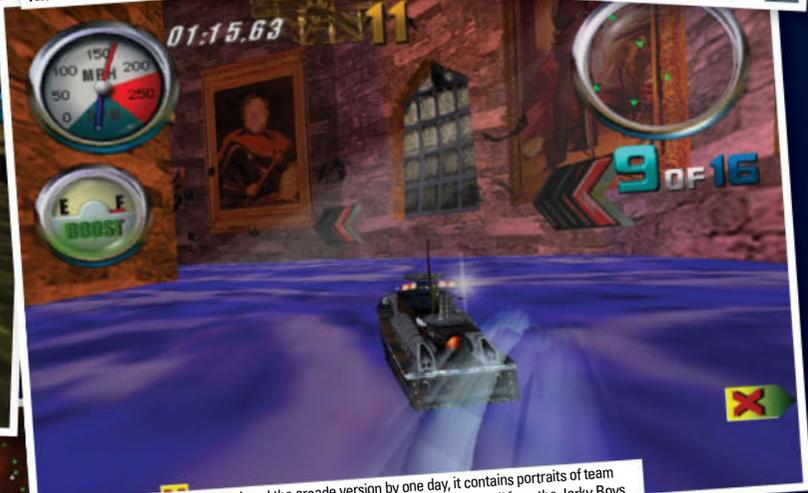
» [Dreamcast] Castle Von Dandy missed the arcade version by one day, it contains portraits of team members, and even a graveyard with funny inscriptions, like 'I don't feel so good' from the Jerky Boys.

» [Dreamcast] The neon-lit night-time stadium track Hydro Speedway is loosely based on Miami, Florida.

» [Dreamcast] A variation of the *Magnificent Seven* theme echoes off the torchlit canyon walls in Lake Powell.

» [Dreamcast] The rotating room in Nile Adventure took its inspiration from the avalanche tunnel on the Studio Tour at Universal Studios.

» [PlayStation] Venice Canals was the first track designed and created before drivable boats were available, hence its extreme difficulty.

» [Dreamcast] If you stop your boat underneath the Henderscheid and Sons shack, you'll hear the theme from *Sanford And Son*.
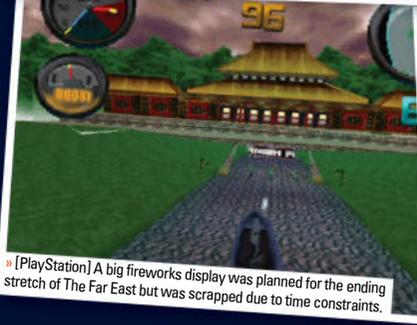
» [PlayStation] A big fireworks display was planned for the ending stretch of The Far East but was scrapped due to time constraints.

» [PlayStation] The giant doors on the Lost Island track were actually inspired by the classic movie *King Kong*.

» [Dreamcast] Until now, only the development team knew that Thunder Park was loosely based on San Diego, California.

CONVERSION CAPERS

Notable ports of Hydro Thunder

DREAMCAST
■ Of all the console ports of *Hydro Thunder*, the Dreamcast version is the closest to being arcade perfect, with only the PC release rivalling its graphical prowess.

NINTENDO 64
■ The Nintendo 64 port is the only version to support four-player split-screen gameplay, though it requires the Expansion Pak and forces players to race in a first-person viewpoint.

PLAYSTATION
■ Though graphically the weakest version, the PlayStation port of *Hydro Thunder* holds its own and plays superbly. It even offers an exclusive circuit/career mode.

PS2, XBOX, GAMECUBE
■ *Hydro Thunder* was rereleased for the sixth generation of videogaming in 2005 as part of *Midway Arcade Treasures 3*, this version is essentially the Dreamcast port.

slowly decreased the gravity and we slingshot the boat. We also put in the whole boost mechanism, and that added a whole other dynamic."

Another mechanic, the infamous Mighty Hull, would come about as the result of an accident. "I was working on object collision," Steve explains. "I had typed one too many zeroes in this one equation, and when I hit [one of the NPC chaser boats] it went tumbling and flying through the air. I laughed out loud, the whole team came in, and I said 'Can we put this in the game?'"

Also adding to the experience was the announcer. Brian, who had a history in radio, provided the personality. "We needed some [audio] tracks," he laughs, slightly embarrassed. "Some placeholder sound effects in the game for timing and to slow the front end, and everyone just said, 'Yeah, we'll use that voice.' I tried to do the biggest, loudest, and most attention-grabbing voice I could come up with, which was just me yelling!"

Since *Hydro Thunder* would debut in arcades, a unique cabinet was of the utmost priority. A subwoofer would be installed in the seat to simulate the power

» An Amazon course idea and the Lake Powell track concept inside the original *Hydro Thunder* pitch document.

"The whole team was just looking at each other, not believing that this was happening"

Steve Ranck

of the speedboats, as well as an authentic method of acceleration. "The team knew that we wanted to have a throttle, not a gas pedal," Steve recalls. "And that was for a few reasons. First, because it was a boat. Second, it would help with small kids. And three, we could [implement] some pretty cool tricks.

"A couple of people in management were so opposed to having this throttle," Steve remembers. "It was a constant battle. They felt that people wouldn't know what to do, they wouldn't know how to use it. We convinced them to let us develop a prototype. We got the engineers to develop one for us and installed it on our one and only machine."

As fate would have it, Midway's CEO was on his way back to San Diego for one of his visits, and it was do-or-die for the throttle. "We were doing the very last and final drive-through for Neil's visit," Steve recalls, "and the throttle mechanically broke. Springs flew out of the thing and it went limp. The whole team was just looking at each other, not believing that this was happening."

A scramble ensued, during which a prototype was stripped for parts and repurposed to fix the build. Steve chuckles, thinking about how close it all came to literally falling apart. "Neil came in and played for probably a solid hour. He was doing the jump move and yanking back on that throttle. The team was holding our breath, hoping the thing
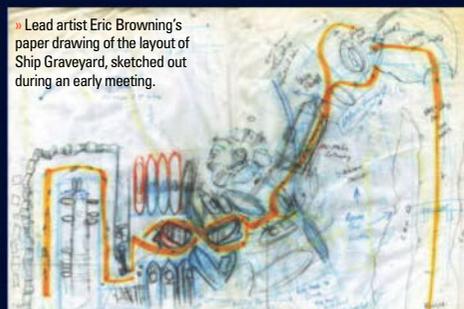
» Lead artist Eric Browning's paper drawing of the layout of Ship Graveyard, sketched out during an early meeting.

held together. It did, he loved the game, he approved the throttle. Later that day, one of the team members was on the cabinet and the throttle broke again!"

Once the bugs were ironed out, it was time for testing. "We took two units into this local arcade," Steve says. "I remember the first guy who walked up to our game. He deposited his [money] and chose the track Lost Island. About ten seconds into it, he had somehow turned around and was driving backward, got stuck on some geometry, then just stood up and walked away. We were crushed! But we learned from that."

Learn they did, and once the game was polished and released, Midway had a hit on its hands. "From that point forward, the spotlight was on us," Steve concludes. "I knew we'd never have that wonderful experience again, of being autonomous as an team in this little cubicle with no windows, just sort of forgotten. It was a golden time." ✳

Thanks to Steve Ranck, Brian Silva, and Eric Browning for all their help.

HYDRO THUNDER 2

Work began on a direct sequel to *Hydro Thunder* but it was cancelled when Midway moved away from arcade development to focus more on consoles. Brian Silva remembers the title being far along when the plug was pulled.

"We had a lot of ideas for it," he says. "Some tracks were done, we did an update to Lake Powell, we did a Paris Sewers track with above and below-ground sections. We did a Chicago River track and even a Lost Island sequel."

In addition to new tracks, a new roster of vehicles had also been put together.

"I think we had nine boats finished and done," Brian says. "A lot of them were updates of the original boats, because we wanted them to feel like familiar characters. With every sequel, you don't want all new characters. You want your favourite characters updated, with maybe some new ones thrown in."

Fortunately, many of the ideas for *Hydro Thunder 2*, including the exciting double boosters, would make their way into Specular Interactive's and Raw Thrill's 2009 spiritual arcade sequel. As Brian puts it: "Basically, if you race *H2Overdrive*, you're playing *Hydro Thunder 2*, but not named *Hydro Thunder 2*."
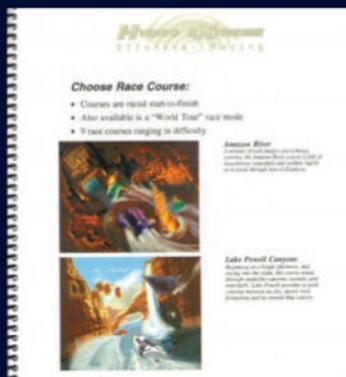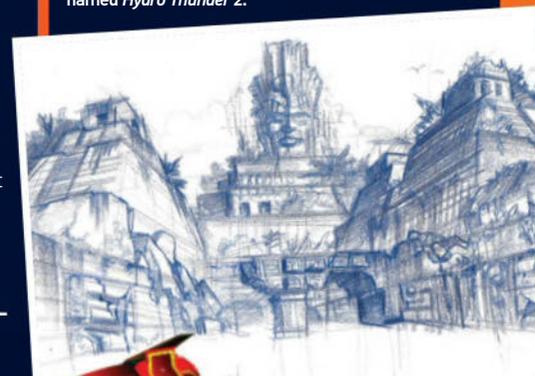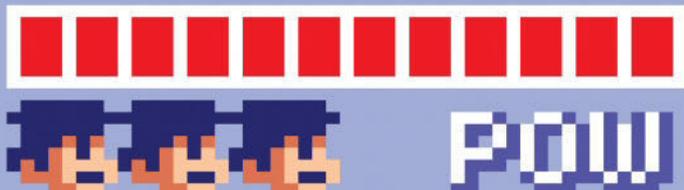
CLASSIC MOMENTS

The Legend Of The Mystical Ninja

» **PLATFORM:** SNES » **DEVELOPER:** KONAMI » **RELEASED:** 1991

t's always fun when games turn your toys against you – we've got quite a long list of favourites we've hand to contend with over the years, from irritating jack-in-the-box monsters to a nightmarish vision of Buzz Lightyear. However, for *The Legend Of The Mystical Ninja*, it'd have to be someone else's toys (and more specifically, traditional Japanese toys). This Daruma head has taken control of a balancing toy, and it's out to get you.

Why is this fight so memorable? Firstly, because it's impressive. Just look at that gigantic guy swinging around smoothly! Mode 7 was employed to great effect here. Secondly, because of the strategy involved. See, just smacking the enemy was a bad move – tip him too far and his spiked weights would come crashing into you from the side, so the trick was to maintain balance by hitting him from both the left and right. It's a simple design, but one so effective and intuitive that it lingers in the memory. ✳

BIO

Goemon wasn't new, we'd just never met him before. When *The Legend Of The Mystical Ninja* arrived on Western shores in the early Nineties, it was as an oddity featuring the brand-new characters Kid Ying and Dr Yang. In Japan it was just the latest release in a series that had been running since 1986, based very loosely on the famed historical outlaw Goemon Ishikawa. While the cultural significance might have been lost on us, the gameplay wasn't – Konami's action-adventure proved to be a potent blend of exotic and fun, cementing it as a cult classic amongst SNES fans.

MORE CLASSIC THE LEGEND OF THE MYSTICAL NINJA MOMENTS

Bang A Gong

Japanese shrines often contain bells, meant to be sounded to ward off evil spirits – and that's exactly the function this one performs, killing all ghosts on the screen when sounded. It's one of those things that only really made sense to us after a course on Japanese culture, but the feeling of power it gave us was intoxicating all the same.

The Red Herring

Certain types of players, when they first boot up a Konami game, will automatically try the traditional Konami code to see what it does. In the fourth stage, this helpful bloke tells the rest of us exactly what it does: nothing. It must be a bluff and do something amazing, right? No sir – it's a totally honest in-joke.

Insubordination

Hey, it's Takosuke the octopus! You might well have seen him in *Parodius* and the like, and he shows up here as a boss. The only problem is, he's not a particularly authoritative boss. In fact, it's entirely possible to just wander past him and ignore the need to do battle entirely, if you have a sufficient lack of respect.

The Unexpected Cameo

Let's be honest, the last thing you expect to see in a game based on feudal Japan is space battles – but there they are, courtesy of a giant Konami-branded TV that gives you the opportunity to play a surprisingly faithful version of *Gradius*. It's only the first level and even that's cut down, but it's still an awesome surprise.

THE TEAM
The people that made Enter The Gungeon happen

DAVE CROOKS
DESIGN

DAVID RUBEL
PROGRAMMING

BRENT SODERMAN
PROGRAMMING

JOE HARTY
ART

ADAM DRUCKER
MUSIC

■ **DEVELOPER: DODGE ROLL GAMES**
■ **SYSTEM: PC/PS4/MAC/LINUX**
■ **GENRE: BULLET HELL DUNGEON CRAWLER**

ENTER THE GUNGEON

Modern games that look old are not uncommon. But here, that beauty is more than skin-deep – Dodge Roll Games has delivered a game that serves as a celebration of the greatest weapons of all time

All guns are not created equal – anyone who has ever picked up a Klobb or a BFG could tell you that. As it happens, you'll find both those iconic weapons (or clear homages to them, at least) and many more in this, a guided tour of pop culture's most memorable firearms and a superb procedurally-generated twist on *Smash TV* for the 21st Century.

"Procedurally-generated levels can add to the variety, and therefore replay value of the game," explains designer Dave Crooks. "If done correctly, they can also instil a sense that 'anything can happen' in the player. The downside is that they are much harder to guarantee quality – there is the danger that procedurally-generated areas can seem cookie-cutter or bland. They are also harder to troubleshoot and bug-fix, as they only exist when the game is running, and even then they are different each time. Hand-designed levels can give the player more specific challenges. They can provide cool set-pieces or battles that incorporate story elements." Neither would work especially well on its own for this game, however, so the team had to set up camp between the two

schools of design. "We tried to marry both – each room's challenge is designed by hand with some small procedural variation, and the rooms are procedurally assembled into a floor."

When asked specifically about the classics that influenced the game, Dave leaps straight to *Smash TV* and *Raiden II.* "I spent an unhealthy amount of time and money playing them as a kid," he laughs, before pointing out the direct references to these two games. "From *Raiden*, we specifically implemented the 'toothpaste laser' and named it the Raiden Coil. The Space Friend passive item is also a direct reference to *Raiden*. From *Smash TV,* we had initially planned a boss that closely resembled Mutoid Man, but unfortunately he had to be cut for time."

These are just the tip of the iceberg (yes, one of the guns in the game fires those as well) when it comes to references, however. Many of these can be seen on the following pages but suffice to say that the majority of the hundreds of weapons and items present display nods to gaming's greatest franchises and weapons. Some are incredible subtle or obscure, while others are blatant… too much so during development, in some cases.

"There were a few things that needed to be changed because the reference was a little too on the nose," reveals Dave. "For instance, the Space Marshal originally looked eerily similar to Han Solo's DL-44, and the Light Gun was actually called the Zapper for decent part of development."

Pixel art is often (and unfairly) seen as a lazy option for modern developers, although it was clearly the only option for a small team that wanted to write a love letter to so many different weapons and franchises, although things could have gone very differently had Dave not been struck with the idea of riffing on another popular scrolling shooter in part of the game's design. "We actually came up with the name *Enter The Gungeon* before we really knew what the game was!" he tells us. "As we sat down to ideate on what the game was going to be, my thoughts drifted to *Ikaruga*. I really loved that the polarity system gave the player the sense of navigating impossible situations. We decided to prototype a dodge-roll with i-frames (borrowing heavily from the *Souls* series) that allowed the player to pass through waves of bullets unharmed. Once we played it, we knew it was the right direction for our game." ✱

» [PC] Each floor has a selection of bosses, so you'll get different ones on each run. Early ones have simple patterns to learn, but that soon ramps up.
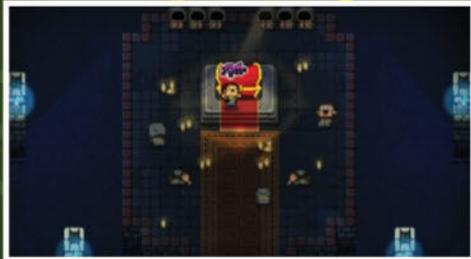
» [PC] Chests come in various rarities and most need a key to open – do you burn a key on a lowly wooden box, or save it in case a regal repository awaits?

» [PC] Flipping tables can create cover, a trick the AI like to employ as well. There's even a subset of passive abilities tied to creating cover in this way.

THE TEAM ON ENTER THE GUNGEON

LUKE
■ This is becoming one of my favourites. Every run sees something new added into the mix and item synergies are great and all the more exciting given how infrequently some of the combos come about.

DREW
■ The attention to detail in *Gungeon* is fantastic. I'd wish I could've sat in on the meetings Dodge Roll had when the team brainstormed guns. The game even has a *GoldenEye*'s Klobb, and it's authentically awful!

DARRAN
■ I'm a big fan of twin-stick shooters, so *Gungeon* immediately went on my list. In addition to being a fusion of two very distinct genres, it's also a loving homage to classic videogames and pop culture.

NICK
■ While this certainly looks up my street, I've seen how much it has taken over Luke's life and it scares me. Also, I'd probably just end up playing Spot The Reference rather than working my way through the *Gungeon*…

> ❝We had initially planned a boss that closely resembled Mutoid Man, but unfortunately he had to be cut for time❞

INFLUENCES
The games that inspired Enter The Gungeon…

SMASH TV
NUCLEAR THRONE
THE LEGEND OF ZELDA
RAIDEN II
THE BINDING OF ISAAC
METAL GEAR SOLID
DARK SOULS

DODGE THIS

The best of Enter The Gungeon's myriad references revealed and explained

THE CLINIC (ZELDA)

■ The surgeons who turn up randomly in the Gungeon use a non-traditional form of medicine, namely fairies stored in jars... which they smash over your head to return you to full health. This is just one of *many Zelda* references.

I'll give you something I found in a chest earlier as a reward!

THE LOST ADVENTURER (ZELDA)

■ Similar to the clinic, this chap turns up occasionally and asks you to map the Gungeon for him. He looks a bit like Link, you can see the Master Sword in his chamber and he opens various lines with 'Hey, listen!' It's pretty obvious...

THE SHRINE (ZELDA)

■ Should you find or do things that result in your Gungeoneer being cursed, you'll be more likely to happen upon this familiar chamber. For a price, Dodge Roll's very own Great Fairy equivalent will cleanse your curse.

AU GUN/MOONSCRAPER (JAMES BOND)

■ These two sit at both ends of the usefulness spectrum – the *Moonraker*-inspired laser beam is somewhat weak, while the Golden Gun (bonus points if you spotted the chemical element reference early) is crazy powerful.

KLOBBE (GOLDENEYE 64)

■ This homage to one of the worst weapons in FPS history is absolutely on point – pathetically weak and laughably inaccurate, you'll groan every time you pull it out of a chest, but that's sort of the point.

TRICK GUN (BLOODBORNE)

■ Like the gruesome weapons in From Software's PS4 exclusive, this has two forms, switching between pistol and shotgun modes every time you reload. A lot of weapons use similar mechanics, so it's something that's worth learning.
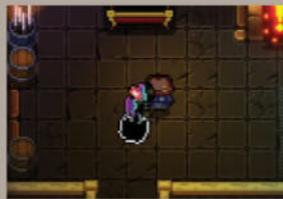
BLACK HOLE GUN (SOUNDGARDEN)

■ We were in two minds as to whether this was a true reference at first, but its description – which starts, 'Won't You Come' – left zero doubt. It's one of the best weapons in the game too, sucking up both enemies and projectiles.

WIND UP GUN (FUTURAMA)

■ One that only avid followers of the Planet Express crew would probably notice, this laser rifle looks, works and sounds just like the one in the episode *War Is The H-Word*, right down to the *Pop Goes The Weasel* reload jingle.

PROTON BACKPACK (GHOSTBUSTERS)

■ Prove just how few ghosts you are 'fraid of with this handy laser-spewing device. True to form, it's powerful on spectral enemies, although it's one of the best room-clearing weapons even when facing regular foes.

THE EMPEROR (STAR WARS)

■ Fans can probably guess what this gun does, but we'll be kind and explain it anyway just in case – it fires lightning. Lots and lots of horrible lightning. Grab one and become more powerful than you can possibly imagine.

FIGHTSABRE (STAR WARS)

■ This one is a bit deceptive, as it just looks like a garish green assault rifle. And it is, until you reload it – during a flurry of swings, it glows and makes a telltale humming noise as it deflects all enemy projectiles.

R2G2 (STAR WARS)

■ This little bullet on tracks is a faithful companion, following you through the Gungeon with purpose and taking pot shots at enemies for you. Against weaker enemies, you can pretty much just let him just do all the work.

MASTER OF UNLOCKING (RESIDENT EVIL)

■ This passive item, clearly modeled after Jill Valentine's beret, lives up to its name by increasing your chance to earn keys when clearing rooms, in turn making it easier to grab more treasure and meaning you *can* open that door.

HEROINE (METROID)

■ Samus' basic arm-mounted cannon works like it does in the original games, in particular the Charge Beam. Hold down the fire button to create more powerful shots, with the fully-charged version becoming one of the strongest regular attacks in the game.

BOX (METAL GEAR)

■ Huh? It's just a box. Only it isn't – it's the ultimate in stealth technology. Hop into your cardboard disguise and enemies won't react to you. Other highlights include Rations, Cigarettes and Ocelot's Colt Single Action Army, complete with ricocheting bullets.

GATLING GULL (METAL GEAR)

■ One of the first floor bosses is this literal take on Vulcan Raven, all the way down to his death sequence. Later on, you're even able to unlock his minigun... but it's sort of rubbish, sadly.

NANOMACHINES (METAL GEAR)

■ Referencing the showdown with Senator Armstrong in *Revengeance*, this passive item – which grants extra armour every few times you take damage – is useful, if nowhere near as powerful as Armstrong's own version.

OX'S ARM (METAL GEAR)

■ You'll find a replacement arm for shopkeeper Ox in the lowest levels of the Gungeon, with the method of extraction (balloon, naturally) and the fact that it's a red prosthetic being references to *The Phantom Pain*.

BRICK BREAKER (MARIO)

■ Shaped like a line of breakable *Mario Bros.* blocks and capable of filling the screen with bouncing green shells in seconds (which is great for bosses), this amazing piece of kit powers up as you collect other *Mario*-based goodies like the Stuffed Star.

ABYSSAL TENTACLE (DAY OF THE TENTACLE)

■ No, we weren't expecting a point-and-click reference in a twin-stick shooter either, but we'll take it. Like the Mutation (itself an *Akira* reference), the tentacle tracks and grips enemies.

HECK BLASTER (EARTHWORM JIM)

■ An oddity in that you don't actually see the bullets, but don't let that tell you otherwise – Jim's trademark pistol is a beast. Crazy rate of fire and decent damage make this a great tool for burning bosses, if you can find it.

MINE CUTTER (DEAD SPACE)

■ A great reference to Isaac Clarke's primary tool in *Dead Space.* On reloading, it swaps between a wide beam and a narrow, more powerful one. It should be horizontal and vertical lines but, y'know... 2D.

BSG (DOOM)

■ Arguably even more effective than the powerful *Doom* gun it is based on, the Big Shooty Gun can clear entire rooms after a fairly brief charge. That's probably why it doesn't come with a lot of ammo, to be fair.

QUAD LASER (AQUA TEEN HUNGER FORCE)

■ Like its TV counterpart, the Mooninites' space blaster fires a single large square which, while incredibly slow, is also immensely powerful. One of the most direct references we found, even if it is a niche one.

BANANA (WORMS)

■ Bouncing off walls and exploding into smaller fruits for more carnage, this weapon from the early *Worms* games functions exactly as you might expect. The explosive sheep would have been *too* obvious, but this is a great choice.

BULLET BORE (TUROK)

■ If we were to tell you that there was a weapon that fired off a tracking projectile that seeks out enemy heads, burrows and explodes, you'd have a pretty good idea where Dodge Roll got that idea from, right? Right.

WINCHESTER (TERMINATOR 2)

■ Okay, so it's basically just a shotgun but the flavour text leaves us in no doubt as to the fact that this is a loving nod towards Arnie's boomstick and more specifically, his outstanding one-handed reload technique.

MACHINE FIST (FINAL FANTASY VII)

■ Described as an 'Avalanche Of Bullets' (get it?), this minigun cannon works like its in-game namesake... until it runs out of ammo, and is launched like an explosive projectile. Don't worry – you get another one upon reloading.

TO BULLET HELL AND BACK

Shooting the breeze (and everything else) with designer Dave Crooks

Bullet hell-style gameplay is not nearly as common in western games as Japanese ones – why do you think this is, and why did you choose to go with it for your game?
I suspect part of the reason is how arcade-focussed the gameplay typically is – specifically, short session score-attack-style gameplay. While there was something of a rebirth of the arcade in the early Nineties due to *Street Fighter II, Batsugun* and *DonPachi* (and games like them) didn't get as wide distribution in the States. *Ikaruga* was the first bullet hell game that many Westerners played, but it wasn't released on console outside of Japan until the Gamecube era... by which point arcades in the US were basically dead.

What was the toughest thing to implement in the game?
Getting the controls and the aiming to feel *just* right was something that we agonised over quite a bit. On controller, how much aim assist should there be and how should it work? We wanted the player to generally hit what they intended to, but not feel like they were 'locked-on'. I think we succeeded, but it did take quite a bit of iteration. I will also say that drop-rates, and general scarcity were quite difficult to balance.

What items would you say are most important to a successful run?
Unsurprisingly, I think weapons and items that increase your overall DPS are a baseline for making a run easier. The faster you can kill something the less time it has to be a threat to you. After that, items that increase your max health, or that offer you a period of invulnerability.

Some of the references in the weapons and items are amazing – do you have a personal favourite?
Thank you! One of my favorites is the Wind Up Gun, as I love *Futurama*. I think my overall favourite reference in our game is that we called one of our achievements 'Woodsie Lord', which is a reference to the game that stole my heart.

Are there any other secrets or Easter eggs still hidden in the game that nobody has found yet?
I wish! But gamers armed with the power of the internet can decipher anything. They even found some stuff in the files that we didn't want to show yet!

FIRST JOB
Junior reporter on the Hertfordshire Mercury

CURRENT JOB
Games publisher

FAVOURITE FILM
Jaws with *To Kill A Mockingbird* a close second

FAVOURITE ALBUM
Harvest by Neil Young

FAVOURITE BOOK:
Catch 22 by Joseph Heller

FIRST COMPUTER/CONSOLE
BBC Micro

FAVOURITE COMPUTER/CONSOLE
Like children, you can't have favourites

BEST GAMING ACHIEVEMENT
Lords Of Midnight

BEST-SELLING PRODUCT:
Match Magazine

BEST HOLIDAY
A castle in the Loire Valley, France

WHO YOU WANT TO BE STRANDED WITH
If I can't say my wife, Mags, then Tyrion from *Game Of Thrones*.

177835·467488268306522

SEX
M

NAME
Terry Pratt

DATE OF BIRTH
No-one asks that!

PLACE OF BIRTH
Middlesex hospital, London

BIOGRAPHY
Terry was the launch editor of *C&VG*, the first magazine devoted solely to videogaming, and he oversaw many other gaming magazines whilst at EMAP in the Eighties and Nineties. He also set up ambitious 8-bit games publisher Beyond Software.

❝ I was playing Pac-Man in a pub and a guy asked me if I wanted to edit the first computer games magazine in the UK ❞
Terry Pratt

Terry Pratt

What cherished games would you take to the island?

From Computer And Video Games and Beyond Software to Mean Machines, Terry Pratt has been a pioneer of both magazine and game publishing. Paul Drury thumbs through his back issues

Over the lunchtime chatter and clink of glass, a familiar sound can be heard floating across the Nellie Dean pub in Soho. Wakka, wakka, wakka. It's the summer of 1981 and Terry Pratt is expertly guiding the ravenous *Pac-Man* through those dot-laden corridors on the coin-op machine in the corner of this busy London boozer when he feels a tap on his shoulder.

"I'd never seen the guy before," says Terry, "but my editor at the time had told him I was a top ghost gobbler. He asked me if I might be up for editing the first computer games magazine in the UK. I said, 'Erm, yep!'"

The mystery man was Richard Hease, owner and CEO of ECC Publications, and he was keen to appoint someone to head up his new magazine venture, which would appear on the newsstands in November that year as *Computer And Video Games*, or *C&VG* as it soon became known in school playgrounds across the land. Terry had honed his *Pac-Man* skills at the Las Vegas arcade in Waldorf Street, opposite the offices of *Computer Talk*, the weekly magazine he worked on. He had left school early to become a junior reporter on his local paper, the Hertfordshire Mercury, before being persuaded in 1980 to join the London-based *Computer Talk* by a chap in a pub, which seemed the standard recruitment method for the profession back then. Was he excited to be writing about the emerging world of computer technology? "Oh I was just the bloke who had to wait until everyone else wrote the magazine and then subbed it, designed it, worked with the typesetters and sent it to the printers," he replies, casually. "It was a

free industry magazine, covering mainframes and business computers and we relied heavily on revenue from recruitment ads. It wasn't 'till the ZX80 came out, which we did cover, that I thought maybe computers would end up in the home."

His hunch was correct, of course, though it wasn't clear in 1981 quite which way home computing would develop, nor what computer gamers might want to read about in a new publication. Terry decamped to an office in Islington which housed a lot of business computer magazines and together with two colleagues from his *Computer Talk* days began putting together issue one of *C&VG*. "I had an inkling that anyone who liked games would like computer games," he explains, "so I went about finding people who could write about chess and bridge and text adventures, too, which had been my one experience with games on a mainframe. The people I knew tended to be techy and they suggested things on computer electronics, so I'd have a page on that. The first issue is evidence I was learning on the job. There were some really good pages and some where we were struggling to think what people would be into."

The launch issue certainly embraced this scattergun approach. There were articles on programming in BASIC and building a computer from kit alongside game listings to type-in, a round-up of the latest coin-ops and gameplay tips for, yes, *Pac-Man*. Keith Campbell's much-loved adventure column, which became a fixture in *C&VG* for the next hundred issues, made its debut, as did comic strip 'The Bugs' and over a third of the magazine was taken up by adverts for hardware and software, demonstrating the burgeoning commercial side of this 'hobby'. "It was a terrific task and rush to pull it all together," recalls Terry, "camping out on the floor of the printers in Southend to get that first issue out the door. We were a small team and it was a minor miracle it came out at all. I thought the cover was stunning. It summed up computer games for me at the time."

The striking image of a blazing-eyed alien invader, which graced the front of issue one, undoubtedly helped differentiate *C&VG* from more sober publications like *Your Computer*. Terry went against conventional industry wisdom that a magazine's cover should have an instantly recognisable 'look' and instead experimented with various layouts and approaches, ranging from *Spitting Image*-style puppets for the World Cup-themed issue 8 to a movie still from *Tron* for issue 11. Cartoon

Terry outside the National Videogame Arcade in Nottingham, donating a signed copy of Lords Of Midnight and an early issue of C&VG to its collection.

Trivia

Terry wrote an article for an early issue of *C&VG* on the rise of 'adult' computer games. "I said this was how computers could be used in the future," he says proudly, "and I was right!"

» Issue 12 of *C&VG* mocked up a newspaper with stories based on the listings within.

» [C64] *Enigma Force* was the sequel to *Shadowfire* and further developed the squad-based gameplay.

» [C64] *Spy Vs. Spy 2* continued the story of the feuding agents in a new setting.

Praise for Terry

Here's what **Retro Gamer** has to say about Terry Pratt's work…

Darran Jones
The early issues of *C&VG* made a huge impact on me growing up and I would continue to buy the magazine for many later years, eventually stopping when I moved over to *Mean Machines*. It remained a massively influential magazine, and we'd arguably not have the likes of *Crash* and *Zzap!64* without it.

Paul Drury
C&VG was the gamer's bible when I was growing up. Looking at the covers from Terry's first two years in charge, I'm transported back to my newsagent in Ripley, Derbyshire, 12 years old, drooling over its pages. Issue 27 which came with the *Book Of Adventure* is my favourite single magazine ever.

illustrations were often commissioned and for issue 12, Terry took the unusual step of mocking up a newspaper front page with stories based on the games listings featured within. "I thought, 'No-one's done a cover like this in our sector and I'll be buggered if I'm second,'" he says, defiantly. "The management hit the roof. It was so far removed from the previous covers that people struggled to spot it on the newsstand. They sent me on a course about designing covers straight afterwards."

We reminisce about the Eighties, when all work-related problems could be solved by going on a course and also how type-in listings were a major part of *C&VG* throughout those early years. An agreement with a US publisher meant listings for the Commodore PET and Atari home computers were supplied but it quickly became clear that these were not the micros installed in British bedrooms. "We tried to cover as many machines as we conceivably could in our pages but we didn't have any of them in then office," bemoans Terry. "We were in the hands of the readership and alongside them, we had to learn the importance of a single full-stop in a listing."

So in the early days, the magazine would pretty much print whatever was sent in for a machine they needed to represent in the magazine, including regular listings for obscure machines like the Sharp MZ-80K. Things improved as word got around that *C&VG* was the place to have your work reach a large audience and soon floods of programs for the Spectrum, C64, BBC Micro et al were spilling across its pages. There was coverage of commercial games too,

though Terry acknowledges they were largely reliant on press releases often without screenshots, so it was left to the team to produce illustrations for the games and assume a role, at least initially, of describing rather than evaluating them. "When you're part of the industry, critiquing is a fraught business," adds Terry. "I was naive and idealistic. If it was a bad game we would tell readers. Then I would find myself in the offices of computer games companies who'd read me the riot act for two hours because we hadn't praised their last videogame to the skies. We tried to be positive but if it was a stinker, we would tell people."

Terry was at the helm of *C&VG* for the first two years of its life, introducing such innovations as multi-criteria review scores, Game Of The Year awards and many other mainstays of the games magazine industry. Right from the start, he toyed with the idea of putting games on the front of the magazine, something *C&VG* would eventually pioneer with cover-mounted flexi-discs, but this was initially dismissed by management as being too expensive. "Then someone went on a course and came back saying we all should be more 'entreprenurial'," says Terry, wryly. "We had all these listings coming in and some weren't a million miles away from an average commercially released game.

"I looked at the costs of EMAP getting into games publishing and came to the conclusion we couldn't do it but something convinced me later to have a go. I think it must have been talking to Mike Singleton about his idea for *The Lords Of Midnight*…"

A visit to Mike's local pub in the Wirral, near Liverpool, where the visionary programmer outlined the concept for his seminal Spectrum title, proved to be the catalyst for the founding of Beyond Software back in December 1983. "I wanted to take gaming somewhere more strategic [and

Timeline

> **If a game was bad we'd tell C&VG readers. Then I'd find myself in the offices of game companies who'd read me the riot act**
>
> *Terry Pratt*

The old new games journalism

C&VG can proudly claim to be Britain's first games magazine but, with hindsight, would Terry have done anything differently? "I think *C&VG* could've been more definitive," he says, "and give people a clear idea what the best games were. Not just a buyers' guide, but explain why a game was the one that topped the genre. I do think we went the extra mile to get exclusives. If there was something like *Tron* coming out, I wanted us to be the one that covered it first. Any chance to do a scoop, I'd move heaven and earth, which, in hindsight, was ambitious for our small team!"

provide] a more fulfilling gaming experience," says Terry. "*The Lords Of Midnight* seemed like something that would deliver on that. I wanted Beyond to go the extra mile and that's what gave me the name."

Though Mike Singleton's masterpiece would be the title that really put the EMAP-owned software house on the gaming map, Mike missing repeated deadlines meant Terry ended up releasing half a dozen titles in late 1983 and early 1984, including High Wycombe-based Ron Potkin's *Up Periscope* and *Kriegspiel*, both fine strategy games released exclusively for the Dragon 32, a less impressive strategy. "If a game fitted my idea of what Beyond should be doing, we'd publish it," explains Terry. "Like *S.S. Achilles* on the Atari, which was not a good business decision but it was a lovely game. If I liked it, we went for it. There was no committee!"

Beyond was very prolific during its first year in business, particularly considering Terry was the only full-time staff member at the beginning. Its output was surprisingly diverse, ranging from C64 spit-'em-up *Goodness Gracious* to *Mr. Robot*, a competent platformer with a level creation tool, and odd action puzzler *Ankh*, the latter pair licensed from Datamost in America. With various contacts in the States, could Beyond have rivalled US Gold as a major importer, we ask? "My aim was actually to send games back the other way," explains Terry, "but it was frustrating because if we had a really good Spectrum game, we had to reinvent it for machines that were successful in America."

It's easy to forget just how many computer platforms existed in 1984 and Beyond published titles for many of them. Its connection with *C&VG*, which had established itself as an essential read for Eighties gamers, also gave Beyond a certain kudos and may explain why the talented team which had been working on the fabled Mega-games *Bandersnatch* and *Psyclapse* came knocking at their door when Imagine Software imploded. "They turned up at our offices the day after Imagine crashed and they had some entertaining stories of the tailspin," smiles Terry. "I think they came to us because of the link with the magazine. They thought we had an advantage and they liked that we were trying to give Beyond a different feel and make our games look special. They could have gone to anyone but they went with us."

The ex-Imagine staffers, including John Gibson, Ally Noble and Steve Cain, would release several original titles through

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Readers' Questions

Northway: For how long did you expect a game to stay on retailer shelves back then and with imported titles, did the original publisher make any special demands?

My impression was that we had a two-month window. When we launched *The Lords Of Midnight*, we thought it would be around forever but, in terms of sales, it was the first few months that mattered. For most titles you only had a certain amount of energy you could give to marketing them. Once they hit the charts, other things kicked in. As for imported titles, the only demand a publisher ever made was how much money we could give them.

Merman: Did your opinion of journalism change after you moved into games publishing?

No. Even when I was publishing games at Beyond, I was still a journalist at heart. If a game was given a bad review, I knew it came from the heart.

Psj3809: What was the reason behind the larger boxes for Beyond games, rather than having standard tape-size boxes?

Stupidity. You could get an off-the-peg box that did the job incredibly cheaply or you could be stupid and invent your own and have to take courses in cardboard engineering to make sure they stood up on the shelves. I took the route that made life hardest and was least commercially viable.

Paranoid Marvin: Were you happy with the categories you used for the *C&VG* scoring system?

I think we might even have invented scoring for games so, yes, we were happy with the concept. And there was never just one discussion about anything we did. We agonised over everything.

Merman: Which deadlines were worse – editing *C&VG* or running Beyond?

The difference is magazines have deadlines and you can't miss them. Computer games don't, and programmers are the worst at meeting deadlines! That's a far more frustrating experience.

Now explore the epic world of

THE LORDS OF MIDNIGHT

by

Mike Singleton

» [ZX Spectrum] *The Lords Of Midnight* was a big success for Beyond Software.

> ❝ I wanted Beyond to go the extra mile and Lords Of Midnight seemed like something that would deliver on that ❞ *Terry Pratt*

Beyond, including groundbreaking icon-driven adventure *Shadowfire* and its sequel *Enigma Force*, but by the time they hit the shelves in 1985, Terry had returned to EMAP's magazine publishing division, against his wishes. "My bosses took me out for dinner and said they wanted me to head up the computer magazine division. I told them no, I was doing what I wanted to do with Beyond. They said, 'You don't understand, you want to be doing this.' I think EMAP should have persevered with Beyond but they didn't understood computer games. It wasn't in their culture. I think Beyond could have gone on to be really successful and they could have sold it for a lot more than the million pounds they got for it."

With Beyond sold to Telecomsoft in 1985 and then quietly 'retired' the following year, Terry returned to EMAP's Publishing Director, overseeing eighty staff working on a range of computer magazines, including *Sinclair Programs*, *QL User* and his old charge *C&VG*. "It was pretty hellish for the first two years, trying desperately to turn round magazines and closing them if you couldn't," sighs Terry. "It was a difficult industry to be in. New mags were being launched all the time and you could see some machines were on the up and others on the down, so a magazine associated with that machine was on a downward curve too. There was nothing you could really do about that."

Terry sensibly kept a foot in each camp of the 8-bit wars with both *Sinclair User* and *Commodore User* in his portfolio. The latter always struck us as a more seriously-minded look at all things Commodore, with a greater focus on the technical side of computing, and given his games background, we wondered if he consciously tried to increase the 'fun' factor within its pages? "*Commodore User* came with a more serious readership and though we knew we were going to make it more games-y, you had to manage that change,"

Trivia

The success of *Mean Machines* led to Terry brokering a deal to publish a French version retitled as '*Consoles Plus*'. Jeux sans frontiers!

says Terry, "not just leap over and try to be like *Zzap!*. You work with what you've got and nudge it in the right direction. And nobody working there was sorry to see the listings go…"

At the end of the Eighties, Terry moved up to become Managing Director of EMAP's computer magazines division, just as consoles were overtaking computers as the gamers' platform of choice. "I lucked out," he smiles. "Graham Taylor, the publisher of *C&VG*, and the editor, Julian Rignall, were so in tune with the market. They were smart guys and spotted the opportunity for *Mean Machines* and negotiated with Nintendo to do their official magazine. I remember they were going to launch *Nintendo Magazine* with 80,000 copies and I said, 'Let's really go for it', so we went with a print run of 134,000. And it sold out."

Terry and his team successfully rode the wave of enthusiasm for the Mega Drive and Super Nintendo in the early Nineties, enjoying huge sales of their magazines as Mario and Sonic battled it out on the frontlines for console supremacy. His division at EMAP was the first to embrace desktop publishing, which meant editors and journalists were in control of page layouts on their own screens, rather than sending them away to typesetters, and could experiment with interesting visual approaches and direct screenshots, setting the template for the more image-led style of games journalism still prevalent today.

After almost 13 years in the computer magazine business, Terry moved over to EMAP's sports magazine division as publishing director in 1994, and helped *Match Magazine* become the premier football mag in the UK, selling a staggering 200,000 copies a week at its peak. He still has an interest in both football and publishing with his current start-up venture, *Goal Machines*, which reinvents football trading cards for the digital age. Though he is no longer directly involved with videogames and gaming magazines, we wonder if he sees the huge changes in the industries he helped nurture as broadly positive?

"You have to say it's been good," he says, after a pause. "The consumer decides what they want. Computer games and the magazines that went with them were something that boys did in the dark of their bedrooms. That's all changed. The industry is accepted now. Everyone plays games." ✱

Thanks for documenting it from the start, Terry.

Terry Pratt
Desert Island Disks

The games that Terry simply couldn't live without
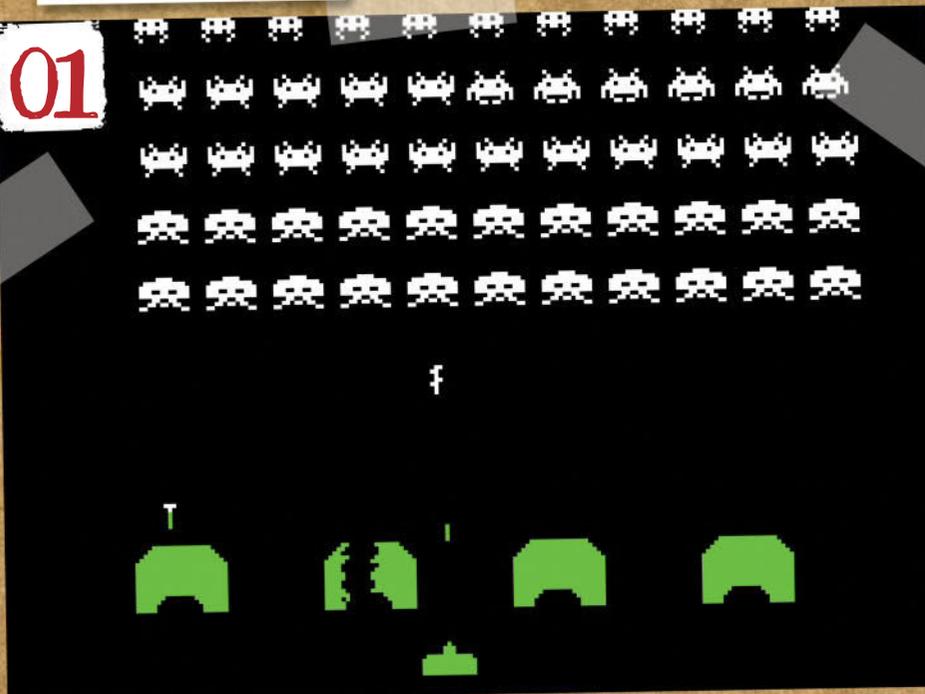
01 Space Invaders (ARCADE)
An obvious choice but its success made my career path possible. It came out as I was leaving school and just starting out as a journalist. The accelerating stomping soundtrack with shrill laser blasts was a key element in its appeal. I never thought then we'd be playing this at home.

02 Pac-Man (ARCADE)
Without doubt *Pac-Man* helped me become editor of *C&VG*. The head of ECC Publications knew my current editor and has asked if he knew anyone who might be up for editing a computer games magazine. He'd said, 'Oh, talk to Terry, he's good at *Pac-Man*.' To be honest, I was a pretty run-of-the-mill player, but I could beat my mates.

03 Philosopher's Quest (BBC MICRO)
This was notoriously difficult but I have to choose one early adventure game. I'd played one on a mainframe for a business magazine article and was intrigued. Setting up *C&VG* from scratch with no office computers and an original editorial team of three, I had to start sourcing correspondents. I lucked out with Keith Campbell as my adventure correspondent.

04 Chess (ZX81)
Yes, you could deliver a computerised chess game in just 1K. It was astonishing what was possible but the screenshots show the state of early computer graphics. Taking publishable screenshots was beyond us then. I elected to go with illustrations to demonstrate the concepts behind the games.

05 Jetpac (ZX SPECTRUM)
Ultimate set the standard for UK games software when I persuaded EMAP to let me launch a software house. Beyond announced itself in 1983 with three games, me, a part-time secretary and a share of a marketing manager. I was making it up as I went along and made many lousy decisions but we finished 1984 as runner-up in Software House Of The Year.

06 3D Ant Attack (ZX SPECTRUM)
This was such an innovative game and deserved to win the Best Original Game Of The Year in 1983's Golden Joysticks. Sadly it came out so late it didn't garner enough votes and was runner-up. I can still picture the furious look on Rod Cousens' face.

07 The Hobbit (ZX SPECTRUM)
Another 1983 Joysticks winner for Strategy Game Of The Year, this moved adventures up to a new level. It was created in Australia but it felt British as it started life on the Spectrum and it's noticeable that so many of the innovative games at the time originated in the UK. Great graphics and clever programming combined with an atmospheric theme.

08 Spy Vs. Spy (COMMODORE 64)
This is a guilt trip as *Spy Vs. Spy* was published by Beyond in the UK but poorly published by me and didn't get the acclaim it deserved. It was nominated for Best Original Game in the 1985 Joysticks and was unlike anything else as the two spies set traps for each other. I just didn't get the concept across.

Rick Dangerous 2

AND YOU THOUGHT THE FIRST GAME WAS HARD…

» AMSTRAD » CORE DESIGN » 1990

There's a lot I like about Core's follow-up to *Rick Dangerous*. It's styled on *Flash Gordon*, it features some brilliant-looking visuals on the humble Amstrad computer and there's a deliciously great nod to that on the box, "He's back in a flash!" Sadly, though, there's also a lot I *don't* like about *Rick Dangerous 2* and it's only become more notable as I get older.

It's well known that the *Rick Dangerous* games are hard, but they're also massively, massively unfair. Having not played the game for a good five years, I managed to get to the second screen before I died. I then made my way to the next screen and was immediately destroyed by a laser. I walked up a ladder, pressed one of two switches and immediately got killed again because I made the wrong choice. It's a brutal, punishing game that delights in turning the screws and constantly assaulting you with an overwhelming amount of grief.

Back in the day I didn't have a problem with the difficulty level, but it certainly bugs me now. I think it's because there are so many situations where death is unavoidable because you simply can't react to the danger. Due to these many unfair deaths, I now treat *Rick Dangerous 2* as more of a puzzle game, a game where you have to be killed by its tricks before you learn to exploit them. It's not the most elegant of solutions, admittedly, but I'm a sucker for its cute aesthetic style and it's kept my attention far longer than I was expecting too. I wonder how the original game still holds up… ✴
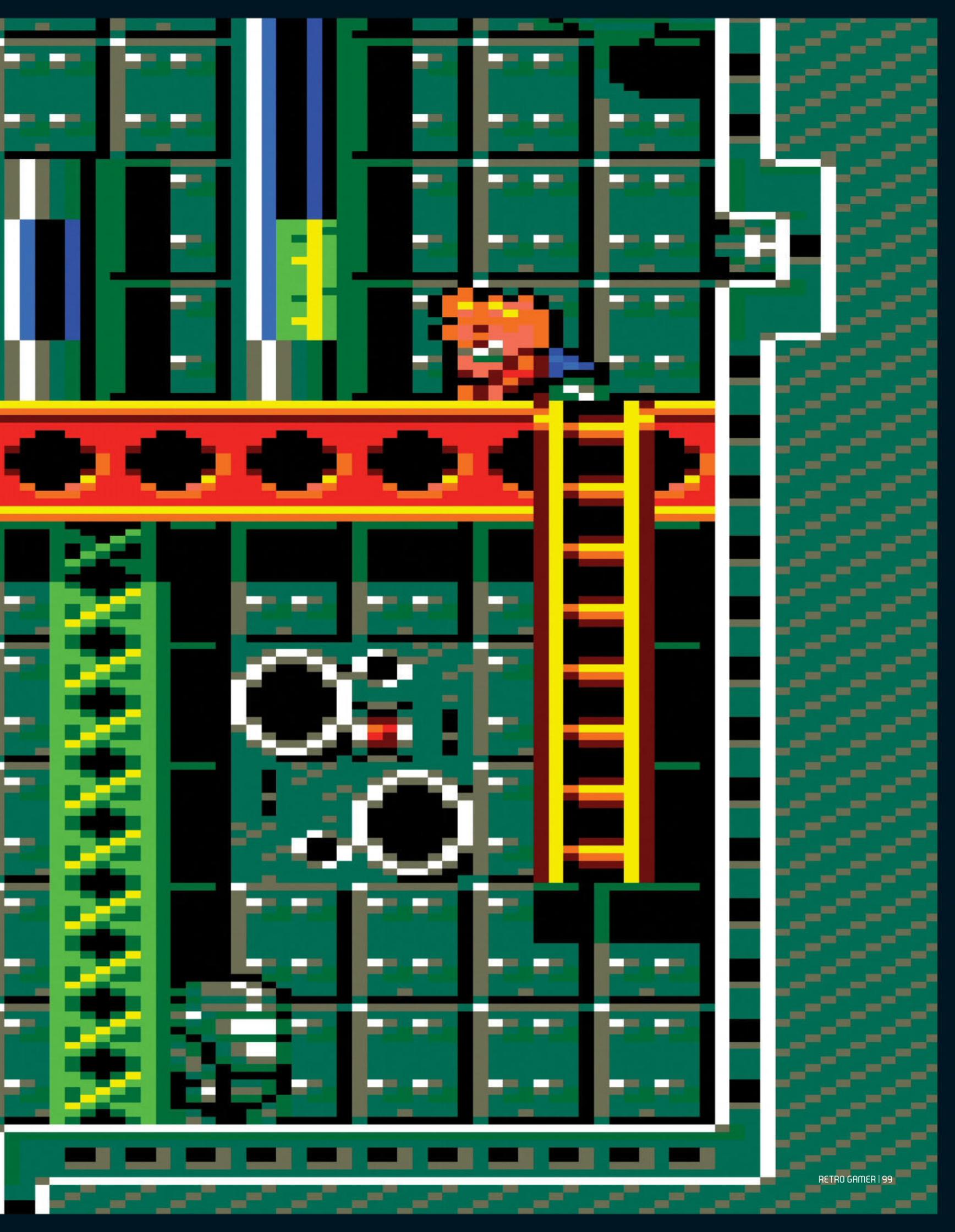
RETRORATED

[Xbox One] Enemy introductions always make them seem imposing, but they soon arrive in greater numbers.

Doom
RIP AND TEAR, UNTIL IT'S DONE

As much as a war against the infinite armies of Hell might seem like quite the battle for poor old Doomguy, id's classic franchise is continually confronted with one far tougher – the war to escape its precursors' shadows. Doom 3 was so scared to fight this battle head-on that it elected to pretty much change genres, turning the monster closet gameplay of the original into a makeshift horror experience that forwent the frenetic pace of the classics and in the process divided audiences. So after years in the lab Doom returns and it does so with the conviction to face this fear and fight the battles its forerunners daren't. For that alone, this reboot is praiseworthy, but it's the other aspects of its design that makes it *great*.

There's a moment early on where it seems like heritage might be Doom's BFG, chugging guitars and grinding synths screaming their best rendition of the classic E1M1 music as you ride a lift towards the inevitable demonic mayhem that awaits you with a beaming smile. But there's more to this reboot than pure nostalgia and those who compare it too closely to the original games are actually doing the new Doom a disservice. Sure, there are keycards and simple maps and classic enemies and weapons, but it's more than that – it's a modern take on that formula that both serves to tickle nostalgia glands and deliver something that doesn't feel dated or pandering, which is incredibly hard to do.

If anything, 2016 Doom feels closer to the likes of Quake and Unreal than it does to the original in many ways – games that themselves were trying to further and evolve the genre back in the day without actually cutting the umbilical cord. Environments are larger and more varied (in as much as choosing a red planet and a red purgatory actually allows) than ever, although limited freedom and prevented backtracking in places means these new levels are hardly likely to topple any of the classic Doom maps in most eyes. Keycards and assumed linearity are all well and good in faux-old-school design, but enemy encounters are the real deal.

» [Xbox One] There are loads of Easter eggs, including plenty of references to the original games.
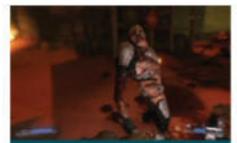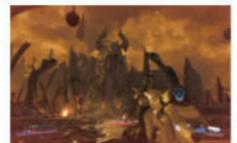
BRIEF HISTORY
» The grandfather of the modern FPS should need no introduction, building on the successes of the similar games that came before to deliver a fast, frenetic gauntlet to run against the seemingly endless legions of Hell. This reboot is true to its roots (unlike divisive horror shooter Doom 3) and delivers an exhilarating modern-day take on the classic formula.

[Xbox One] You should have seen how our faces lit up when we first stumbled across this little guy…
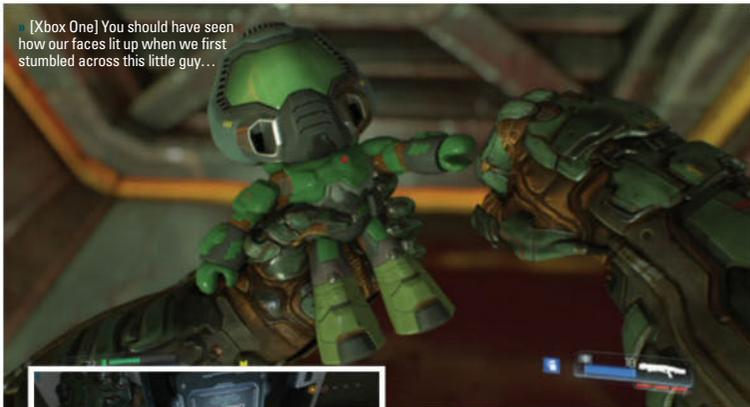
As was seemingly the case in the original games, showdowns seem to literally be a case of seeing how many enemies the game can throw around without crashing, asking players to run the gauntlet and see how much of Hell they can destroy before being pulled to pieces. 'Run' being the operative word there – anyone used to taking cover or finding time to reload their weapons in FPS games is in for a rude awakening. And by awakening, we mean death.

Unforgiving it may be, but unfair *Doom* is not… outside of a few moments, at least. When encounters typically involve tens of enemies at a time in wide-open arenas, there will naturally come a few times when their seemingly random movement and activity works against you, forcing you into corners where mobility – the only thing that can really keep you alive – is impossible. Hard counters to this are awarded as the game goes on, from the instakill Chainsaw (which also grants more ammo drops upon a successful kill) to the room-clearing BFG, but higher difficulties especially place you in situations where ammo for those Win Buttons has run dry and death seems inevitable. A bevy of suitably crazy weapon upgrades mean this isn't always the case but to brave the higher difficulties is to accept the fact that standing still only invites death. With no regenerating health, your only option besides finding med-kits in the world is to fall back on the brutal Glory Kill system, where weakened enemies can be finished off with quick contextual melee kill animations to have them drop more health than usual. In abusing this system, you almost turn the chaotic encounters into macabre puzzles – it becomes about finding the right combination of shells, cells, bullets and beams to pour into each enemies before you reach it (or it reaches you) to keep your health topped up as you chain between enemies in this way. It's immensely satisfying, fits the tone of the game well and there are enough different takedowns per enemy type to stop them getting too old over the course of a level or playthrough.

While the campaign may be just the no-nonsense thrill ride we were hoping for, *Doom*'s multiplayer suite isn't quite so refined. It's fast, competent and often exciting, but it just has next to nothing to separate it from the scores of me-too online modes that have appeared in B-tier shooters over the years – the ability to briefly play as a demon is as close to innovation as it gets and frankly, it feels slightly jarring to see a progression system and gated gear unlocks in a *Doom* game. Still, some will love its simplicity and speed, though others have probably been too spoiled by relatively recent updates to classic online shooters like *Counter-Strike*, *Unreal Tournament* and *Team Fortress 2* (in disguise as *Overwatch*).

Nailing the tone of the older games perfectly and fusing it with modern production values means that *Doom* is able to do its namesake justice, especially in its frenetic and enjoyable campaign. It's very gory, very metal, very stupid, very hard, very intense… it's very *Doom*, basically. ✶

In a nutshell

Both a superb reboot of the classic series and a tight, exciting shooter in its own right, *Doom* is every bit the thrill ride it should be. Extras like SnapMap and multiplayer lack the polish of the kick-ass campaign, but it's worth it for that exhilarating solo trip to Hell alone.

8 RetroGamer_Mag scored **8** for Doom
Follow our scores on JUST A SCORE
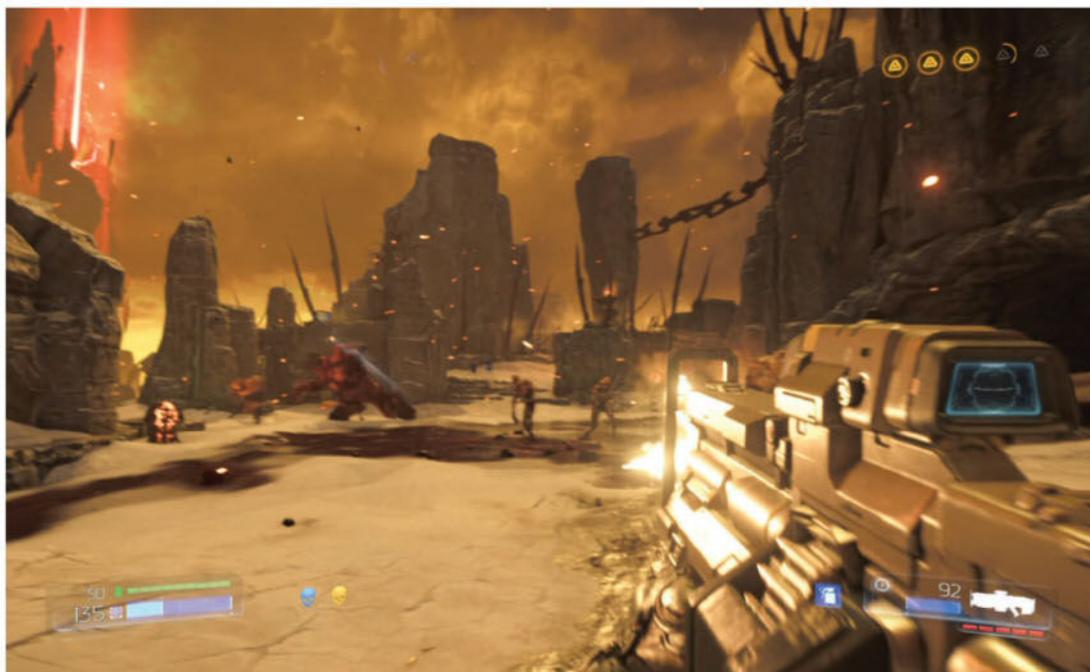
▼ SOMETHING OLD
DOOM (PC)

▼ SOMETHING NEW
WOLFENSTEIN: THE NEW ORDER (PS4)

» [Xbox One] Each weapon has two 'mods' that allow it to be upgraded in interesting and unique ways.

RETROROUND-UP

>> Every month we look at all the classics and latest releases that are available to buy or download

Lumo

» **System:** PS4 (tested) PS Vita, PC, Xbox One » **Cost:** £14.99 » **Buy it from:** Online

We'd love to take *Lumo*'s coder, Gareth Noyce, out for a drink – he clearly loves old games as much as we do. If you're looking for a game that will have your nostalgia glands firing on all cylinders then *Lumo* is perfect. Although Gareth is known for newer titles (he's worked on everything from *Sudeki* to *Crackdown*) he clearly knows his old games and *Lumo* is as loving a tribute to retro as you could expect to find. *Monty Mole*, *Bubble Bobble*, *Jack The Nipper* and *Marble Madness* are just a few of the games referenced here, but there are many, many more and that's before you move over to the obvious isometric titles such as *Knight Lore* and *Head Over Heels*. Hell, we even found an awesome *Ghostbusters* movie reference.

Lumo's story may be slight – you're sucked into a videogame and must escape – but so what? *Knightlore* wasn't exactly high fiction and it was still amazing fun. *Lumo* is a game where action speaks louder than words and as a result there's always something to do. Some rooms are so throwaway they're almost completely pointless, but others are ingenious little puzzles that will give your grey matter a serious workout. It's a little more linear than we'd have liked, but in a way that's indicative of the games it's based on. *Lumo* excels in continually offering you new experiences and for the most part they're handled incredibly well. Bubbles can be jumped on; water can be swam in; certain blocks can be pushed; giant balls can be rolled around as a mode of transport; mini-games can be discovered; your wand can scare spiders away and reveal hidden pathways; chains can be swung on – it's a never ending series of new things to try and it ensures *Lumo* constantly feels fresh and exciting.

Lumo's certainly not perfect – some rooms require pixel-perfect jumping that simply should exist when such a tricky perspective is being utilised – but it's not far off. A stunning love letter to the days of yore, improved by modern day execution. It really is quite brilliant.

9 RetroGamer_Mag scored **9** for Lumo
Follow our scores on JUST A SCORE

» [PS4] We're guessing that Gareth was a big fan of *Nebulus* back in the day.
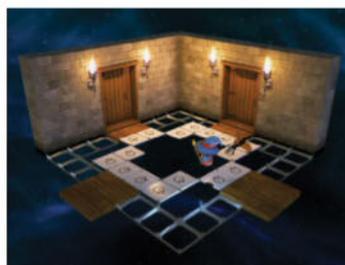
» [PS4] Jumping is still a far from smooth experience, if only you could quickly switch to a top-down view.

» [PS4] The ice stages will cause plenty of swearing if you try rushing through them.

Fire Emblem Fates

» **System:** 3DS » **Buy it for:** £34.99 (each) » **Buy it from:** Retail, Online

When a developer attempts to push a franchise to appeal to a broader audience the games tend to lose their way a bit. Intelligent Systems' solution to this with *Fire Emblem Fates*, then, is to offer completely different versions of the same game. If you liked the simplicity of *Fire Emblem Awakening*, the *Birthright* edition's RPG-like grinding focus will certainly appeal to you. If you prefer the classic tough-as-nails *Fire Emblem* of yore, then *Conquest* is the way to go, opting for more strategy and throwing away the ability to level your team between story missions. The result is a diverse title that caters for fans of new and old *Fire Emblem*, while maintaining the high level of presentation that was seen in *Awakening* and cementing itself as one of the definitive titles for the 3DS library.

9 RetroGamer_Mag scored **9** for Fire Emblem Fates
Follow our scores on JUST A SCORE

» [3DS] Fates adds new mechanics, such as status, effects into the fray.

Shadow Of The Beast

» **System:** PS4 » **Buy it for:** £14.99 » **Buy it from:** PSN

Heavy Spectrum's reboot is miles better than the original game. There, we've said it. It looks absolutely lovely, like a Roger Dean painting come to life, features an interesting combat system (which is heavily indebted to the free-flowing combat of the *Batman: Arkham* games) and has a wealth of secrets to discover and unlock.

Sadly, for all its graphical splendour the gameplay is nowhere near the same standard, which means it's actually a solid representation of the original game (which has kindly been included as a nice unlockable). For a game that relies so heavily on combat, it's poorly executed, and only get more frustrating as the game continues. The puzzles are fun, but appear sporadically, while the bosses range from inventive to simply terrible. A beautiful-looking, if decidedly average experience.

5 RetroGamer_Mag scored **5** for Shadow Of The Beast
Follow our scores on JUST A SCORE

» [PS4] Like the original, *Shadow Of The Beast* is all looks and no substance.

» [Master System] A familiar location.

» [Master System] There's no need to be rude!

» [Master System] Impacting with wall in three, two...
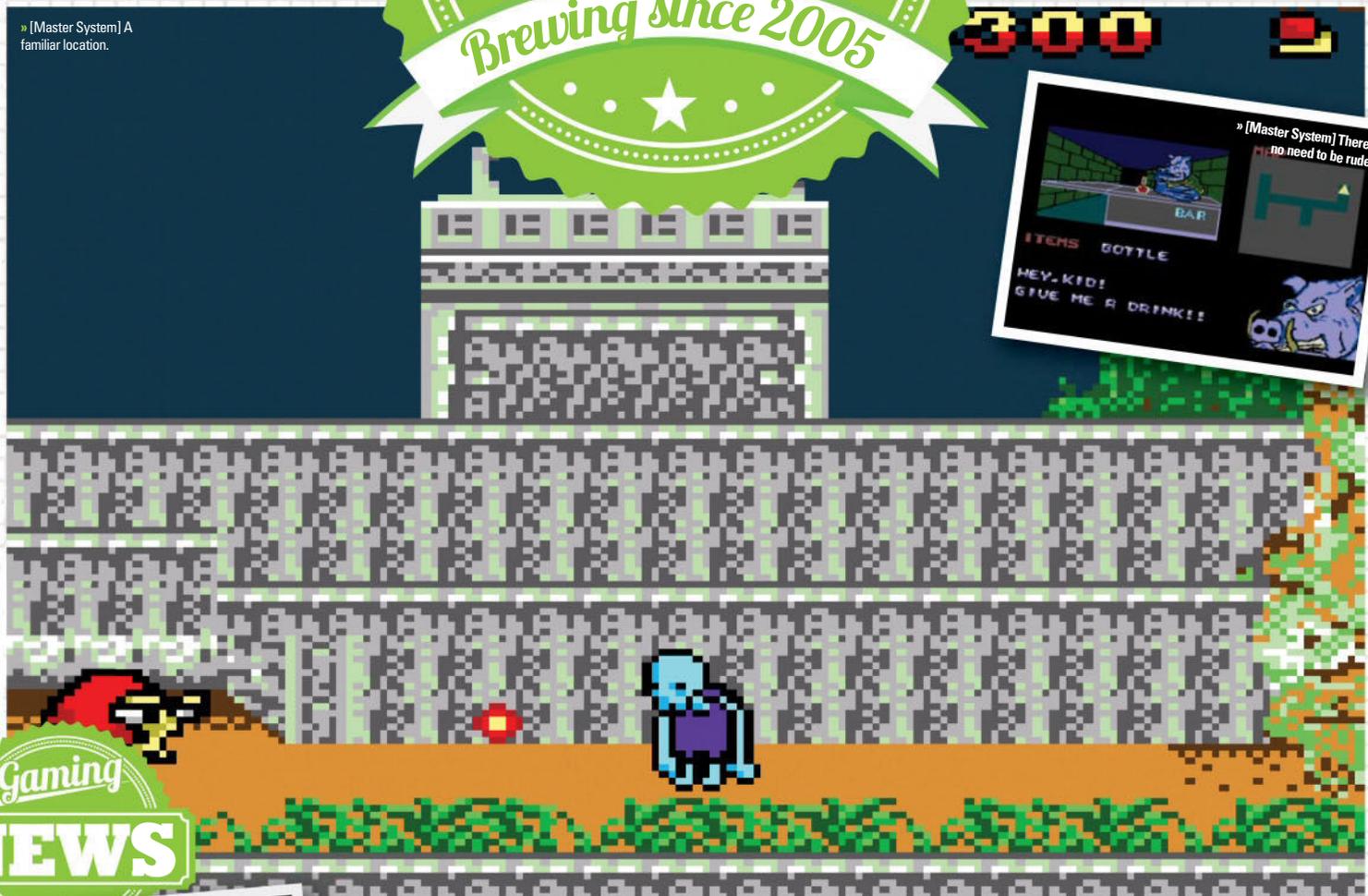
TO BE THIS GOOD

The SMS Power coding competition for 2016 has finished and it brought forth a range of new games on Sega's 8-bit systems – the entries are mostly for the Master System, but fans of blasting action might want to try *Swabby – A Snail Tale* for the Game Gear. Here the maze-solving snail, who originally appeared in the Master System BIOS, game is accidentally given magical powers by Zeus and takes to the skies over some very familiar landscapes. *Weka Invaders* on the Master System sees Waimanu the penguin blowing away blocks and enemies with a strict time limit to worry about, and *DataStorm* is another shooter, this time based on the Atari 2600 game, *Turmoil,* and, like its inspiration, is suitably frantic.

Twin Maze and *Master Of The Labyrinth* are both about dungeon exploration games, although the former is more a tech demo while the latter has meat to it. And, speaking of meat, there's plenty to be hacked at in *Cimmerian* which is an attractive version of Palace Software's sword battler *Barbarian* that promises to be even better when the final version is complete. We were also drawn to single-screen, one or two-player platformer *Bara Buru* which plays a little like the coin-op *Rodland* with the titular characters using their weapons to first stun and then dispose of enemies, but there's also the incomplete, but playable, *Monkey Lad* for some scrolling platform action, too, with the primate in question running through the scrolling levels, stomping on the fauna and collecting items.

There are a few renditions of the classics as well, *MARKanoIIId* is currently listed as an 'interactive demo' but will hopefully be completed since it's a rendition of *Breakout* which already looks and sounds good – the name could possibly do with some work – while *Cye* is loosely based on *Boulder Dash* and *Schlange CV* uses the classic *Snake* formula, with both being ported from ColecoVision code by its original author.

There's more where those came from, too, with 14 games in total and a couple of demo scene-style releases to enjoy as a bonus, all to be found behind Kikstart.eu/sms-power-2016. Most of these programs are considered works in progress by their creators who will, hopefully, be finishing them soon. There was also a second competition this year where developers were challenged to rework classic games, the entries can be found at Kikstart.eu/sms-hacks-2016.

NEW GAMES NEEDED
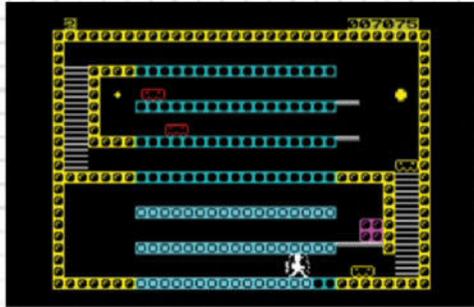
» [ZX Spectrum] The hunters become the hunted.

YET ANOTHER RESCUE MISSION

Mr Vintik's lady friend has been kidnapped by a giant robot so he'll need to use his brains as well as quick reactions to rescue her, working through each level by 'painting' the cyan panels and avoiding or occasionally chasing down attacking nasties.

We've given this game a quick try so far and had a lot of fun with it, the graphics are more functional than anything else but it seems to play well. Head to Kikstart.eu/vintik-spec for more information and a download from over at the World Of Spectrum forums.

> " **Fans of blasting action might want to try Swabby – A Snail Tale** "

» [PC] There's lots of debug information, but this *Sky Kid* remake is still playable.

SET UP US

The best way to learn a programming language is simply to do something with it; that's exactly what Paul Green did when he wanted to pick up GML in Gamemaker Studio and the project he settled on was a remake of Namco's *Sky Kid*.

It's a shoot-'em-up where the titular pilot must fly through horizontally scrolling levels, collect a building-smashing bomb and destroy his primary target. Kikstart.eu/skykid-prv-win goes to a blog post with more information, including a YouTube link showing the current version of the game in motion.

· HOMEBREW HEROES ·

C64 coder Lasse Öörni already has an impressive back catalogue, and Hessian is a great addition to any action adventure fan's game collection. We talked to him about inspirations and working on larger projects

» [C64] Beware of fire breathing robots.

THE BIG INTERVIEW
LASSE ÖÖRNI

Hessian's story has clear cyberpunk overtones, what were your influences?
It's often hard to pinpoint exact, conscious, influences, especially afterwards, but I believe the influence is split roughly equally between 2D games – *Castlevania, Turrican, Metroid, Cave Story* – more modern or 3D games – *Deus Ex, Half-Life* or *Mass Effect* – and old school cyberpunk films like *RoboCop* and *Escape From New York*.

And roughly how long did it take to develop from start to finish?
Active development was about one and a half to two years of work in my free time. In real time the game took longer – 2012 to beginning of 2016 – due to long pauses which stemmed from being unsure on the game's scenario. The game was sort of 'saved' by abandoning the scenarios that didn't work too well, and instead taking one I had written, almost as a joke, during National Novel Writing Month back in 2010.

Just how big is the world in *Hessian* and how does that compare to *Metal Warrior 4*?
Hessian is about 700 screens, while *Metal Warrior 4* is roughly one thousand.

They're a bit different, as *MW4* has you travelling to multiple smaller locations, and *Hessian* is just one big building complex.

What kind of feedback have you received from gamers?
Feedback has been overall very positive. Some have pointed out problems in the controls' complexity, which is good to keep in mind for the future – though in this specific case there was little that could have been done differently, considering all the moves and eight-way shooting that had to be crammed in.

With hindsight, is there anything you would have done differently?
The game's memory allocation uses a few different schemes: permanently resident code and data for the enemy AI and movement, dynamic sprite and level data allocation, and two kilobyte chunks for story code and text. It would have been preferable to unify all this under a common dynamic

allocation system – also for enemy code – for reduced permanently used memory and less loading pauses, but in the interest of actually getting the game finished, this would have been too risky as a late-stage rework, and best left for future research. Also, if there had been more disk space left, I probably would have expanded the endings.

Finally, what plans do you have for the future that our readers would be interested in?
There's still room for exploring the potential of a more advanced C64 game engine. This may or may not result in an actual new game project.

» [C64] All we wanted was some time on the internet!
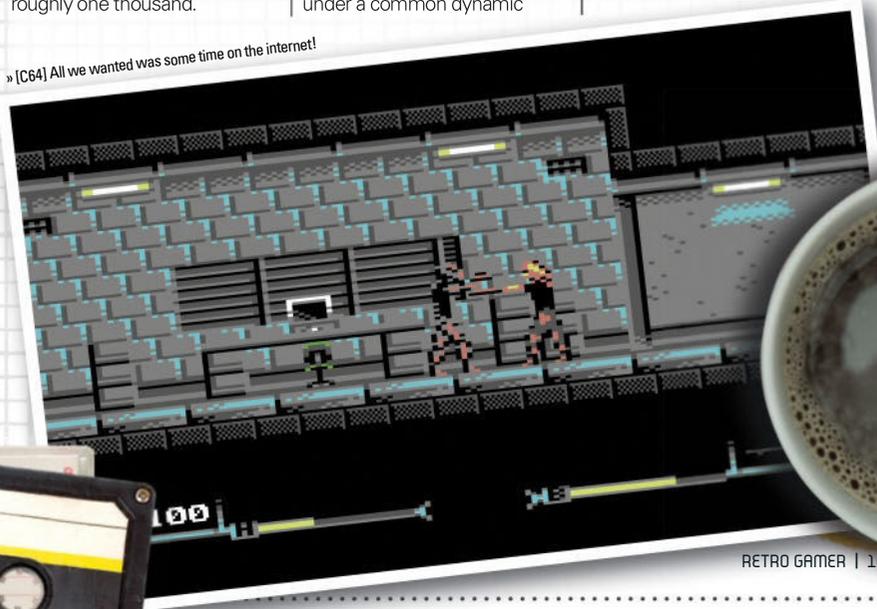
·DO YOU· REMEMBER?

Llamatron for the Atari ST and Amiga is Jeff Minter's 1991 reworking of *Robotron: 2084* and one of the earliest shareware success stories in Europe. *Llamatron* builds on the original game and is crammed full of the usual Llamasoft goodness, releasing wave after relentless wave of weird and wonderful enemies, including llama-blasting laser beams, screaming Mandelbrots, *Monty Python*-esque falling weights and deadly rain showers, which can only be stopped by shooting umbrellas until they open.

The action is intense and there's a lot of onscreen activity to worry about, but *Llamatron* is still surprisingly approachable; the llama fires automatically and players can optionally select a support drone to help out or bring a friend. Head to Kikstart.eu/llamatron-st for the page on Llamasoft's website where this and other games can be downloaded.

» [Atari ST] Getting your five a day is always difficult.

» [Atari ST] Frantic shooter action, what else can you expect from Jeff Minter?

» [C64] Taking some time to have a quick snack in *Bug Hunt*.

RGCD 16K COMPETITION 2015

» **FORMAT:** COMMODORE 64 » **DEVELOPER:** VARIOUS » **DOWNLOAD:** KIKSTART.EU/RGCD-2015 » **PRICE:** FREE

It might seem a little late to be covering the 2015 iteration of RGCD's 16K cartridge competition for the C64, but the final deadline was April 2016 and 11 games were released in total.

THEA from Simon Quernhorst is a reasonably easy maze game where a unicorn searches through four levels – Terra, Heaven, Eternity and Arctic – for items before completing the stages a second time at a faster speed. Eric Hilaire's *Bug Hunt* is a cute little single-screen action game where a frog uses his remarkable tongue to catch insects while avoiding the less palatable options.

Speaking of cute, *Pickle's Pod Patrol* and *Quak* are both brightly-coloured, platform-based action titles where the titular creatures must collect items, while Wanax's *Platman* has a large multi-screen world to explore. *Vortex Crystals* is also a platformer, but less cute, with a shiny, futuristic look and some nasty respawn issues that lead to unfair deaths, while John Christian Lønningdal's *Icicle Race* is stacked full of challenging but enjoyable puzzles similar to those found in *Solomon's Key*.

There are a couple of shoot-'em-ups as well, Mr NOP's *Slime Deluxe* is a slightly upgraded version of the game we mentioned in issue 154, an adrenaline-fuelled spot of Eighties style blasting, and *Alienator* from regular competition contributor Georg Rottensteiner is a variation on *Space Invaders* which changes how the enemy aliens move. Staying with arcade-style action, there's *Blap 'N' Bash Revisited* – a *Breakout*-like affair with two joystick-controlled bats, enemies getting in the way and power-ups which is, again, a remix of something we've covered previously – this time in issue 149. There's also the simplistic, but challenging, *Ring On A String* which is a homage to the attraction where a ring must be guided along a wire without touching it.

The RGCD competition has always been something to look forward to, and this year was no exception, with *Icicle Race*, *Quak*, *Platman* and *Bug Hunt* in particular standing out for us from a solid collection.

» [C64] *Icicle Race* has lots of challenges to deal with.

» [C64] Hunting around for the first place ribbon in *THEA*.
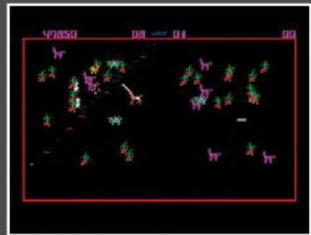
9 RetroGamer_Mag scored **9** for RGCD 16K Competition 2015
Follow our scores on JUST A SCORE

DEEP CORE RAIDER

» **FORMAT:** ZX SPECTRUM » **PRICE:** FREE
» **DEVELOPER:** PAUL JENKINSON
» **DOWNLOAD:** KIKSTART.EU/DEEP-CORE-SPEC

A Deep Core Raider is an interstellar pirate who goes in search of surveyed planets to pilfer the riches-within. These sites have already been explored by large space corporations, so minerals that were extracted before their mining teams were called are sitting there, waiting to be taken.

Or they would be if there weren't automated defence systems in play to keep looters away or barriers which need to be bombed. The craft being employed to 'borrow' this wealth has a tiny fuel reserve and uses it up burning the main thrusters for flight, so topping up whenever possible is essential.

This is a nicely-presented action game which is vaguely reminiscent of *Cybernoid* with a few elements of *Thrust* but with no inertia to worry about, the secrets to becoming rich are getting used to the timing of the guns and using your thrusters sparingly.

8 RetroGamer_Mag scored **8** for
Deep Core Raider
Follow our scores on JUST A SCORE

» [ZX Spectrum] Another area successfully mined out, time to make a swift exit!

» [ZX Spectrum] Weaving through caverns and avoiding automated security.

OUBLIETTE

» **FORMAT:** COMMODORE AMIGA » **DEVELOPER:** JAMES WILKINSON
» **DOWNLOAD:** KIKSTART.EU/OUBLIETTE-AMIGA » **PRICE:** FREE

Find the exit, kill the dragon. That's the simple but accurate mission statement for *Oubliette* – the title refers to a secret dungeon with only a ceiling hatch – which is an arcade-style, random dungeon crawler for the Amiga. Each level opens with a map showing the player's position along with the location of their target, and the rooms between those points are occupied by vile creatures to slice apart or launch projectiles at.

Said projectiles are collected after destroying some enemies and come in extremely handy when taking on the dragons which bounce around the screen while launching fireballs. Although it's possible to take one them out with a sword, getting close enough is going to cost some precious health. The graphics are fairly weak by Amiga standards because the developer was presumably aiming for a NES-style feel, but the rest of the game is nicely presented and is entertaining to play.

8 RetroGamer_Mag scored **8** for
Oubliette
Follow our scores on JUST A SCORE

» [Amiga] How does a one-headed dragon launch three fireballs?

ROUNDUP

Slavia 2 is an old-school, resource-juggling strategy game for the C64. Choose one of four factions before recruiting an army and building up its resources in the limited time available before the enemy arrives. Gear yourself up for battle and head to Kikstart.eu/slavia-2-c64.

Space invaders are heading to the Tandy Color Computer 3, more specifically the Taito coin-op is being converted to run on the Coco3 by tcdev whose work on converting Ultimate's isometric 3D games to several platforms we've previously covered. For more information visit Kikstart.eu/invaders-prv-coco3.

Finally, there's a playable version out of the Mega Drive bomb-'em-up *Bomb On Basic City* which puts you behind the propellor of an aeroplane which has to, well, bomb things, – there's a couple of zones to work through in the demo ROM available from Kikstart.eu/bomb-basic-md.

A PRELUDE TO CHAOS

» **FORMAT:** AMSTRAD CPC » **DEVELOPER:** EGOTRIP » **DOWNLOAD:** KIKSTART.EU/PRELUDE-CHAOS-CPC » **PRICE:** FREE

The evil Cyborg Queen has sent her minions to make the planet ready for her arrival, but Amy has been contacted by a village where these preparations are taking place and has every intention of putting a spanner into the works.

There's a reasonably-sized map to explore, around 40 gems to collect, enemies to avoid or shoot including some bosses and weapons which become available as Amy is levelled up that in turn allow her to blast away background elements to reach new areas. What initially seems a small area is quite sprawling, and there's a map item to collect, which will help with navigation.

There's a good amount grinding required in order to build up experience and quite a bit of backtracking to previously visited locations when new weapons are collected, but it isn't too excessive and *A Prelude To Chaos* is entertaining enough to excuse it.

8 RetroGamer_Mag scored **8** for
A Prelude To Chaos
Follow our scores on JUST A SCORE

» [Amstrad CPC] I've got the key, I've got the key.

» [Amstrad CPC] Even a walk in the woods can be dangerous for poor Amy!

MAILBAG

HAVE YOUR SAY… SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

★ STAR LETTER

KICK OFF

Dear **RG** team,
Is it safe to say that after the whole Coleco Chameleon fiasco, we can all agree that crowdfunding is rubbish and end retro gaming's obsession with Kickstarter campaigns?

What happened to people doing projects because they believe in them? For the past couple of years, the fate of my favourite retro series' has been left to the whims of other people, and whether or not they feel like that extra tenner for a soundtrack is worth it, and some fantastic projects have fallen by the wayside. Those that do make it tend to value backer feedback heavily too, which is a great way of giving people what they they want, but the charm of older games is that they reflect the personalities of the coders.

What's worse is that so many of these projects take forever to actually produce anything. I backed *The 90s Arcade Racer* over three years ago and still don't have a game to show for it. Let's just go back to the days when developers expect our money *after* finishing a project, yeah?
Tony Green

» The Coleco Chameleon was set to hit Kickstarter, but crowdfunding wasn't really the problem with it.

On one hand, we agree with you about the proliferation of Kickstarter projects – there doesn't seem to be an announcement these days that isn't conditional on a six or seven figure pledge total. On the other hand, there are definitely projects that wouldn't have been possible without crowdfunding that have turned out pretty well. *Elite: Dangerous, Tesla Effect: A Tex Murphy Adventure, Wasteland 2* **and more have all been worth it, though Nick reserves his right to change his mind if** *Shenmue III* **turns out rubbish. Having said all that, though, we should point out that crowdfunding was the absolute least of the Coleco Chameleon's problems…**

» Cisko Kidd's favourite Mega-CD games. You should own *Road Avenger* just for its amazing theme song.

For readers who aren't familiar, My Retro Game Box was a subscription service which sent players games they didn't own each month, based on their preferences and system ownership. However, it ceased operations earlier this year. While there are North American services that work in a similar fashion, we're not aware of any new entrants into the field that cater to the UK – perhaps because of the problems that caused My Retro Game Box to close in the first place.

CD PLEASURES
Having only played the Mega-CD add-on with my old Mega Drive II, the games at the time that were good (if dated) were *Road Avenger*, *Thunderhawk* (played it to death), *Tomcat Alley* and my favourite, *Sol-Feace*. But that was the sad reality of the cracks appearing in Sega's once impregnable armour, so busy competing against itself whilst their rivals capitalised on this in usurping all their latest consoles to the bin.

Also I'd like to add that I'm looking forward to the arrival of the Vega Plus handheld that would make up for the disappointment at the demise

DISCUSSED THIS MONTH

Spectrum Next
Another month, another new bit of retro hardware – this time it's a super-powered Speccy, powered by an FPGA, and it seems to be compatible with original peripherals. It looks interesting, and we're curious to see how well it will do in an increasingly saturated market for classic hardware revivals.

MAME ON
Dear **Retro Gamer**,
I have found out that MAME is now open source. Would it be possible for you to do a MAME special, complete with a cover disc containing MAME and ROMS to use with it? Could you include versions for Linux, Windows and Amiga OS 3.9 (if this is possible)?

I would most like to see on the cover disc: *Gauntlet, Paperboy, Galaxian, R-Type, Super Monaco GP* and *Salamander*.
Ian Learmonth

MAME is indeed open source now, but there's still a legal minefield associated with it which means we can't just put out a cover disc full of

arcade classics. **Beside the fact that MAME itself is a registered trademark requiring permission to use, there's the fact that we don't have permission from the various copyright owners to distribute ROM sets for MAME. Add to that the fact that Retro Gamer hasn't featured a cover disc since 2005, and we've got to say that such a special is very unlikely indeed.**

BOXING DAY
Hi **RG**,
I loved My Retro Game Box and was very sad to see it go. Do you or any of the readers know of another service like this in the UK?
Love your mag.
The Destrucity Gamer

» [Arcade] MAME might be open source now, but distributing copyright-protected ROM files is still illegal.

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Email: retrogamer@imagine-publishing.co.uk

of the much promised but doomed Coleco Chameleon console.
Cisko Kidd

The Mega-CD is such a strange system, and that's why we featured it on the cover of issue 153. It's easy to understand the thinking at Sega back in the Nineties, and you can find a fair amount of good games to play, but the machine was blighted by high prices both then and now (try getting a copy of *Snatcher* or *Shining Force CD* and you'll see what we mean). Still, all the games you mentioned are good and affordable and we keep our own copies of them handy.

As for the ZX Spectrum Vega Plus, the IndieGoGo campaign was a success and the latest news is that a manufacturer has been chosen. We're hoping it'll address some of the original model's issues when it arrives later this year.

SPACE CASE
Dear **Retro Gamer**,
I hope to find an old game that I played in a game room in the Eighties. It was a shooting game. Every level brought you to a new planet, and it's not *Phoenix*…
Maybe you can help?
Paul Davidson

We can honestly say that we're stumped by this, because there's not a lot to go on in terms of description. If any readers can identify this arcade game solely from the information provided, we'd be incredibly impressed. We'd have to put together something quite special in order to reward them…

THE FUTURE WAS WHEN?
Dear **Retro Gamer**,
I have just got into your superb publication and I have one query. I see that in issues 38-40, there was a developer history of SNK in three parts. My question is: was this ever reprinted any volume of the collections or bookazines etc.? Many thanks in advance for your help and keep up the great work.
Paul Davidson

Hi Paul, it was indeed. All three parts of the SNK developer history were compiled in *Retro Gamer Collection Volume 2*, which is long out of print. However, you can still pick up a digital copy via greatdigitalmags.com. If you're interested in this feature, you might also be interested to know that we have a Neo-Geo digital special coming soon, which covers all facets of SNK's highly desirable console and arcade hardware.

» [PC] Without Kickstarter, we wouldn't have retro series revivals like the well-received *Elite: Dangerous*.

From the forum

» www.retrogamer.net/forum

Every month, **Retro Gamer** asks a question on the forum and prints the best replies. This month we wanted to know…

Game Boy Advance memories

NorthWay
I got one when they were new. Sits in a drawer somewhere. I think the lack of backlight was what made it fizzle out for me. Got a Micro for sale? But I loved the *Wario Land* game I have for it – pure class.

RodimusPrime
Always struggled to enjoy it until the GBA player for the Gamecube came along. It's an essential bit of kit that was a godsend for people still pining for the SNES games. Sequels to many SNES games made it like an unofficial SNES 2.

theantmeister
I picked mine up while I was in the US for a wedding in 2001. Happily, Nintendo still made region free handhelds back then. I struggled through *Castlevania* for a while before relenting and getting an backlight fitted.

bensonrad
I still carry my SP with me on the train each day, perfect for some quick arcade action, I have nothing but great love for this console and its backward compatibility. I see it as the last great hurrah (the way I like my gaming) before things

became touchscreen focussed and internet connectable...

merman
Sitting on a coach for six hours completing *Wario Ware* is my main GBA memory. I now own both an original purple GBA and a blue SP, which are great for just picking up and playing.

joefish
I remember once getting jealous looks from a few kids on a train as they struggled to hold up their chunky DS consoles and prod the screen of their plodding Nintendo

games, while my little Game Boy Micro was hurling the *sprites* of *Space Harrier* all around the screen. None of them had the faintest idea that I was using an old system pushed aside by the 'new thing' they were holding.

Megamixer
I had the original model not long after launch and the step-up in power from the GBC blew me away. Amazing how the screen was acceptable back in 2001 but I wouldn't dream of trying to find a patch of sunlight today! Its library is ridiculously strong, too.

nextmonth

MEET THE
PINBALL
WIZARDS

From Bill Budge to Andreas Axelsson – we interview the developers who turned pinball into a videogame art form

ALSO INSIDE

Trapdoor, Final Fight, Hyper Sports, 64 Reasons To Own A N64, Alien III, PlayStation, Fire And Ice, Combat, Magical Flying Hat Turbo Adventure, Karateka, Big Five Software, Ash and Dave, ZX Spectrum, The Legacy Of Resident Evil and much more

ENDGAME

SPACE INVADERS '95: THE ATTACK OF LUNAR LOONIES

» After 17 years of trying to invade Earth seriously, Taito's famous Space Invaders decided to spice up their latest attempted conquest with a bizarre sense of humour. To be fair, it seems a bit silly to attempt real menace when you're trying to invade a land of giant snacks. Let's skip to the ending, in which the aliens have predictably failed to take over the planet once again...

01

» You've beaten stage five! You are officially a heroic defender of Earth. What's your reward for this act of bravery? A lovely firework display, as well as some form of military honour. Secretly, you're hoping for a *Blue Peter* badge.

02

» You feel like you should say something clever to mark such an occasion, like Neil Armstrong. Unfortunately, you haven't spoken to other humans during the war, leading you to utter the weird sentence "We'll protect the peace of the Earth!"

03

» Blissfully unaware of your grammatical deficiencies, you continue. "As far as we are here, invaders are not fearful!" In the background, your comrades smile for the cameras. Later, at the post-debrief party, they're going to laugh at your speech.

04

» Still, you're a hero. A hero that looks ridiculous to the entire world's news media, not to mention your own parents, both of whom are English teachers, but a hero all the same. You bid farewell to the assembled media throng and wander off into the sunset with your weird bipedal laser cannon.

05

» Lest we forget, here are the defeated invaders. We shall afford them no dignity, because quite frankly they don't deserve it after giving up on trying to scare us. Instead, they can wail and scream all they want as we leave them drifting through space to atone for their crimes.
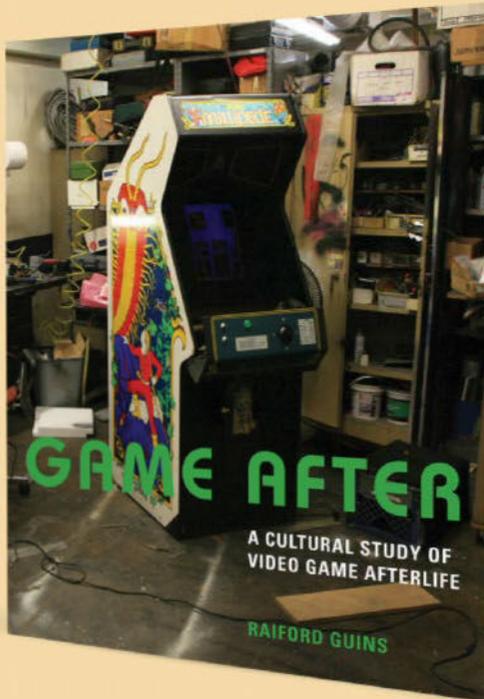
GAME AFTER
A Cultural Study of Video Game Afterlife
Raiford Guins

"Raiford Guins takes readers on a romp through American memory as a pixelated landscape of desire. Witty, learned, and not a little obsessive, *Game After* is an exploration of what video games mean to us in this, the era of collection, when antiquarians have become hipsters and hipsters antiquarians."

—**Lisa Gitelman**, author of *Always Already New*
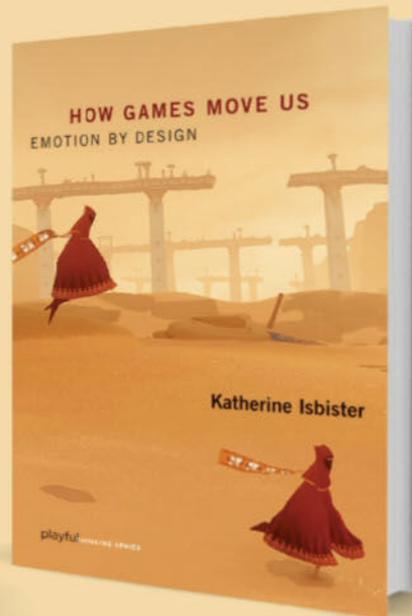
HOW GAMES MOVE US
Emotion by Design
Katherine Isbister

"… an invaluable guide to the many ways that games can be designed to provoke powerful positive emotions, not to mention chills, goosebumps, and transformative experiences that change how we see ourselves and the people we play with."

—**Jane McGonigal**, PhD, author of *Reality Is Broken* and creator of SuperBetter

Playful Thinking series
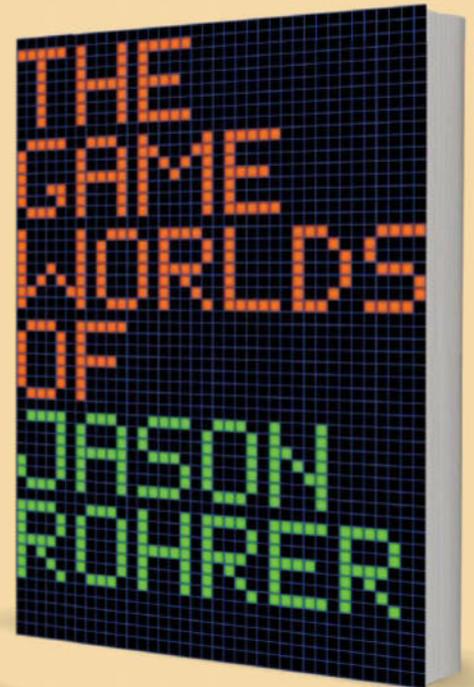
THE GAME WORLDS OF JASON ROHRER
Michael Maizels and Patrick Jagoda

A generously illustrated volume that documents the career of Jason Rohrer, one of the most heralded game art designers working today.

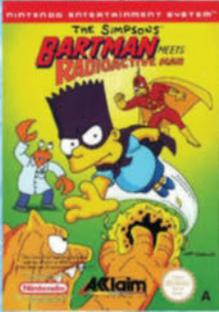Copublished with the The Davis Museum at Wellesley College

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