AUSTRALIA'S #1 PC GAMING MAG

PC PowerPlay

▶ SINCE 1996

SHLOCK HORROR

WE TRACE THE HISTORY OF JUMP SCARES AND THINGS THAT GO BUMP...

STAR WARS SQUADRONS

A NEW HOPE FOR X-WING AND TIE FIGHTER FANS

INFINITE AMMO

THE RISE AND RISE OF RETRO SHOOTERS

ODYSSEY

ELITE DANGEROUS

FUTURE

BE THE FIRST PERSON TO SET FOOT ON AN ALIEN WORLD IN AN EXPANSION THAT DRAMATICALLY WIDENS AN ALREADY VAST GALAXY.

SPACE... THE FINAL

We're mixing our metaphors again.

So last month I pondered how little time I had for flight sims... and then along came Star Wars: Squadrons to show me that if that sim is set in space... well. I've been clocking a lot of time in the cockpit of a U-Wing or TIE Fighter, so I guess that's who I am now.

I also never quite got around to buying Crusader Kings 3, though I still look at it longingly on Steam. I don't know what's holding me back. Actually, I think I do - for some reason I thought now might be a good time to give Warframe a try, and $diety help me, I think I'm falling down the rabbit hole. I have the wiki open all the time, I'm running missions in every break from work I take, and... yeah, I'm not proud.

Something I am proud of, though? Heck, it has been one shitty year, but PC PowerPlay is still here, and I'm pretty damn proud of that. The publishing industry is struggling under the weight of the COVID pandemic, but we're still going – and that is thanks to you: our readers. Whether you buy on the newstand, or subscribe, you're the reason we can keep on going.

So, thanks, everyone. Happy New Year, and see you next issue!
David Hollingworth

You're the reason we can keep on going.

EARLY ACCESS PREVIEW

BALDUR'S GATE III
P. 030

Baldur's Gate III feels like it's trying to make up for lost time. There are no humble beginnings here – instead we're treated to psychic squid monsters, interdimensional ships, and jaunts into the Underdark.
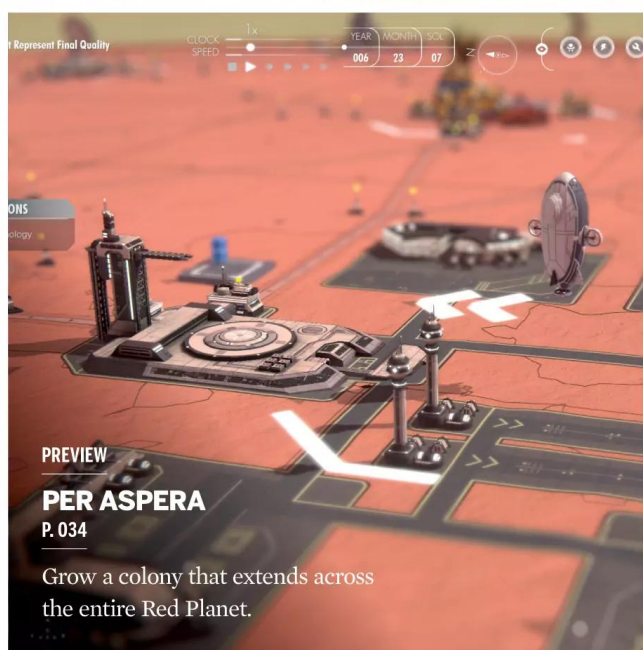
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PER ASPERA
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Grow a colony that extends across the entire Red Planet.
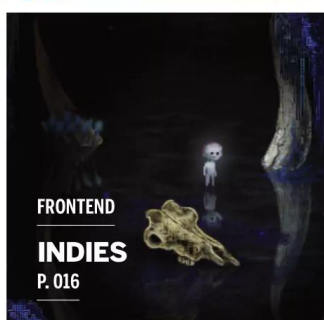
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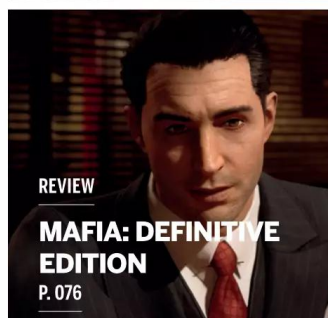
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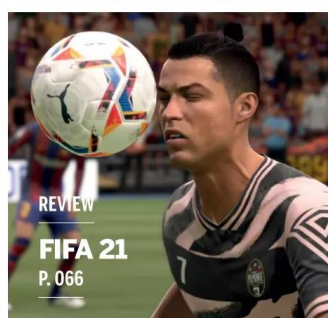
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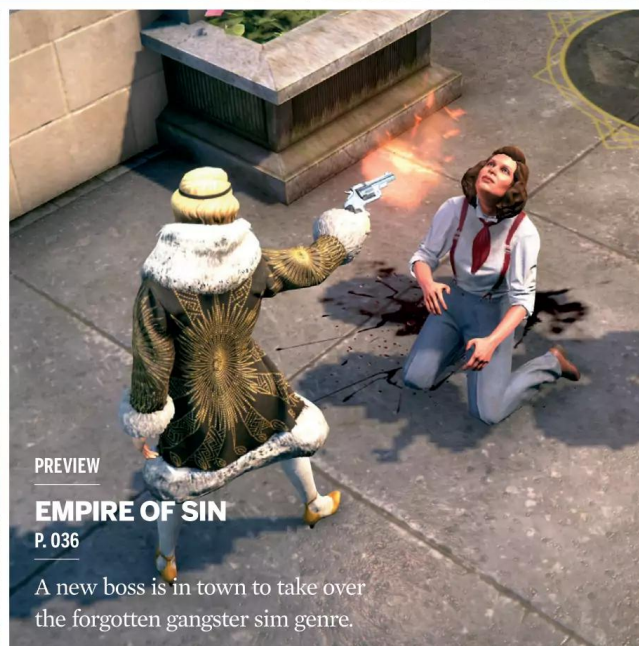
PREVIEW

EMPIRE OF SIN
P. 036

A new boss is in town to take over the forgotten gangster sim genre.

WAR THUNDER GETS A BRAND NEW ENGINE AND PRETTIER GRAPHICS IN ITS BIG 'NEW POWER' UPDATE

The sky now looks nicer in the military simulator.

War Thunder got its long-awaited 'New Power' update last month, updating the game's engine and vastly improving its graphics in the process. According to the update notes, the skies will look prettier and more realistic, as will bullet contact, explosions and fire. Aircraft destruction has been revamped, as well.

Most of the graphical buffs focus on realism: ground vehicles will now have more realistic shell hits, destroyed ground vehicles now look even more on fire (both inside and out), and the "shape of the penetration now depends on the angle of impact" when missiles hit ground vehicles. Meanwhile, armour-piercing shells will now protrude from tanks.

There are new war machines involved as well, in the form of 15 new aircraft, 14 new tank models, as well as battleships and aircraft carriers. New airports and locations have been added too.

Sea of Thieves will see its 'biggest year yet' in 2021

Rare promises a lot of ongoing support for the pirate sim.

Sea of Thieves executive producer Joe Neate has promised 2021 will be the "biggest year yet" for the treasure hoarding pirate sim, which as of July boasted 15 million players. Neate made the claim on Twitter, in concert with a new dev update for the game, which proclaims roughly the same thing.

While the update falls short of any specifics, it does indicate that next year's changes and additions will be substantial. "We're hard at work behind the scenes on some significant changes that will lead us into 2021, with plans in motion for how we continue supporting the game and some major news still to come," Neate wrote. "Sea of Thieves isn't slowing down any time soon."

Former EA boss Patrick Söderlund's new studio is making a PVP shooter

Embark's first project has also entered full production.

Embark, a studio founded by former EA Games boss Patrick Söderlund, has begun work on a competitive first-person shooter.

Writing for the first time since July 2019, the former Battlefield executive penned a blog post covering the studio's year under the pandemic and gave updates on the team's first project (a free-to-play military action game). But after receiving questions regarding job listings at the company, Söderlund announced that Embark has a second game in the pipeline—an as-yet-unnamed team-based shooter.

"To be honest, I thought I was done with PVP-shooters having worked on them in one form or another for almost my entire career," Söderlund writes. "But a while back, some of us here put together a small pitch that was too irresistible to ignore."

Twitch criticised over its 'exploitative' affiliate fast-track scheme

What's five bucks for monetisation and stream-ready music?

Twitch has been accused of exploiting its current DMCA struggles via a new partnership with music label Monstercat, one that grants a shortcut to affiliate status for US$5 a month.

As the platform's first monetisation tier, affiliate is a crucial first step for folks who want to make it big on Twitch. Traditionally, a streamer needs to unlock it by meeting a set criteria of 50 followers, 500 total minutes of broadcast across at least 7 days, and an average of three or more concurrent viewers. Alternatively, starting this week, you can just pay for a subscription to Monstercat Gold through its new Twitch program.

"This seems amazingly unfair to all those folks who have worked hard to get to affiliate," Spawn On Me's Kahlief Adams tweeted, "but it also feels like it lessens the value of an affiliate status if you can just buy your way in."

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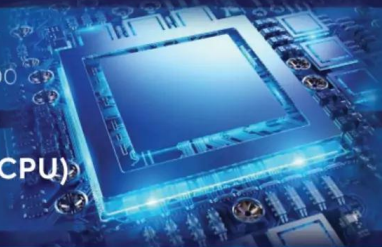
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INTEL'S MANUFACTURING IS BROKEN AND NEW ROCKET LAKE CPUS PROVE IT

The next six months are make or break as Intel hurtles towards existential crisis.

Intel's upcoming Rocket Lake CPUs prove it is in a crisis of existential proportions. The next six months will decide both its fate and the future direction of the PC as a whole. Hyperbolic? Much? Actually, no.

It's a somewhat speculative interpretation, to be sure. But tales of Intel's woes have become so routine of late that the very existence of Rocket Lake and what it implies has been largely overlooked. Rocket Lake says very, very bad things about the viability of Intel's entire business model. And that, in turn, makes it very significant for the PC as a whole.

Rocket Lake, of course, is Intel's next desktop CPU architecture. It's essentially a 14nm backport of Intel's 10nm Sunny Cove CPU core architecture, as seen in 10th Gen Ice Lake notebook chips. Rocket Lake won't be released until next year, which means Intel will be launching a new CPU design in 2021 on the ancient 14nm node. Intel's original plan was to move to 10nm in 2016. Yes, really.

Intel has sold the whole 'backporting' thing as a positive, a sort of groovy and inclusive approach to CPU manufacturing. "Hey guys, relax. We're flexible, we can port from node to node. It's freestyle. It's all good," Intel seems to be saying.

The reality is that there's really no such thing as a node-agnostic CPU architecture. It's going to cost a huge amount of money to port those Sunny Cove cores, PCI Express 4.0 I/O and Xe-based graphics to 14nm for Rocket Lake.

So, it's not groovy or flexible. It's a move made out of desperation because Intel's 10nm production node still isn't good enough for the prime time. Let's repeat that. Rocket Lake will be launched in 2021 in 14nm because Intel's 10nm still won't be good enough for a desktop CPU launch.

That's going to come at a cost. For Rocket Lake, Intel is regressing from 10 cores, as seen in the current Core i9-10900K, back to eight cores. Because those Sunny Cove cores were never intended for 14nm. And they're big and fat and power hungry when ported to 14nm.

There are further factors that make Rocket Lake look plain odd. In September, Intel officially confirmed an eight-core 'H' version of its latest 10nm Tiger Lake laptop chips exists. It's a CPU that would make Rocket Lake totally redundant. So why doesn't Intel launch that chip on the desktop instead of Rocket Lake? The only plausible reason is that 10nm remains fundamentally broken.

As a short term stop gap, Rocket Lake probably just about makes sense, even if Intel's marketing pitch for the step back to eight cores is almost certainly going to make your ears bleed. But further out, this 'backporting' shizzle surely isn't a goer.

Currently, Intel says its first 10nm desktop CPU will be Alder Lake, due in the second half of next year. That's the one with the new big.LITTLE hybrid architecture and up to eight performance cores and eight efficiency cores. If backporting Ice Lake to 14nm came with compromises, backporting Alder Lake to 14nm would surely be even less appealing.

In short, Alder Lake probably has to be on 10nm to be viable. But there are no signs at all that Intel's 10nm is going to be good enough in a little over six months. It's worth remembering that, to date, Intel is still only selling quad-core mobile CPUs on 10nm. The launch of the 10nm Ice Lake-SP server chip, once due in 2019, has been delayed once again into early 2021. And you'd be brave to assume it'll hit that deadline.

"IT'S GOING TO COST A HUGE AMOUNT OF MONEY TO PORT THOSE SUNNY COVE CORES, PCI EXPRESS 4.0 I/O AND XE-BASED GRAPHICS TO 14NM FOR ROCKET LAKE."

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DARK WINTER

The big brother of the played-out Fallout franchise becomes fresher with each new instalment, delivering a delightful blend of top-down tactical combat and sci-fi lunacy.

James Cottee has been known to admit he's wrong, but it takes a few beers.

Wasteland 3 rules. Yet judging by the commentary surrounding it, there appears to be a lot of misconceptions about the latest iteration of inXile's signature post-apocalyptic RPG franchise.

The first category of complaint is that the game is completely unbalanced. Critics baulk at how an end-game shotgun with a range extension mod can project a 'cone of death' across the entire map. Many complain that the game is far too easy on even the highest difficulty, because of the so-called 'Alpha Strike' effect. That is, if the human player goes first, it's all too easy to wipe out the entire enemy team on the very first round, even with their superior numbers and astronomically level-scaled hit-points.

The second variety of gripe ties in to the plot, and how one of the faction choices available towards the endgame is geopolitically destabilising and profoundly stupid. What kind of ghoul would let warlords run roughshod over the remnants of an irradiated America?

Both of these lines of criticism are understandable, but both are wrong.

Wasteland 3 presents the player with multiple stackable rampantly over-powered game mechanics for a very good reason: because it's fun. It's fun to discover these exploits, and it's fun to use them to make mutants explode like a blood sausage. If things get too easy, then it's fun to put artificial constraints on yourself to make Supreme Jerk mode challenging – perhaps by playing without any Sniper or Melee characters.

The AI has its shortcomings, but that just makes you feel like a strategic genius when you target bunched-up opponents with your talking car's goat mortar.

Then there's the ability to make bad and amoral choices. Again, this is not a bug – it's a feature. In the lead up to release Bryan Fargo made a big deal about how it was possible to recruit one of the games most despicable villains onto your Ranger team. You can also rob merchants, ally with slavers, take over a narcotics factory, aid cultists and genocidal robots, and put an army of cannibals in charge of Denver.

Wasteland 1 and 2 made it very clear that you simply can't make everyone happy. Wasteland 3 goes further – it gives you the power to make absolutely everyone miserable. Many games promise true consequences for moral choices, but Wasteland 3 delivers.

The bugs also drew a lot of complaints, and those were entirely justified; at launch the game was a pig's breakfast. But inXile is improving. It took a whole year to get Wasteland 2 debugged, but Wasteland 3 saw its most egregious blockers banished after only a couple of months. The months ahead hold the promise of numerous quality-of-life improvements, and even DLC (ie. locations and quest lines cut during development). Several item descriptions suggest that a crafting system was planned at one stage, and data mining confirms this. While not essential, it'd be nice to have – especially if it lets you spam more over-powered disposable laser turrets.

There's a multitude of subtle refinements, like the pared-back list of skills. You used to have to put a lot of points into 'Smart Ass' if you wanted to field the occasional zinger, but the new dialogue system lets you be rude to everyone.

In spite of its shaky start I'm immensely satisfied with Wasteland 3, and I have high hopes for the future of the franchise. My only fear is that now Microsoft also owns Bethesda, some mole-eyed bean-counter might crunch the numbers and calculate that Microsoft only really needs ONE studio that cranks out incredibly buggy fantasy and post-apocalyptic RPGs, and decides to dissolve inXile on the spot. But this fear is irrational. Microsoft is committed to supplying vast quantities of content to Xbox Game Pass subscribers, and it needs every Bard's Tale and Torment it can muster.

The only real blemish on inXile's record of late is the unfortunate matter of Autoduel. It turns out that they were being a tad cheeky when asserting that they held the rights to the video game version of Car Wars, and Steve Jackson spent a six figure sum in court to get the trademark back. An official port of the original 1985 cult classic is due to hit Steam soon. But I'm left wondering: What if? What if inXile was permitted to make a brand new Autoduel game? What would it be like? My gut tells me it would be very buggy – and very, very good.

Nothing is impossible. Stardock and Toys For Bob were able to reconcile their differences and commit to working together to create a future for Star Control. Maybe someday inXile and Steve Jackson Games will see eye to eye, and bring Autoduel into the 21st Century...

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THE MOST TOYS

In a game you can't win, expansions are inevitable.

I was a frank four-year-old. At the house of a preschool friend, I remarked, "What a mess," and was never invited back. At the more empathetic age of 42, I can appreciate that the collection of paraphernalia I'd witnessed was the manifestation of a complex and difficult issue; hoarding. I don't have a healthy relationship with The Sims, but I struggle to define it. It's not an addiction, because my engagement now lasts mere hours after the release of a gameplay heavy expansion. Am I a fan? A collector? A hoarder? Some amalgamation of these things?

As always, when I fired up The Sims 4 recently, I noticed a new expansion; Eco Living. I was so annoyed with myself for yoinking it, I immediately yoinked the Nifty Knitting stuff pack, too. As my Sims' hippy house filled to the brim with fabricated wall decals and woollen tortoises, I pondered their purpose. List them on Plopsy, for simoleons? Pretend they are precious? I'm not sure if it's normal for a Sim's interdimensional pockets to have 600 beetles in them. As well as new crafting options, Eco Living allows you to raise insects for food.

I've read that one of hoarding's characteristics can be to not (genuinely) value your stuff. Did I enjoy these new packs? I loved The Sweater Curse, which is a prolonged Tense moodlet from giving a romantically involved Sim a hand knitted sweater and they hate it. In real life, I'm knitting my husband a disappointing Covid scarf that looks more like a trapesium, so I get the joke. But I did not enjoy Eco Living's Neighbourhood Action Plans. If you have no friends, like my sims, you'll end up suffering through every half-baked, do-gooder idea that's voted in.

Some NAPs are OK, like Promoting the Creative Arts, which allows sims to gain influence from writing novels and so on. Free Love is interesting, in which all jealousy from romantic intersections is removed. (Or so I believe. I can't even be bothered with monogamous sims-relationships, so I didn't try it out.) Sadly, my

neighbourhood kept voting to fine me for using the shower, then to cut off power and water every Thursday. Generators are a complete pain to upgrade, fuel and maintain, even if solar panels and dew collectors are more useful.

Is it possible to be a hoarder if your stuff is digital? Certainly, The Sims 4 demands so much space on my laptop that all of my (actually precious) COVID-recorded, teaching resources have been relegated to an external drive. The Sims is not cluttering the hallway or keeping the kids' friends away, but this automatic accumulation (currently, for The Sims 4, amounting to the base game, nine expansions, nine game packs and seventeen stuff packs) feels entirely out of control. Why do I keep buying more game packs if they don't "spark joy", in the words of Marie Kondo?

Many videogame enthusiasts will collect the games they love forever, but how many franchises have delivered a constant stream of (mostly) unchanging content for 21 years? Definitely some; Civilization, Mario, Pokemon? My colleague Terrence Jarrad tells me, "If you play World of Warcraft, you buy all of the expansions." On Twitter, I received more responses to the question of which games people buy, long term, than I could read. I'm not sure what precise intersection of sustainable living, knitting and hoarding finally made me stop to think about this, yet here we are.

I considered concluding this column with a grand promise to actually stop. Stop buying, stop playing (unless I want to). While mustering the courage to do so, I noticed the new Snowy Escape pack. Snow, my weakness. By the time you read this, it will have been released and I will own it. My dad bought the very first Sims game, didn't like it and handed it to me, Force-bonding it to me forever. My sad destiny is inevitable; my descendents will never know (or care) that I collected all the stupid parts of an imaginary sims lightsaber. Nor should they.

Meghann O'Neill has collected every PC Powerplay she has ever contributed to on a shelf above her desk. If her grandchildren are reading this, she'd like them to know she did (at least) value the sims items with silly names. The "I Dream of Sous" Chef Station. Classic.

Is red the canonical impostor? In this essay, I will...

BIG TIME

How 2018 indie sleeper **AMONG US** became a global smash hit.

In September, *Among Us* entered the all-time, record-setting peak player club on Steam. According to Steamcharts, 388,385 people played *Among Us* simultaneously, more than *GTA V* on its Steam debut. And that's not even counting the millions on iOS and Android.

How did *Among Us* become such a sudden phenomenon, nearly two years after it launched? So big that it became the most-streamed game on Twitch in September, and its developer cancelled plans for a sequel to keep working on it? There's more to it than just viral Twitch popularity. A few key things made *Among Us* a massive hit: free mobile apps, extremely low PC system requirements, and the Mafia. I'll explain that last one first.

The game at the heart of *Among Us* has actually been around for decades. *Among Us* is the latest popular adaptation of Mafia, aka Werewolf. This social deception game, about a group of players trying to identify the traitor(s) in their midst, dates back to the 1980s. *Among Us* adds structure to the basic experience: players have a chance to win by completing objectives around the map, which inevitably spreads out the crowd and gives the impostors a chance to strike.

A big part of *Among Us'* success is simply that Mafia is a fun, endlessly playable game that scales well to big

groups. But in 2020, getting together to play games like Werewolf in-person isn't really an option. We're primed for social interactions to play out over Zoom and voice chats, and *Among Us* is an easy laugh generator with friends. Or people who are soon to be unfriended...

"You know a game like *Among Us* is good when the conversations get really heated," says SR_Kaif, who was one of the first streamers to consistently play *Among Us* for an audience on Twitch. "The art style is charming and the gameplay is very simple, you don't really need an explanation on how to play the game compared to other social deduction games like *Town of Salem* or *Deceit*."

The smartphone apps also open up *Among Us* to a massive (and young) audience beyond PC gaming, and it'll run on basically any PC dating back to 2010. The barrier to entry is extremely low. These are all reasons for *Among Us* to be a popular game right now, but they don't explain why it blew up – how it went from unknown to the biggest game on Twitch and one of the biggest on Steam.

At the start of July, *Among Us* averaged just a couple hundred viewers on Twitch, according to tracking site SullyGnome. By the end of August, it averaged over *100,000*. Early bursts of exposure on Twitch rapidly snowballed into a huge increase in viewers, and that translated into more and more players. It's also noteworthy that viewers aren't just concentrated around

Pretty 'sus'

Just how big is *Among Us*? Big enough to propel 'sus' into everyday conversations. 'Sus' is shorthand for 'suspicious' in *Among Us*, but quickly became a meme because in a game built on paranoia and baseless accusations, everything can be 'sus'. If you hear someone say 'sus' out loud, they probably got it from *Among Us*... or they're an impostor.
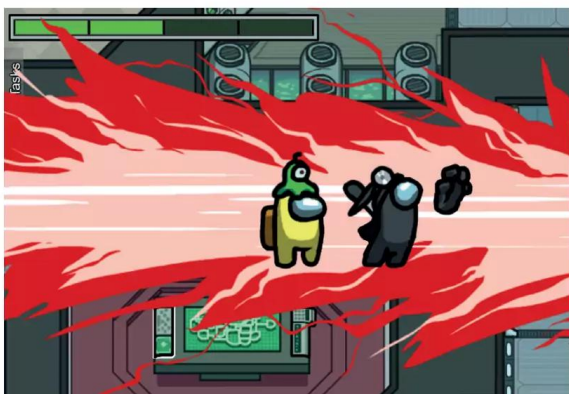
FAR LEFT: Never trust a guy with an alien hat.

LEFT: *Among Us'* maps encourage you to split up, but that's when it all goes bad.

Twitch superstars – the top 100 *Among Us* streamers are all pulling in good to great numbers.

The most successful *Among Us* streamer during its boom was xQc by a longshot. The former *Overwatch* pro's watch time dwarfs other streamers at more than 11 *million* hours through September.

IMPOSTOR SYNDROME

But who kicked it off? Before *Among Us* was everywhere, SR_Kaif had been streaming it for months. His first stream in December 2019 crossed 1,000 viewers, something he'd only reached streaming indie horror game *SCP: Secret Laboratory*. "I decided to post a YouTube video of it in January as well as uploading the VODs to my VOD channel and from that, I saw my concurrent viewers jump to 2,000 around mid-February," Kaif says. xQc's audiences would dwarf that, but it was impressive for Kaif, who now has about 136,000 followers (to xQc's 3.6 million).

Starting in May, some mid-sized streamers picked the game up, giving it a big boost. By the end of July, *Among Us* had rocketed 400 positions in average viewers into the top 50 on Twitch thanks largely to massively popular streams by Sodapoppin and xQc and a contingent of Korean streamers who rallied to the game. An underappreciated part of *Among Us'* success is its language support – it's available in English, Portuguese, Spanish, and Korean.

When Sodapoppin first played *Among Us* in July, he got friends and fellow streamers to play, which seems like a key ingredient in *Among Us'* future stratospheric viewer growth. Putting ten streamers in one room just magnifies the celebrity power.

It took a surprisingly long time for *Among Us'* activity on Steam to catch up with the rising interest in streams. Steam reviews show an uptick in new players at the very end of July, but the last week of August is the really huge jump. After massive Twitch exposure, PC gamers were starting to play *Among Us* en masse.

AMONG CHARTS *Among Us' growth, by the numbers*

TWITCH TRAFFIC EXPLODES
Twitch traffic show how *Among Us* went from no viewers to peaks of over 500,000 in just three months.

Number of viewers

■ Peak viewers
■ Average viewers

600,000
500,000
400,000
300,000
200,000
100,000
0

5th Jul | 19th Jul | 2nd Aug | 16th Aug | 30th Aug | 13th Sep

STEAM CATCHES UP
Among Us' Steam traffic jumped up in August, but it lagged behind Twitch. It didn't properly explode until September.

Reviews

6,000
4,000
2,000
0

■ Positive reviews
■ Negative reviews

Sep 01 | Sep 08 | Sep 16 | Sep23

LANGUAGES
Without supporting Spanish, Portuguese and Korean, *Among Us* may have been a hit, but not a phenomenon.

■ English ■ German
■ Spanish ■ Italian
■ Portuguese ■ Misc.
■ Korean

It's still hard to put into perspective how quickly *Among Us* has grown. Even though it was gaining thousands of players and many more Twitch viewers over July and August, September was on another level. On September 3, it had around 10 million downloads on Android. By September 21, more than 100 million.

Tracing *Among Us'* rise back throughout the year, it seems like SR_Kaif helped prime *Among Us* for its big moment. He's been streaming it every month since January, pulling in more and more viewers. The rest of the PC gaming world just finally started paying attention. Still, he doesn't claim any credit. "I wouldn't say the success of the game had much to do with me," he says. "Although the devs mentioned that the games player base was dwindling around the time I picked it up, it wasn't going to take off without the big streamers such as Sodapoppin playing it. It is cool to be along for the ride though!"
Wes Fenlon

IT'S STILL HARD TO PUT INTO PERSPECTIVE HOW QUICKLY AMONG US HAS GROWN

A COLLECTION ASIDE

PAX Australia in 2020 was about as different for MEGHANN O'NEILL as it could get. Her usual routine involves travel, a hostel bed, lunches at the Casino, drinks with other reviewers, a cheeky panel here or there, her son melting into a beanbag and seeing more than a hundred, local, indie games. This year, even finding thirty Australian, PC games showing at PAX Online proved a challenge and this is why you will see more games from overseas studios, yet still published by Blowfish and Fellow Traveller, among the collection. With the help of JAMES ELLENDER, PC Powerplay conducted Zoom interviews over three weeks. Many less hands were shaken. Interestingly, almost every pre-release game has a demo this year, and it is nice to be able to link them to you, so that you can experience them for yourself.

DAP
DEVELOPER Melting Parrot **PRICE** TBA **RELEASE STATE** Q1 2021
WEBSITE https://store.steampowered.com/app/1372210/Dap/

My PAX Online coverage started with a dap. A bang? No, a dap, and lots of them. Picture the bobble headed tree spirits from Princess Mononoke, gather them into a little group and listen to them saying, "Dap dap dap." I wish you could hear it. The dapping is innocent, ancient, cautionary, beautiful, accompanied by male singing, like a cathedral choir, sustained, second intervals, leading notes that never resolve, falling, crystalline arpeggios, soft rain on water. This is a gorgeous game to listen to, at least until it all fades into an oppressive drone.

Incredibly, when I spoke to Dap's designers, they didn't mention music and sound design. In fact they suggested I, "just play it", perhaps because the overall impression defies easy explanation. There's story, puzzles and combat, melee and ranged, that are presented without ceremony. When my daps started turning evil, it was on me to notice why and lead them to safety. This is a treacherous world, despite the fact that it's not immediately clear what troubles are afoot. To protect you, you've mushrooms, fire and magical objects, even if they never quite provide adequate comfort.

Dap's demo is challenging and generous, with more than an hour of play. I can't imagine you'll play it and then not wishlist the game. I'd say this is horror/action, but it also seems to be shaping up to be an interdimensional management sim, of all things. Certainly, from narrative to mechanics, it rarely feels the need to explain itself, which makes it all the scarier. I approached one location and heard women humming, then wondered if they were actually screaming. I'll leave you to discover what happens next for yourself.

YESTERMORROW
DEVELOPER Bitmap Galaxy **PRICE** TBA **RELEASE STATE** Q4 2020
WEBSITE https://www.blowfishstudios.com/game/yestermorrow

Yestermorrow opens in a cosy, sunny village. There's hide and seek to play, and dresses to lament wearing, as The Light Festival approaches. Sounds too good to be true? Of course. What happens next is (at least initially) unclear, but vibrant lanterns and grassy meadows become spiders, robots, alien technology and choking, Cthulu-esque vines, as the player character wakes from a memory, experienced as a dream. Yui's previously cute ponytail now reaches her waist and swings prettily as she hangs from filthy chains. She's also wearing a bright red mask over her face. Times have (clearly) changed.

Given the volume of platformers I see, I always ask what sets this example apart from the genre. Blowfish told us that time travelling is a key feature of puzzling and story. It is, even if Yui's changing age (and hair) get a little confusing. Personally, I was hooked by the sheer beauty of the game, especially the dynamic music, where melodies and textural stems are seamlessly mixed (in and out) depending on time period and location. I'm also a sucker for an aesthetic day/night cycle that considers both clear and apocalyptic air quality. Every animation, from patting a cat to flailing your arms while falling, is delightful.

I would mention that, even in this short demo, platforming can provide a challenge. I quickly gave up on a section where, after dodging acid and assorted spiky creatures, I had to climb the web attached to a moving spider, then jump between two disappearing platforms and duck under a swooping bat. My 10 year old son, Lyndon, managed to beat this after maybe ten attempts. It's possible I'm too old for platformers these days, but Yestermorrow is definitely something I'd watch someone else play. If platforming is your jam, this beautiful experience is a treat for your eyes and ears.

STARLIGHT　　　　　　　　　　SYNDICATE OS

Investigating:
Witness to the End Apartment

PARADISE KILLER

DEVELOPER Kaizen Game Works **PRICE** $28.95 **AVAILABILITY** Released

WEBSITE http://paradisekiller.com/

I've been attending PAX, and reviewing games, for a good while now. It's rare for anything to confuse or surprise me. The guy who built a wooden motorbike as a controller? Nope, I've seen weirder input devices. The 2017 collection, casting the American President as everything from villain to edible inventory item? Not my cup of tea, but not entirely unexpected either. Paradise Killer is a cautionary tale about what happens when your level designer gets over-excited; everyone panics and has to write a whole world around an abundance of pink, ceramic skulls, shipping crates and imposing structures.

OK, I'm joking. I don't know if this even slightly resembles Kaizen Game Works' design process. In my head, it's how I explain the wild creativity on display here. Typically, as in Skyrim, I immediately left the critical path and clambered (awestricken) upwards, to a golden temple full of statues spewing blood. I bought a dead nebula from a vending machine, cut my arm, offered precious life fluid to the gods and messed around with rotating passageways for a bit. It was a very Myst-like experience. Well, apart from the characters, all stylish, buff and blue, with names like Doom Jazz and One Last Kiss.

I explored for more than an hour before recalling that I was supposed to be investigating a murder, although I had learned more about my surroundings, thanks to collecting relics and items. The island exists inside its own plane; crafted by The Syndicate who were hoping to summon (demonstrably evil) space gods through fervour and prayer. Periodically, and as a result of demon infestation, it is reset, at which point its current citizens are sacrificed. The island has not yet become its auspicious 25th iteration, due to the entire council being murdered.
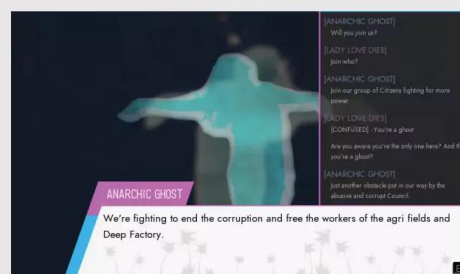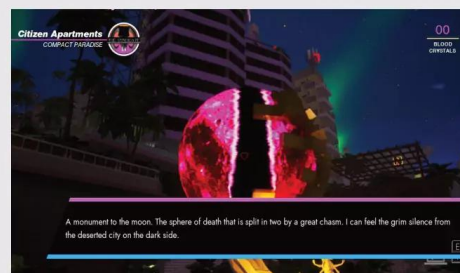
So you're solving a murder? Well, you are The Syndicate's lead investigator, who has been in exile for three million days. So, yes, if you really want to. You're assisted by Starlight, for managing clues and information, which is a laptop that chimes prettily alongside the saxophone motif from the game's soundtrack, one of several incredible moments for musical implementation. If I were going to suggest one mandatory place to begin, before wanderlust takes hold, it would be to buy computer upgrades from Crimson Acid, thus allowing you to hack with more goats, moons and ... you'll get the picture.

So you're NOT solving a murder? Certainly the game doesn't demand you do it well, or integrously, and I've recently seen several games where you're "allowed to" mess up investigations, including Yes, Your Grace and Lamplight City. In this case, the trials are framed as you presenting "your truth". Everyone has secrets and it soon becomes clear that this is not a matter involving one, clear incident. Given the complexity of characters and contexts, even forming an incorrect case will require a thorough understanding of the island.

I can't shake the feeling that Paradise Killer's level designer was like, "Oh my gosh, look what I made!" And the rest of the team were like, "Mate, we're just making a visual novel, not a gigantic, funky universe full of sexy, scary creatures. Or are we?" We conducted a pleasant interview with a developer prior to playing the game. Now, of course, I have more questions. Paradise's intriguing weirdness initially struck me as very distracting, in a context where I was supposed to be investigating a crime, but curiosity was ultimately the key to forming a (somewhat more) complete picture of what had occurred here.

NINE WITCHES: FAMILY DISRUPTION

DEVELOPER Indiesruption LP **PRICE** TBA **AVAILABILITY** Q4 2020

WEBSITE https://www.ninewitches.com/

Germans love adventure games. Certainly, the European audience is frequently mentioned when I talk with developers. So, when Blowfish explained that Nine Witches is set in and around an occult, alternate, Nazi Germany, I was wary. I'm not sure I can handle Schindler's List in my Day of the Tentacle, even if I don't have any specific sensitivities to this kind of content. But, after playing the demo, I'm going to trust that the thoughtfulness with which every aspect is presented will extend to the story, characters and setting. This is a polished experience with beautiful pixel art and sound, as well as intriguing mechanics.

You play as two characters; a quadruplegic professor and his assistant. What is your interaction, when you can't move your legs and arms? Astral projection. In fact, the first puzzle has you waking the professor from a trance, as he needs to receive an important visitor. Next, our heroes fly to a Norwegian town to investigate the machinations of Okkulte-55 who have unleashed a dark curse in support of The Reich. Akiro, the assistant, must defend himself with a dodgy, old gun. I sold my soul to the devil to make action sequences easier. (Like, literally. He's character and difficulty menu, all in one.)

My favourite puzzle involved impersonating a driver and being quizzed on my passport. What is the third number? I quit the conversation to have a look, swearing to examine everything in my inventory at the next opportunity. The crossing guard then asked for the third and the sixth number. So, I quit and wrote down the whole number. Then I was asked for the sixth number of the professor's passport. I love how gratifyingly stupid this made me feel. This studio understands its audience and how to entertain us, Aussie, German or otherwise. I'm not sure if I'm expecting laughter or tears, but I can't wait.

UNDER A STAR CALLED SUN

DEVELOPER Cecile Richard **PRICE** Choose your own price **AVAILABILITY** Released

WEBSITE https://haraiva.itch.io/under-a-star-called-sun

I'm a sucker for a beautiful spaceship. Every pixel is where it should be. My bunk is slightly unmade. A coffee steams prettily, both from afar and on closer inspection. Plants gently sway under fans for ventilation. I gaze out of an asymmetrical window to a small mess of stars that are winking on and off. I could spend this whole page describing the expansive, interstellar vessel, but I should allow you to discover it for yourself. It's a treat. Should a spaceship-for-one not be smaller, more efficient? For narrative purposes, not when you're small and on a trajectory that cannot be changed.

Created for Liminal's Glitch Festival and free to play in your browser on itch.io, Under a Star Called Sun isn't about a large and beautiful spaceship or even (really) space. It is simply a conversation between characters, so personal that I wouldn't want to interpret it for you in any terms, except to say that it contains content that is highly relatable. One line of dialogue reads, "Who do you blame for misfiling a memory in the filing cabinets of your brain?" Another, simply, "Over and over and over and over." I feel privileged to have been briefly privy to another's experience of loss.

Solo designer, Cecile Richard, told us they aren't a composer, yet their music is beautiful. I've been listening to it, while writing, and the loop is cleverly obscured by complex textures and, occasionally, a single, descending bassline, functioning as a kind of grand, sad, anacrusis. Melodic elements seem to sometimes depict stars then, other times, are a clever interweaving of two complimentary, contrapuntal threads. I enjoy recommending these kinds of "coffee break games" to everyone I know. In only five minutes of play, I feel like I've undertaken a vast and very meaningful journey.

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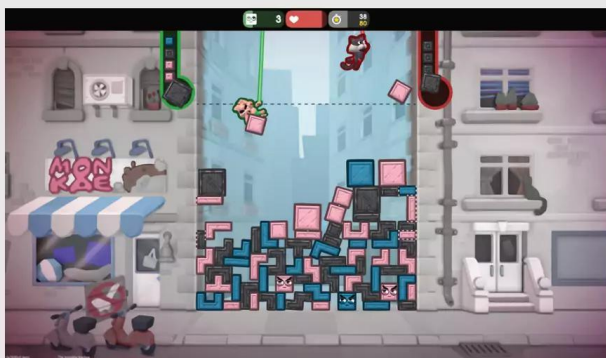
TOPPLEPOP

DEVELOPER Spirit Animal **PRICE** TBA **AVAILABILITY** Pre-alpha

WEBSITE https://topplepop.com/

TopplePop is infuriating. There are so many buttons. Drop the block, rotate it, push it, lock it into position, who knows what else? The idea that I was supposed to have any kind of control evaporated the moment they put my pig-monkey-chicken-cat onto an elastic rope. I can use movement keys to stretch in any direction, but the rebound (after a block is dropped) sends me to persistently unexpected places. Sometimes it's hard to quantify what makes a game fun. In this case, fighting against the control scheme (with friends) is the clear source of all hilarity.

So look, it is possible to improve with practice, but when you consider the many shapes and sizes of the blocks (and that I have already forgotten how to rotate them into any kind of perpendicular arrangement), chaos remains inevitable. Really, you're just chucking them, hoping four of the same colour will land together. Black is garbage, disintegrating in the blast radius of pink, yellow or blue. Some blocks are covered in bubblegum and stick to everything that touches them. I think that's because the demo is set in an alley. More areas and surfaces, like ice and lava, are promised at full release.

Why are monkeys and cats hurling blocks in alleys? I do not know. But you can dress in a cute little builder's outfit, with a hard hat, too. You're rescuing angry faces, by exploding their block, for an unknown reason. Everything becomes funnier, the closer you are to running out of time or growing your trash pile over the line. TopplePop has detailed, yet silly, controls. And its context makes no sense. Of course, my son and I have been playing the demo for around two hours and I suspect we will play the full game for many more. I haven't laughed this hard in ages and it's a game that's fun to be angry at.
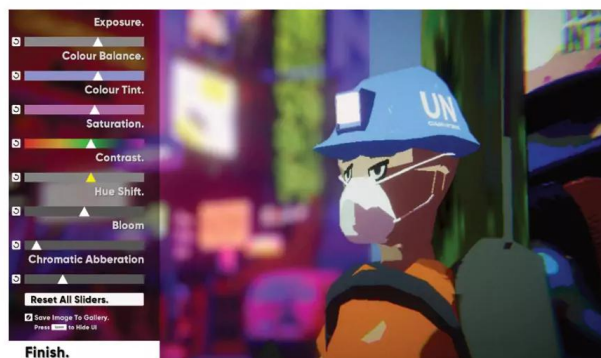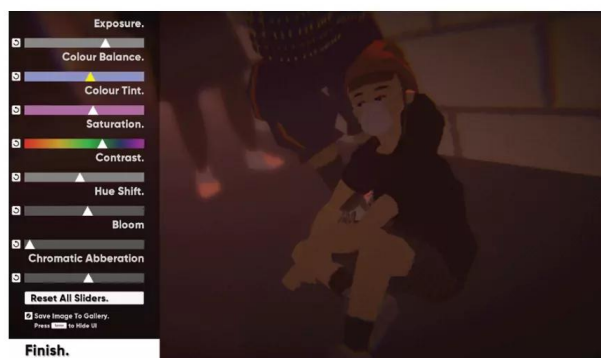
UMURANGI GENERATION

DEVELOPER Origame Digital **PRICE** US$14.99 **AVAILABILITY** Released PC

WEBSITE http://umurangi.tapiki.io/

When developer Tali Faulkner described Umurangi Generation as a relaxed experience that "tutorialises photography", not to mention its urban, retro-future visual style, I was excited to get my hands on it. This is a series of nine carefully crafted vignettes which would capture my imagination for the better part of eight hours.

An evocative narrative unfolds around corporations attempting to capitalise on extraordinary crises, and the ensuing political tensions between citizens and those corporations, all impressively told through environmental storytelling that is simultaneously intriguing and subtle, becoming more and more spectacular as the game reaches its climax.

The wonderfully grungy Jet Set Radio-esque visual style is suitably stylish, given the photography context. Set in New Zealand, it's refreshing to notice that the neon, graffiti-packed aesthetic references New Zealand's own indigenous cultures, adding greatly to the visual diversity. The soundtrack is viscerally funky and satisfying. Comprised mostly of impeccably executed electronic hip-hop instrumentals, it acts as an equally vivid companion to the visuals, together bringing a weighty sense of a greater urban culture to the game's diegesis, a commendable feat.

The core gameplay loop and progression is built around sets of unique photo bounties which are open-ended in nature, like framing any ten solar panels, allowing players to approach this creatively. Collectable film canisters are hard to find, but are rewarded handsomely. As progression proceeds, your arsenal of interesting lenses, camera mods, and post-processing effects expands too, introducing new concepts in a way that feels natural and exciting to unlock for photography beginners and pros alike. Umurangi Generation is an easy recommendation for anyone seeking a shorter but gratuitously punchy experience.

Umurangi Generation is reviewed by Meghann's assistant, JAMES ELLENDER, because of his interest in photography, and this game is his pick of PAX Online 2020.

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ONE GIANT LEAP

Be the first person to set foot on an alien world in **ELITE DANGEROUS: ODYSSEY**, an expansion that dramatically widens an already vast galaxy.

By Andy Kelly

A s someone who's played space simulator *Elite Dangerous* for hundreds of hours, it's a strange sensation seeing a blue sky in a game that is usually dominated by the inky, star-speckled blackness of space. *Odyssey*, a major expansion coming in 2021, introduces planets with thin atmospheres to the game's colossal scale replica of the Milky Way. And better yet, you can touch down with your ship, leave the safety of your cockpit for the first time ever, and actually walk on these, and other, worlds.

This is something *Elite Dangerous* players have been dreaming about since the game first surfaced on Kickstarter in 2012. "Some elements of *Odyssey*, in terms of actually walking on planet surfaces, have probably been, at least conceptually, there since the very beginning of the game's development," says Piers Jackson, game director at developer Frontier. "However, as for the actual build-up to having a significant amount of developers working on it, the tail-end of 2019 is when we really started ramping it up."

To prepare for players going walkabout on its planets, Frontier is overhauling the technology that generates them. "We're doing some pretty significant updates to the

planet technology," says Jackson. "The planets are getting a big new refresh. With the new settlements, we're also having to add a whole pile of new gameplay areas across the universe. Some of those will be deployed onto planets without atmospheres that players are currently able to explore, and others will appear on our new thin atmosphere planets."

FINAL FRONTIER
Settlements are one of the most intriguing new additions to *Elite Dangerous*. I've always loved how parts of *Elite* have the feel of a sci-fi Wild West, with rough, lawless systems on the fringes of the major population centres, and the ability to take on illegal jobs, Han Solo-style. Settlements are extensions of this, being remote, sparsely populated towns in the shady corners of the galaxy. Think Hadley's Hope in

"YOU FIND THE ABANDONED SETTLEMENT HAS ALREADY BEEN CLAIMED BY RAIDERS"

Aliens, but without the aliens. For now, anyway. Who knows what the Thargoids will get up to in the future.

"So maybe you've taken a mission to reboot a settlement," says Jackson, giving an example of one of how visiting one of these settlements in *Odyssey* might play out. "There's something wrong with the generators and everything is powered down. It's

very eerie, none of the civilians or guards are there anymore. You turn up with an objective, or maybe just because you decided to explore there. But when you go to bring the power back online, you find the abandoned settlement has already been claimed by gangs of criminal raiders. They're after the spoils as well, and you have to make the decision to run away, stand your ground, or sneak around in a way that they don't spot you."

This is where *Elite*'s new tactical first-person combat will come into play, which is another dramatic addition to the game. Running around shooting people might feel like a strange fit for a space sim, but Frontier is making sure the combat falls in line with the rest of the game in terms of simulation and depth. Some of the disciplines you've picked up in ship-to-ship combat will carry over to the new on-foot stuff.

"It is a tactical shooter that we're working on," says Jackson. "It's different in feel to the ship-based combat. Ship combat can be very protracted and drawn out. But we have taken the core elements, such as the idea that the on-foot characters can have shields. And shields use up

Exploring a dusty settlement on the fringes of space.

PAINT JOB *A look at* Odyssey's *evocative concept art*

1 SPACE BAR
It wouldn't be a sci-fi game if it didn't feature a futuristic bar or club. This neon-lit watering hole looks like a good place to pick up not-quite-legal missions.

2 SETTLEMENT
This gives a good idea of the 'Wild West in space' feel Frontier wants its settlements to evoke. These will be dusty, rundown, and probably very dangerous.

3 SECURITY ROOM
This is a security office in one of the galaxy's many star ports, in a populated area of space. Compared to the settlements, law and order reign supreme here.

4 APEX INTERSTELLAR
This is a newly introduced shuttle service that you can use to travel between star ports and settlements without having to fly there in your own ship, for a fee.

energy, so players will have to think about when to deploy them. Certain weapons, like lasers, are good against shields, while kinetic weapons are good against armour and damaging the person underneath.

"The weapon choice you make, on a base level, is very important for the tactics you take into battle. Then you've got factors like your range, the proximity to the target. Do you take a close-range weapon like a pistol that you can draw quickly, or do you have a more long-range approach to the problem? So the tactics are varied depending on how you want to approach each combat encounter."

SHOOTING RANGE

The *feel* of a first-person shooter is vital to its success, and I ask Jackson what approach Frontier is taking in *Odyssey*. Will it be a heavy, chunky shooter like *Arma*, or more accessible and fast-paced like *Call of Duty*? "It's probably in the middle somewhere," he says. "We're not going for anything in the feeling of an arcade shooter.

"The weapons, if they have weight, will have different draw speeds, different ADS [aiming down sight] speeds. So you will be able to

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feel the difference with each weapon. We're not expecting twitch-based gameplay in terms of being able to draw weapons and immediately shoot. But also, it's not sluggish. There is pace to this. We want a level of drama and excitement to come through in the combat."

Getting the combat to feel just right has been the subject of much iteration and evolution, and that work is still ongoing. "We've been working on the numbers for months, and we'll continue to tweak them until release. It is a 'feel'. We calculate a lot of these things as best we can up front, but you have to sit and play it and see how it actually feels, and what it feels like to be shot *at* as well. It's not just about you shooting, it's how the AI behaves towards you, how accurate they are, what their reaction times are."

Adding further depth to the on-foot combat is the addition of new suits, which can be selected and modified depending on your play style. "These become your role, essentially," explains Jackson. "They're defined partly by their armour and shield profiles, but also by the tools they allow you to use.

"The tactical suit is basically our combat suit. That gives you an extra primary weapon, and it has an armour and shield boost. But it's trading off against other things. It doesn't have all the tools other suits have. So depending on how you want to approach a mission or exploration or just all-out combat, you pick your suit and loadout to match."

STAR WARS
Excitingly, there's no real separation between ship and on-foot combat. So if you're having trouble clearing out a settlement, a buddy can swoop in and support you from the air. "We don't separate the two," says Jackson. "So if players are in ships, they'll be able to fly over settlements and shoot at players below, and they'll be able to shoot back at them." This should make for dramatic moments and, almost certainly, some mischief among less noble players.

"With the settlements we're aiming for a Wild West vibe," says

> "IF PLAYERS ARE IN SHIPS, THEY'LL BE ABLE TO FLY OVER SETTLEMENTS AND SHOOT AT PLAYERS."

Jackson. "These are the frontier lands. And while you have planet ports and star ports with large populations, these are smaller occupational areas where people are meeting to work. They might have an industrial or agricultural style to them. The processes and devices you see there will reflect the actual nature of the settlement and its function in the universe."

Ports, however, are a different story altogether. "The star ports become more of a social hub than an actual piece of mission gameplay," says Jackson. "You'll enter into one, usually aboard a ship, and at that point you can disembark and move down into what we loosely call the social space. It has vendors and mission givers and it's the nexus the game then spans out from. In the same way you can land your ship and access all the star port services, we have on-foot equivalents of those."

Odyssey's weapons are as detailed and realistic as the game's ships.

FAR LEFT: Firefights will have a focus on tactics over running and gunning.

LEFT: If you're the first to walk on a planet, future visitors will see your name.

These spaces retain the hard sci-fi look that defines *Elite's* world. In footage of the new social hubs I see a few locations not unlike Mass Effect's Citadel, with storefronts, holographic billboards, and people milling around. And looking out the window I see the familiar image of a port, with ships flying around, docking, and undocking. It really hammers home the sheer scale of these structures.

"If other players come to those ports, they can exist in the same area as you," says Jackson. "Otherwise we populate with NPCs. Some of them will be running stalls, selling you goods, or could actually be providing you with missions. Others will just be milling around getting on with their daily lives. But yes, you can definitely meet other players in these places, or meet up with friends if you want to have a multiplayer session. The interiors of the star ports will also have elements that reflect the nature of the system they're in, and that goes down to the advertisements that are on display there."

LIFE AND SOUL

"We're very much aiming to try and bring the NPCs to life," Jackson adds. "The sorts of interactions you can do will be familiar to *Elite* players, in terms of the choices you can make. We handle this through a mix of menus and dialogue systems, but you will actually come face to face with these characters, and a large amount of the dialogue will be voiced. Obviously we can elaborate in a lot more detail in mission text, but yes, these characters are there and they will interact with you and talk to you."

The new star ports will also offer a choice of illegal and legal missions, depending on how law-abiding you want to be. And when dealing with shady space scumbags, you'll be able to squeeze them for a few more credits. "We have an on-foot equivalent of the bulletin board for picking up missions. But we also have physical

»

TAKING SHAPE *Milestone* Elite Dangerous *updates*

PLANETARY LANDINGS (2015)
This major update was your first chance to land on alien worlds of the rocky, metal, and ice variety. It also added a new vehicle, the Scarab SRV, which lets you bounce around on planet surfaces.

THE GUARDIANS (2016)
This update included the ability to fit your ship with passenger modules of various sizes, allowing you to ferry people around the galaxy for profit. Ship-launched fighters were also introduced here.

THE ENGINEERS (2016)
For fans of tweaking their ship's performance, this update was very welcome. The titular engineers are a cast of eccentric characters who can modify your hardware to seriously exceed its baseline performance.

THE COMMANDERS (2017)
In this commanders could finally customise their appearance with the introduction of the Holo-Me avatar creator. The update also added multicrew co-op to the game and a camera suite for taking screenshots.

THE RETURN (2017)
The *Elite* universe's feared alien threat, the Thargoids, began to make their presence more widely known in this update. This included encounters with their bio-organic ships and new anti-Thargoid weapons and modules.

FLEET CARRIERS (2019)
With this players were able to buy and operate the giant fleet ships that previously could only be viewed longingly from afar. These ships act as mobile star ports and have huge jump ranges, but cost a lot to operate.

mission givers that exist in the ports. The one real difference is that, because you're meeting face to face, you can actually negotiate for an improved payment."

Some missions will involve travelling to other systems, but you don't have to take your ship thanks to Apex Interstellar. "This is a new service that allows you to book a shuttle, and the shuttle will take you between ports and settlements," says Jackson. "It provides a mechanism for players, particularly new players, to move around easily within civilised areas of space. We're also facilitating physical multicrew here. So if you are part of someone's wing, you'll be able to board their ship, if they allow you to, and they can fly you from one location to another."

PEACEFUL PROTEST

While combat is a new feature in *Elite*, there are still ways to enjoy the on-foot stuff without firing a single laser. "There are two big ones for our explorers out there, who are of course a big part of the community. For instance, we now give players a chance to earn a first footfall accolade. If you go off into the black and land somewhere, and you are the first

player to set foot on that planet, that will be announced to you right there and then, and will be marked up against your name for other visitors."

You'll also be able to use a new tool to scan any life you encounter on the new planets. "We're giving players the opportunity to track down and scan organic lifeforms," says Jackson. "You can retrieve sampling information and bring that back into the human bubble and trade it." Right now this seems to be plants and other flora, but I wouldn't be surprised if later updates added more interesting wildlife. That isn't confirmed, but it seems to be the direction Frontier is heading in.

But don't worry: if you're a player who'd rather not leave the safety of your cockpit, you'll never have to. "We're not taking anything away from *Elite Dangerous* or *Horizons* as it currently stands," says Jackson. "If you want to continue playing the game the way you do now, it will be entirely possible to do so. But this is a massive update. Being able to get out of your ship and walk around, interacting with settlements, performing missions, engaging in combat. We're adding a lot to the *Elite* universe."

OUT OF THIS WORLD

Odyssey's *planets will look better than ever.*

The tech used to generate the planets is being improved in *Odyssey*. Terrain will be more realistic with deep canyons and otherworldly icy landscapes to explore on foot. Ice and rock planets will be given the most obvious facelift, and things will look detailed in the distance as well as up close.

> "WE'RE NOT TAKING ANYTHING AWAY FROM ELITE DANGEROUS OR HORIZONS AS IT CURRENTLY STANDS."

way you can kit out your ships with cosmetics, you can do the same with your suits. This will also give groups of like-minded players, whether they're deep space explorers, bounty hunters, or communities like the famous Fuel Rats, a way to adopt a uniform. "We allow you to apply cosmetics over the top of your suit, in the same way we allow ship kits to be applied. So you can express yourself however you want."

Frontier hasn't worked on an FPS before, so this is new territory for them as a collective – but not as individuals. "While Frontier doesn't have a vast amount of experience in first-person games, a large number of the *Odyssey* dev team have," says Jackson. "There are people, including myself, who have worked on first-person games, and we're all bringing our expertise to the table."

Odyssey is shaping up to be the most dramatic, game-changing *Elite Dangerous* update yet; even bigger than *Horizons*, which added the first iteration of planetary landings. Being able to disembark and stretch your legs, fighting, exploring, and making your mark on uncharted worlds is the stuff of science fiction dreams. When you first make footprints in the alien dirt on some faraway planet, you'll know you're the first person in the world – in the *universe* – to do so, and that'll be a truly special feeling. ◼

TOP: Combat suits have positive and negative traits to keep things balanced.

ABOVE: Space hasn't been neglected. Planets look better from above too.

LEFT: One of the new social hubs, where you can pick up missions from NPCs.

SHIP SHAPE

"The ship is still really important, but we now have an added level of importance on the player character," he adds. "And that comes in two flavours. One is the gameplay element, which is what suit am I currently wearing and what equipment am I carrying with it, and how do I use that to express myself in the game. And then there's how you represent yourself in the universe to other commanders you encounter."

A big part of *Elite* is, of course, showing off to others. In the same

BALDUR'S GATE III

It's finally here, but was it worth the wait?

Out now in Early Access, *Baldur's Gate III* feels like it's trying to make up for lost time. There are no humble beginnings here – instead we're treated to psychic squid monsters, interdimensional ships, and jaunts into the Underdark. And that's before even visiting the city itself, which is currently inaccessible.

As the series' new Dungeon Master, Larian Studios wants to make an impression quickly, setting you on a high-stakes adventure with a sense of urgency that can only come from being implanted with a tadpole that's turning you into a mind flyer, one of those aforementioned psychic squid monsters. It's only undermined by my compulsion to stop every few minutes to push people off ledges.

The ability to shove people has made its way over from D&D proper, and with *Baldur's Gate III*'s very tall design, there are plenty of opportunities to use it. Sneaking up on, say, an oblivious gnome and knocking them into the abyss is the most obvious use, but it can also come in handy if you want to push someone into some fire or poison, or line up some enemies for an attack that strikes a row.

PUSH OFF

In my party of four, I have an arsenal of magic missiles, animal companions, curses and a barbed spear designed to gouge out eyes, but I always try to go for the environmental kills. Agent 47 could really thrive in Faerûn. Unexpected murder weapons are my second choice, if there's no room for accidents. Almost every object can be turned into a weapon in a pinch – one of my first kills was with a skull that I picked up and tossed at a monster. Thanks, Skully.

This is a side of D&D that was previously missing from *Baldur's Gate* –

PLAYED IT

the creative, messy sandbox. Every confrontation is an opportunity to push your luck and stretch the game's systems like you're negotiating with a DM. Thankfully, Larian's pretty easy-going, letting you use all sorts of questionable strategies as you fight and explore, like stacking crates to get height advantages, or the classic 'plucking explosive barrels from your inventory and tossing them at enemies' gambit from *Original Sin*.

Along with the ability to shove people and throw objects, you can stealthily slink around, make superhuman leaps, dip your weapons in puddles of acid or ignite them using a torch. These abilities can all be used in turn-based battles at the cost of an action or bonus action, as well as freely when you're messing around in real-time.

Wherever there's the potential for a fight there are torches, scattered objects, barrels filled with volatile substances, ladders, and ledges, giving you many ways to get an advantage. That's if you decide to fight at all. Having a mind flayer tadpole in your brain, it turns out, gives you the power to influence people, at the risk of giving into the alien infection. And depending on how you've developed your character, you might be proficient in the arts of persuasion and intimidation, letting you talk yourself out of trouble.

GOING ROGUE

In an early fight, which I got into after failing to sweet talk some bandits, I was able to send a rock crashing down on top of them, breaking the ground and letting me leap down to the level below, where there were more enemies waiting inside a dungeon that would have been otherwise hard to get into. It's not a trick I've encountered since, but it's a smart introduction to the literal depth of *Baldur's Gate III*'s environments.

My most memorable scrap happened inside a busy goblin camp. I'd talked my way through most of it so I could assassinate the leaders, but the final boss was surrounded by lots of mates. To

DIP YOUR WEAPONS IN PUDDLES OF ACID, OR IGNITE THEM USING A TORCH.

You won't have to wait long for your first adventure into the Underdark.

prepare, I sent my rogue up to the rafters, so when the battle started they were able to rain terror down from above, murdering goblins with sneak attacks. I also managed to push some guards into the spider pit below, where they became a delicious snack for my temporary allies. The spiders then managed to escape, alerting more goblins and adding more meat to the battle. It quickly grew out of control. I didn't make it out alive.

The complexity of these locations is a great boon for battles, but it also makes exploration a more engaging part of the adventure. There are countless ways to get around, going under and over obstacles, or using your skills to uncover hidden routes. The Underdark in particular is bewilderingly elaborate, requiring a lot of stumbling around and leaps of faith as you bound between mushrooms perilously sticking to the side of cliffs. It's a bit laborious, spelunking through the fungal labyrinth, but the journey feels like a proper expedition into the unknown.

Travelling through any inhospitable wilderness is better with friends, and failing that a party of bickering, flirting acquaintances will do. You'll quickly gather up all of the six available companions, each of whom also has a mind flayer tadpole in their head. They're all hot messes, shrouded in secrets, rich in drama, and thirsting for some romance.

Between pithy exchanges and playful ribbing, companions offer helpful bits of insight and keep their eyes out for secrets. Everyone in the party carries their weight, with their skills painting a clearer picture of the world. A character with a proficiency in religion, for instance, might be able to decipher a religious inscription, while a perceptive character is more likely to spot monster tracks or the tell tale signs of a secret door. When first venturing into the Underdark, it was only thanks to one of my companions' knowledge of nature that I was able to deftly avoid walking right up to an exploding mushroom.

Baldur's Gate III is always rolling dice, making passive skill checks to determine if you're going to notice that sliding bookcase right in front of you. These happen automatically, accompanied by the comforting rattle of dice, but dialogue and active skill checks replicate some of the delight of real tabletop roleplaying by making you manually roll a digital D20.

ROCKS AND ROLLS

The rules and systems are drawn from D&D, but the presentation has a lot in common with modern cinematic RPGs. *Baldur's Gate III* still feels best when played as an isometric RPG, but it benefits greatly from close-up cinematic dialogue and lively cutscenes. The mo-cap animations and detailed character models make the game's denizens more expressive and charismatic, and I'll never tire of watching my dwarf put his fingers to his temple, just like Professor X, when he's rooting around in someone's mind.

It really is a sumptuous game, but it's also during these cutscenes and conversations where it's most noticeably a work-in-progress. Almost every chat I've had has been visited by a glitch of some kind, whether it's wonky physics making mind flayer tentacles take on a life of their own, characters becoming freakishly contorted, or my entire party choosing to all stand in exactly the same spot.

There are plenty of other rough edges, naturally. I only experienced one crash, but I encountered lots of smaller issues. Larian's started tackling them already, though. There was an update right before launch, and a trio of hotfixes since then. It's expected to be in development for around another year, with more classes, races and other features still in the works. The first act still swallowed me up. It got me the first time I punted a dude off a cliff, and I just didn't stop playing after that. I'm a bit deflated now that my party is gone – the save is no longer compatible – and they'll never reach Baldur's Gate, but we killed cultists, wiped out some goblins, and cruised through the bowels of Faerûn.

With its turn-based battles, different art style and focus on systemic shenanigans, *Baldur's Gate III* isn't an attempt to resurrect an old series. It's something new that pushes the systems and creative mayhem from *Original Sin* and then combines them with the rules D&D. And they're perfect together.

But should you buy in now? There's a good 25-30 hours of adventuring to be had, full of memorable fights and characters, but you won't be seeing the game at its best. It's already fun, but it's a bit unstable and janky, and more importantly you can't yet make a gnome illusionist, so really what's the point?
Fraser Brown

THERE ARE COUNTLESS WAYS TO GET AROUND, GOING UNDER AND OVER OBSTACLES.
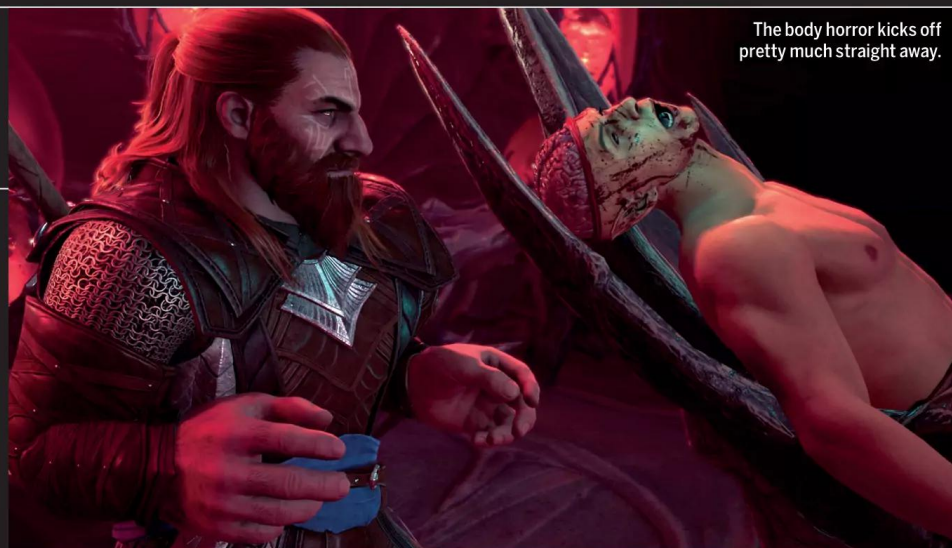
The body horror kicks off pretty much straight away.

Sure, I'll just walk under the giant monster tentacle.

Polma
Bodyguard of the High Priestess
65/75
Level 3
✴ Threatened

55%

Combat's very different from the first two games in the series.

A new base means new missions become available.

Work In Progress - Does Not Represent Final Quality

CLOCK SPEED

1x

YEAR 006 MONTH 23 SOL 07

⁝: DIRECTIVE: INNOVATIONS

☐ Research a Technology

0.14%

6/6

5/5

+6.6

30

100/100

WIND TURBINE

2   7   1   18   1   10   30   55

Solar power and wind farms will keep the juice flowing.

ADDITIONAL LANDING SITE

PHOBOS
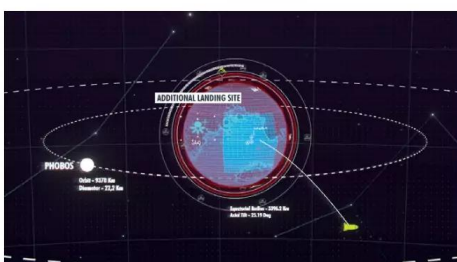
Zoom out from the surface to check on orbital objectives.

CLOCK SPEED   16x   YEAR 005   MONTH 03   SOL 13   N

SPECIAL PROJECTS

ACTIVE DONE EXPIRED

COLONIST MIGRATION   ONGOING

SP-00: ON EARTH

DIRECTIVE: HUMANS ON MARS

☐ Build a Colony

DIRECTIVE: ORGANICS

☐ Build a Food Factory

Orbit - 9378 Km
Diameter - 22,2 Km

COLONIST MIGRATION

COLONIST MIGRATION   ONGOING

NO COST

SP-00: ON EARTH

5 M   7 M   5 M   7 M

+ADD

Equatorial Radius - 3396.2 Km
Axial Tilt - 25.19 Deg

INTROSPECTION THREAD

Once the colonists are on their way, there will be no turning back.
This is it.

0%

0/6

5/5

-32.4

23

0   19   2   0   2   0   33   6   5   34   5   0

HEIGHT (KM)   -9

82   63   4   28

The best protection from meteors is an atmosphere.

NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
December 2020	TLON Industries	Raw Fury	per-aspera.vg

PER ASPERA

Grow a colony that extends across the entire Red Planet

As an AI overseeing the colonisation of Mars, things are going swimmingly with my fleet of robots and drones. Only when the human colonists arrive do things take a turn for the worse. Humans need water, food, air… plus one of them may be trying to sabotage the colony. Humans suck.

Don't think of *Per Aspera* as *SimCity* on Mars. Your colony isn't a single metropolis, it's way, way bigger, and it will eventually extend across the entire surface of the Red Planet. The end goal isn't just to mine resources and build structures that can support human life, but transform the planet itself into a habitable environment through terraforming. Melt the polar ice caps. Increase the temperature. Create a breathable atmosphere. Research new technologies that will allow you to lasso gas-laden asteroids and exploit the moons of Mars for additional resources.

It's a big job, city building on a planetary scale. I've already got space mirrors in orbit to reflect extra sunlight down to the planet, I've scattered black dust into the thin atmosphere to warm the poles, and I've got my sights set on building a space elevator, mostly because it sounds cool. My human colonists may currently be living indoors, but the plan is to someday build open air cities.

PLAYED IT

SEEING RED

But at the moment, Mars is an incredibly hostile environment. Sandstorms can lessen the output of my solar power plants, lowering the productivity of my robot-staffed factories. Concentrated meteor storms resulting from the tail of a passing comet threaten to pummel my entire base into (red) dust.

The further out I build, the more I can accomplish, but I don't want to expand too much until I've manufactured an atmosphere thick enough to prevent meteors from hitting the ground.

The initial colony building is a bit slow-going. I began with just a single robot worker, zipping between my first structures and building everything by itself. My first mines produce iron, carbon and aluminium, and my first power source is a single solar plant. But the more I gather and build, the more power I need, and soon I'm examining the windiest areas to place turbines so I can keep the lights on even when the sky darkens with dust.

Adding additional spaceports allows me to launch new types of missions. On a planet constantly bombarded with space rocks, it's a good idea to not have all my eggs in one basket, so I seek out a new spot on the planet to build an entirely self-sufficient secondary city. Soon I'll make areas on the other side of the planet accessible to my robots and colonists, too, eventually forming a network of bases and cities.

And there's a story developing alongside my Mars colony. As an artificial intelligence, I'm still growing and learning, and have frequent conversations with my human contact on Earth and a few of the people living in my colony. There's some tension in our chats, and I find myself not entirely trusting the information he's passing on to me. To be honest, I'm not sure I trust myself. Despite the fact that I'm an artificial consciousness, I think I might need therapy.

My preview of *Per Aspera* ends with the sabotage of several of my colony's buildings, and a mysterious message from an unknown source that doesn't want Mars to be inhabited at all. After the mess we made on Earth, I can sympathise, but if it's one of my colonists sabotaging my efforts, what does it mean for the colony's future? And if it's something else, like a figment of my artificial imagination, what does that mean for me?

Christopher Livingston

I'VE ALREADY GOT SPACE MIRRORS IN ORBIT TO REFLECT EXTRA SUNLIGHT.
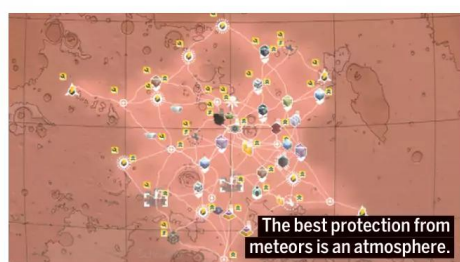
NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
December 1, 2020	Romero Games	Paradox Interactive	empireofsingame.com

EMPIRE OF SIN

A new boss is in town to take over the forgotten gangster sim genre

I don't know exactly what it was that caused five different gangs to go to war with me at once. Maybe envy, maybe my aggressive expansion into the wrong neighbourhoods, or maybe the fact that I allowed the cops to use one of my speakeasies as a hangout in exchange for some leniency from the law.

The sudden surge of chaos felt like a real Paradox touch, where your seemingly stable empire can quickly fall into disarray due to a complex and clever web of systems underpinning AI behaviour. Given that developer Romero Games brought on Paradox veteran Chris King as a designer for this glitzy Prohibition-era gangster sim, I should have expected no less.

But despite the onslaught that's seeing my whiskey barrels and ladies of the night slip through my fingers into the ravenous maws of my rivals, I'm delighted. As a fan of the quintessential organised crime sim from the '90s, *Gangsters: Organized Crime*, I've long been waiting for a worthy successor to step into its spats, and *Empire of Sin* could prove to be it.

Lead designer Brenda Romero doesn't have answers for why the old-timey gangster theme has been largely neglected in strategy games, but has been dreaming of making this game for 20 years. "I've definitely been on the edge of my seat a few times when games were announced that took place during this time or broach this theme," she admits. As luck would have it, the few gangster sims in the years since *Gangsters: Organized Crime* have all failed to quite deliver on the crime management fantasy.

With Paradox as a publisher, Romero Games has a benefactor with unparalleled insight into the strategy genre. "No one knows strategy as well as Paradox," Romero tells me. "They've been excellent in giving us the support needed to get *Empire of Sin* done."

PLAYED IT

CRIME PAYS

I got to sit down for a few hours with the game, putting me in charge of Dean O'Banion – one of several real-life mobsters you can play as. Other famous faces include Al Capone and Daniel 'Funeral Director' McKee Jackson.

Each boss has their own dialogue, personality traits and specialities. In Dean's case, he gets cheaper upkeep of breweries and speakeasies but, lacking the gift of gab, has a penalty when coming to agreements with other bosses.

As you play through the game, a part of your strategy will involve learning the bosses' personalities and what to expect from them. "Each boss has a fixed underlying personality that influences their behaviour. Their willingness to go to war, the willingness to keep their word, how much they like to build up their rackets," says King. "Then there are the values of the current game situation that drive and influence their decisions, so even the bosses that dislike war can be pushed into war if you are nasty to them."

They all have a unique story too. My first mission as Dean saw me cosying up to the local Catholic Church by clearing the thugs from a local den of iniquity. And the pastor didn't seem to mind when I replaced the thug den with a speakeasy.

The story and side-missions that pop up as the game's persistent clock powers on are all framed within the wider simulation, so how you go about things never feels linear. You win by eliminating all bosses from the game, which means you have the freedom to follow the narrative or just stick to the raw business of taking over rackets, managing booze stockpiles, trading with other mobsters, and, of course, going to war.

Your decisions can haunt you in interesting ways, according to narrative designer Katie Gardner. "Some decisions made earlier in the game might affect

YOU HAVE THE FREEDOM TO FOLLOW THE NARRATIVE OR JUST STICK TO BUSINESS.

You're a criminal but also a businessperson, so you'll need to crunch numbers as well as skulls.

Turn-based combat is your main means of expansion, but still needs some work.
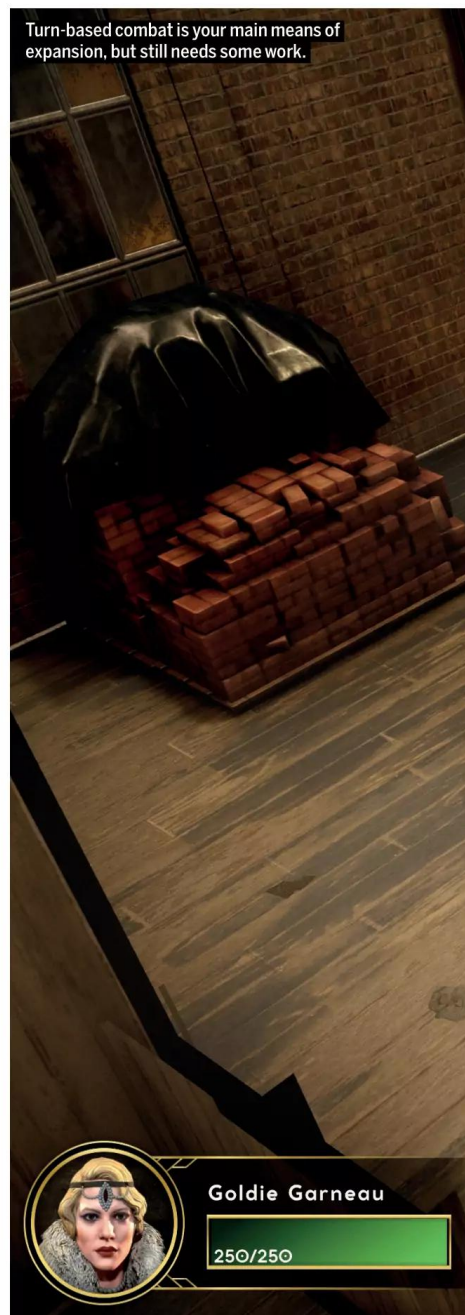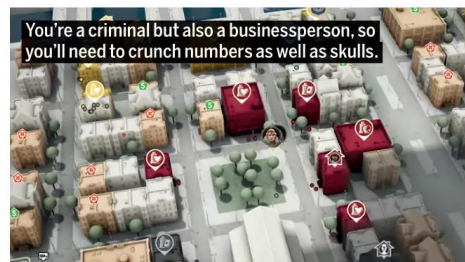
something much further down the road," she tells me. "You can choose to spare or kill a small-time crook, only to find out later that he's more well-connected than you thought." In a similar vein, if I played deeper into my game as Dean, I might have had the option to regain some kudos with other gangsters by poisoning the booze in the bar I put up all those cops in.

During my session, I quickly took over several businesses in my neighbourhood before going all-in on the management side of the game, where I spent well beyond a sensible amount of time nerding out on the numbers – profit/losses of each business, distribution of booze barrels across rackets, studying competing rackets and their effect on the number of customers patronising mine.

Beyond violently eliminating competitors, you can draw more people to your businesses by making improvements – a live band in your speakeasy, a strip pole in your brothel, that kind of stuff. Businesses complement each other too, and I found that sending more booze barrels to one of my less profitable casinos encouraged visitors to be more 'adventurous' with their cash.

FRIEND OR FOE

Despite its simulation leanings, Romero's own speciality in RPGs shines through. Dialogue choices in sit-downs with rival bosses have a big impact on your standing with them, and every character picks up traits based on in-game events. Looking back on my session, I can see why my foul-mouthed meetings with the Genna crime family caused word to spread that I was not a man to be trusted.

In the interest of immersion, enemy bosses are driven by survival rather than victory conditions. "The AI has been purposely designed to not be a chess AI planning to win the game," King tells me. "Instead they're personalities who will fight and build and do all the things that a boss in Chicago would do. The real Capone never thought 'If I just take over four more rackets I will win Chicago'."

There are around 60 gangsters for you to hire. Each has their own rivalries with other gangsters, and side-missions that will affect their loyalty towards you.

"THE AI HAS BEEN PURPOSELY DESIGNED TO NOT BE PLANNING TO WIN THE GAME."

Loyalty is one of the systems – the others being honour and notoriety – that affect how characters respond to and respect you. Build up high loyalty with a gangster, and their chances of being flipped by the police decrease drastically.

Interestingly, when I spoke to Brenda it came up that currently loyalty doesn't affect how likely gangsters are to betray you and work for other bosses, which she immediately noted as something that needed fixing. It gave a little insight into how focused the studio is on giving the game that all-important verisimilitude, the sense that all these systems and numbers add up to a logic that feels human in a game that's essentially about extreme human behaviours – honour, loyalty, greed, and power.

Zooming in from the macro-game, your main means of taking over buildings and expanding your empire will be through turn-based combat. While it hits all those familiar *XCOM* cues – action points, varying degrees of cover, overwatch – it feels like a relatively simple version of a formula for which the bar's been set very high by other games. It doesn't feel bad as such, but it doesn't quite match the depth of the rest of the game, and I can see the slow pace of combat bogging down the pacing over the long haul.

The various bugs and teething issues can hopefully be squashed by launch, but these turn-based sections should either be sped up or offer some kind of environmental interaction – flipping tables, leaping over bar counters, using those civilian schmucks as human shields. And how about an option to auto-resolve those hopeless ambushes in the street with a drive-by? Badabing-badabum.

But there's plenty of time for growth, even after release, with Romero describing launch day as a 'foundation' from which *Empire of Sin* will grow. Like so many great strategy games – including Paradox's own – it's designed with expansion in mind, though what form that takes will depend on feedback from the first wave of players who'll be making their mark on Chicago from December.

That foundation is looking solid, burying the bad memories of disappointing gangster sims from years gone by in the concrete beneath it. There's a lot at play here – simulation, RPG, tactical combat – and while some elements could use some trimming to let others shine through, this could well be the new king of crime sim city.
Robert Zak

Goldie Garneau

250/250

The bosses are fleshed-out characters with big personalities.

Each boss has their own storyline, but the ultimate goal is to wipe out your foes.

ROUND

Marked By Killer Queen

THUG
10/45
100%
CRIT 31%

THUG
50/50
100%
CRIT 31%

THUG
40/40
100%
CRIT 61%

GOLDIE GARNEAU
250/250
5%
CRIT 2%

100%

Killer Queen 3/3

· Curtain Call ·

Hit
100%

Place your mark on up to 3 targets.
Once all marks are placed, fire a shot at each marked target.

ENDS TURN

Crit
61%

Damage: 63 - 72

INFINITE AMMO

How '90s shooters escaped their certain
Doom with an indie retro revival.

By Alex Spencer

I

f you tuned into 3D Realms' Twitch channel this September, you could be forgiven for thinking you were peering through a portal into 1997. The publisher held the inaugural Realms Deep event, two days of lightning-fast frags and chunky gibs, weapon sprites and the kind of character models where you could count the polygons by eye, all with a soundtrack that can only be described as 'pumping'.

Dave Oshry, CEO of New Blood Interactive, describes it as "our own E3 for retro shooters". It's a party for developers who believe the first-person shooter was perfected by the turn of the millennium and, rejecting all those heretical texts which followed, have spent the past half-decade striving to resurrect the look and feel of the '90s golden age. This might sound like a regressive way of making games – and it certainly can be – but this movement has produced some of the highest-rated games on Steam. And you can trace almost its entire history back to one unlikely game: *Rise of the Triad*.

It was the remake of a 1995 shooter that Frederik Schreiber, now VP of 3D Realms, admits was "an obscure, kind of unknown game to the masses". And he should know – in 2013, along with Oshry, Schreiber was one of the game's directors. The

remake isn't much better remembered, but it happened to mark the beginning of a broader revival, the names getting bigger with each release: *Shadow Warrior*, *Wolfenstein: The New Order*, *Doom*.

The release led – via a few cancelled projects and a lot of *Duke Nukem*-related lawsuits – to acquiring 3D Realms, the publisher behind so many of the shooters that defined his childhood, and reviving its reputation with games like *Wrath: Aeon of Ruin* and *Ion Maiden*, the first game in two decades to be made using the Build engine.

For Oshry, it was the reason David Szymanski, a fan of the remake, got in touch to share a prototype he'd been working on. Oshry fired up the one-room demo to check it out. "It was all there: the movement, the shooting, the interactivity," he remembers. "You could flush the toilet!" This was *Dusk*, a *Quake*-meets-*Doom* horror shooter that's generally considered a high watermark of this revival – and it transformed Oshry's company, New Blood, into a purveyor of retro-flavoured delights.

RESPAWN

These two companies are the cornerstones of the indie retro shooter revival, but they're far from the total of it. I could rattle off names (*Prodeus, Hrot, Hellbound*) like rounds from a chaingun, but the more important point here is: why, 20 years after its heyday, has this style of games returned?

"For years before I'd been frustrated no one was making games like this," says Szymanski. He'd grown up with *Doom* and *Quake*, and modern shooters simply weren't scratching the same itch. I hear a similar story from Thom Glunt, designer of another early outrunner,

TOP: *Maximum Action*'s Woo-'em-up follows in the tradition of the legendary 'Action' mods for *Half-Life* and *Quake II*.

ABOVE: Those famous *Dusk* toilets.

RIGHT: *Hellscreen* describes itself as 'Giger-esque', which as we all know means 'monsters that looks like naughty bits'.
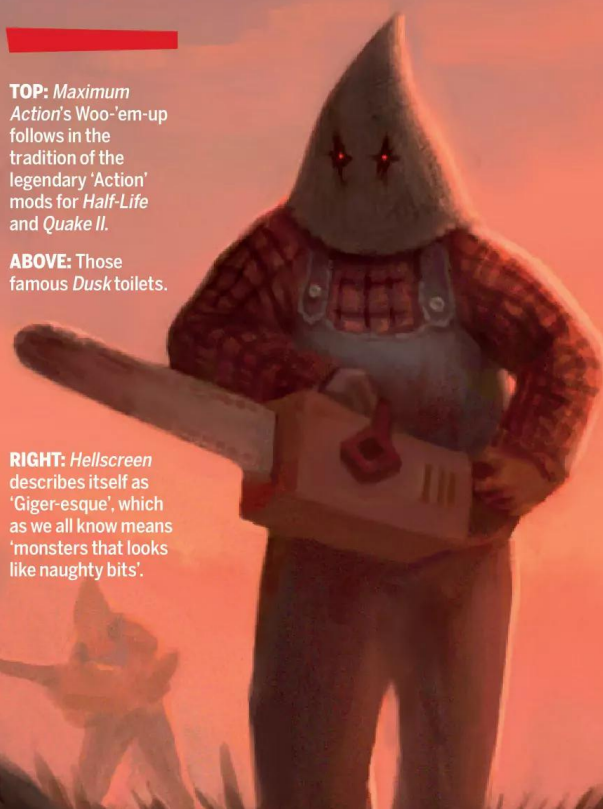
CANON FODDER
The holy texts of the retro shooter movement

WOLFENSTEIN 3D May 1992
The 'granddad who fought in the war' of the retro-shooter family tree.

DOOM Dec 1993
As the original Star Wars is to blockbusters, *Doom* is to the FPS.

HERETIC Mar 1994
War, tick. Sci-fi, tick. *Heretic* added the third shooter setting: fantasy.

STAR WARS: DARK FORCES Feb 1995
Speaking of Star Wars… Still a classic in its own right.

RISE OF THE TRIAD Feb 1995
If you order 'one length of '90s shooter', this is what arrives.

HEXEN Oct 1995
Alos known as 'Beyond *Heretic*'. But, like, not that far beyond.

DUKE NUKEM 3D Jan 1996
Enter, the Build engine. And some of the most pokable levels of all time.

Strafe. "There were only a few throwback FPS games at that time," Glunt says – and, while they borrowed the fast gunplay of the classics, all these shooters stuck to a modern graphical style. "I personally hated that. I wanted those beautiful, crunchy, low-poly vibes, and it felt like many devs were scared of it or didn't see the beauty."

That's not the case today. If you've got a hankering for the early 3D of *Quake* or the spritely majesty of Build engine games like *Blood*, you'll find multiple titles catering to your needs. Think of it as the successor to the 8-bit aesthetic that's ruled over indie games for the past decade, with similar benefits for a smaller development team. But that's not the whole story. "We don't see rendering techniques as mere steps in an inevitable linear progression," says Jon Marshall, one third of *Devil Daggers* creator Sorath. "They can be valid tools in their own right, just as black-and-white film photography or hand-drawn animation retain their own quality distinct from later digital colour photography or CGI."

"I SPENT A LOT OF TIME STUDYING WHAT MAKES DOOM'S COMBAT SO MUCH FUN."

SECRET AGENCY

Devil Daggers strips the retro shooter back to its barest essentials. The world recedes into darkness a few feet from your face, the shadows spewing floods of enemies. You have a single weapon to repel them: your hand, which for some unexplained reason can shoot energy. You hold on for as long as you can – each decimal point of a second hard-fought – and then try to beat that score. This throws a stark spotlight on the simple feel of moving and shooting, something all the developers I speak to are trying to recapture. "I spent a lot of time studying what makes *Doom*'s combat so much fun," Szymanski says of *Dusk*.

But *Devil Daggers* also cuts away another treasured aspects of these games: the level design. The classic '90s approach, Szymanski says, was using "shortcuts and backtracking to make the level itself an experience, and not just a series of environmental setpieces in what effectively amounts

New Map Unlock
[Tab to open map]

Health 100   Total 11

QUAKE
June 1996
Proper 3D! Physics! Rocket jumps! A literal leap forward for shooters.

BLOOD
May 1997
Another Build game, with a title that definitely gets straight to the point.

CHASM: THE RIFT
Sep 1997
Szymanski cites this deep cut as the main influence on *Dusk*.

SHADOW WARRIOR
Sep 1997
This is mainly remembered for being a bit saucy.

UNREAL
May 1998
Good game, better engine – as shown by everything made with it.

SIN
Nov 1998
Pushed AI forward, had the misfortune of coming out ten days before…

HALF-LIFE
Nov 1998
The end of an era, but certainly the beginning of a whole new one.

to a hallway". *Dusk*'s levels are a great example of the form, looping around and inside of themselves, as if artist M C Escher was set loose with *Doom*'s modding tools.

And that's without mentioning the secrets. In *Dusk* or *Ion Fury*, it's not just about skidding around like you've got an Acme-equipped coyote on your tail. To get the best stuff, you'll need to slow down, study the wall textures for a telltale crack or discolouration. Tap the use button, and a panel might slide away, putting a new weapon in your hands, or even leading to an entire secret level.

KNEE-DEEP

Coming from modern shooters, the thing that stands out most is the refreshing lack of interest in imitating reality. Maps are explicitly death traps, the level designer as cackling Bond villain, with a conveyor belt of enemies to headshot. They don't all take it quite as far as *Devil Daggers*, but these games are essentially the first-person shooter with everything removed but the engine.

The rest "no cutscenes, carry all the weapons you want, ludicrous gibs, run really fast, no tutorials" as Oshry effortlessly rattles off for me, before adding "monster closets and coloured keys and doors everywhere" too – that's all just optional set dressing, really. Oshry understands the value of these nostalgic signifiers, and New Blood's marketing leans heavily on it.

But nostalgia really is a funny thing. Here in 2020 especially, it's difficult not to indulge in the idea that the past is a warm and safe place for everybody. Which, obviously, is some way from the truth. By shutting out more recent work, you're likely to narrow the range of voices you hear – something that has certainly plagued *Ion Fury*, with its post-launch dithering over whether to remove two homophobic jokes of the playground variety, the sort of jokes that you'd expect from the original *Duke Nukem* games. But even putting that aside, if nostalgia becomes your only guiding principle, it's unlikely to aid creativity very much. After all, why shoot for the future when the past is already there waiting?

"I FELT THAT IF WE'D HAVE MADE A QUAKE CLONE, THEN WHY WOULD WE ASK FOR MONEY FOR IT?"

Thankfully, everyone I speak to agrees. "I felt that if we'd have made a *Quake* clone, then why would we ask for money for it? It should have just been a *Quake* mod," Glunt says of *Strafe*. Even Schreiber, who approaches these old games like a watchmaker, a loupe held up to their inner workings, replicating every technical limitations perfectly, is firm that "all the things that didn't age well, we're cutting out".

Oshry – who insists he's trying to stop putting out retro shooters, only to have something new and shiny catch his eye – says you can't just copy what came before, whether that was in 1993 or 2017. "It has to be something different." Take *Ultrakill*, the studio's latest. There's a dash of *Devil May Cry* in its wall jumps and style meter, but more important is the idea of taking all that blood and mechanising it, so that the only way to heal is to bathe in the showering arteries of a dispatched foe.

Every game in this revival – at least, all the ones worth playing –

TOP: Blood is one of the big retro shooter signifiers – but *Ultrakill* makes smart use of it.

ABOVE: The lurid retro-shooter stylings of *Nightmare Reaper.*

conceals an idea like this, its own little twist on the formula. "I think that that's the beauty of this retro shooter wave," Schreiber says. "All of the games that come out, they have different aesthetics, they have different goals, they all have different ways of making their games."

GAME OVER?
It's pretty undeniable that Oshry, Schreiber, and comrades have won – we're no longer short on the old-school thrills they felt deprived of back in the early 2010s. Does that mean their audience has been sated? "All trends move on," Oshry shrugs. "I've ruffled some feathers by saying, if you're starting work on a retro shooter now, you're probably two years too late."

Schreiber describes 3D Realms' recent output as an alternate timeline, moving through the '90s on fast forward – and it's rapidly closing in that millennial boundary. "Where we are now with *Graven* is kind of the limit," he says. "In terms of visual fidelity, the problem with making an early 2000s game is that, for the

majority of people, it will look like a very ugly modern game, rather than a really pretty old game. We can always go back in time, but that's the limit."

The answer, it seems, is diversification. 3D Realms is also publishing *Ghostrunner*, which applies the speed of a retro shooter to create something entirely its own. "We're going to do more AAA indie stuff like that," Schreiber says, although he acknowledges they're much more expensive to make. For New Blood, meanwhile, retro definitely remains its niche, but that reaches well beyond shooters. "All the cool kids are making retro immersive sims these days," Oshry says, a nod to the studio's upcoming *Thief*-a-like *Gloomwood*.

But the retro shooter party's not over just yet. Many of the games mentioned here aren't even out yet, Schreiber intends to bring Realms Deep back for another year, and you get the impression that Oshry's efforts to stop making these games will fail. And if it does all end, well, we'll see you back here in another 20 years for the next revival. ■

YOUNG BLOOD
The next wave of retro shooters making their way to PC

GRAVEN
Release: 2021
Announced at Realms Deep, this is 3D Realms' foray into the Unreal engine (the first one, natch) and asks the bold question: 'what if *Hexen II* was good, actually?'

HELLSCREEN
Release: Sep 2021
The key innovations here: a HUD-mounted rear view mirror and an incredible dual-tone dithering effect that has the approval of *Obra Dinn*'s Lucas Pope.

HROT
Release: 'Soon'
Recommended by Dusk's David Szymanski, this shooter is deeply brown and incredibly Soviet. "And also, here's like a horse with a gas mask that is on fire," Szymanski adds.

FALLEN ACES
Release: 'Soon™'
New Blood's next retro shooter venture – once again, Oshry couldn't help himself – is a cartoon noir where you're switching between Tommy Guns, lead pipes and fists.

CORE DECAY
Release: TBC
Another game leading the indie immersive-sim charge, promising 100 cybernetic implants and existentialism, this one looks like the *Deus Ex* to *Gloomwood*'s *Thief*.

NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
Early 2021	Rebellion	In-house	evilgeniusgame.com

EVIL GENIUS 2: WORLD DOMINATION

No, dear reader, I expect you to die.

This is a direct sequel to the cult classic 2004 lair builder of over-the-top spy-fi comedy and action. *Evil Genius* is strategy management unlike any other, and the team at Rebellion knows that. It's more lavishly made, with a more '60s retro flair than the first, but it retains and updates the best parts.

I watched a live gameplay demo and spoke with two members of the *EG2* team: producer Ash Tregay and lead designer Rich Edwards. Edwards is an *EG* superfan, so this is his dream design. He's so enthusiastic that when interviewed for the then-secret project he puzzled out what Rebellion was doing and asked point-blank, mid interview, if it was *Evil Genius 2*.

In *Evil Genius 2* you dig into the nitty-gritty details in the life of an over-the-top spy fiction villain. You build up your base and casino resort cover operation on a tropical island, gathering an army of minions and building infrastructure for your Doomsday Device.

None of this is cheap, and that means stealing a lot of gold. You manage strategy on a world map to accomplish missions, building a worldwide criminal network. You also need armed thugs, media spin doctors, and deadly traps to keep the Agents and Superspies of the Forces of Justice off your back.

To start you'll pick one of four evil geniuses and one of three islands. "The island you choose is your home for the entire campaign," says Tregay. One island has already been shown – the medium option. Another is tall and narrow, with more vertical space. On that island visitors arrive by cruise ship, then take cable cars up to the casino, giving you a bit more time to react to new arrivals. The third

FIRST LOOK

island is squat and round, with a helipad in the middle, like a donut.

Each of the geniuses has their own style: unique campaign missions, specialities, and Doomsday Device. Maximilian is the industrial tycoon of *EG1*, obsessed with making money. Red Ivan was a mere henchman in *EG1*, but he's a boss now. The other two are newcomers we don't know much about, "Emma is a Spymaster turned Anarchist with a heavy deception focus, whilst Zalika leans into science," says Edwards.

But we've left the *Evil Genius* world for 16 years, so Edwards describes the story, "We're following a timeline where the Evil Genius conquered the world, ruled it with an iron fist for some time, and then – because these characters are always attracted to the struggle and the underdog approach – they've backed off, and now vanished, leaving a power vacuum."

Red Ivan has been through it. He's lost a hand and gained a metal one, but he still likes explosions and carries a rocket launcher to deal with enemies. "At the start of the campaign he's a deposed warlord," says Edwards, "His country of Ivannia has fallen and he is attempting to rescue people from there."

It's a lot more story than *EG1* had. "We put a much stronger focus on the narrative," says Edwards. "We want to make sure we are following the genius from the inception, and all of the challenges you would have to overcome."

APOCALYPSE NOW

The centrepiece of the campaigns, and of your lair, is the Doomsday Device. Your device is built in stages, but it's not static like *EG1*: you get to fire it often, reaping risks and rewards on the world map. Red Ivan's is the H.A.V.O.C. device, an unsubtle and roaring red-coated dynamo of a cannon that causes widespread devastation. Ivan's forces then capitalise on the chaos to further his schemes. There's no subtle use for Ivan's, but Maximilian's Midas Device transmutes

YOU ALSO NEED ARMED THUGS, MEDIA SPIN DOCTORS, AND DEADLY TRAPS.

You love gold.
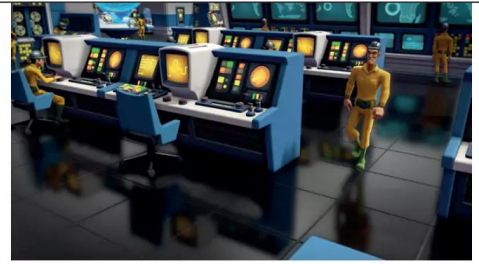
» solid objects to gold – like entire buildings. Max's minions can then go steal the target for some extra income.

As the Doomsday Device progresses, so do a genius' abilities. One of Edwards' favourite examples is Maximilian. At first, Max uses a regular pistol to execute disloyal henchmen or enemies. Later he perfects his Midas Pistol, which turns unfortunates into solid gold statues.

Each Genius' campaign will take 12-16 hours to complete, but that's without doing any side stories. "We've made sure that there's a heap of optional content," says Edwards. Optional missions are how you recruit Henchmen, the Oddjobs to your Goldfinger. They start on the world map as rival crime lords, and only by besting them can you win them to your cause. One returning henchman is Jubei, the master swordsman, now well into old age and hobbling about with a staff.

With all this new stuff, Edwards emphasises that *EG2* is flexible – you can now pause and fast-forward play. "[*EG2*] moves at the pace you're comfortable with. If you do want to spend your time just crafting your perfect lair, you can do that"

There'll be a lot to craft. All 15 room types from *EG1* make a return, but with expanded functions. "So, whilst we have the Infirmary back," says Edwards, "it is also a room you can use to push your minion stats higher than they ever would have been." Continuity was key to Rebellion's process, and they made sure that fans would feel right at home by watching *EG1* Let's Plays and studying bases on player-made planning tools.

Tregay explains their production philosophy, "Taking what the original did well forward and then augmenting and building on that as a foundation," he says. A key feature Edwards preserved from *EG1* was combining rooms. "So in a single area you might have a Barracks with a Mess Hall in the middle and some weapon racks on the side walls," says Tregay, "to really build the lair however you desire, and you'll find that those options open up as you become more familiar."

TRAP FIGHT

Evil Genius 2 looks smooth and responsive in motion, and it really feels like you're

REBELLION WANTS YOU TO RECONSIDER BASE LAYOUT THROUGHOUT THE CAMPAIGN.

playing a character whose every whim is feared. The interface is more up to 2020 standards, as is unit AI. Minions snap to, and are quick to carry out orders like construction, training and placement. Rooms have new doodads like benches, trophy cases, and potted plants, which have effects like helping minions recover spent stats faster.

Series fan Edwards was excited to simplify the elaborate, deadly traps, "If you put down traps in your lair, and you put them down close together and point them at each other, they just automatically network, straight out of the box." So if you put down a wet bar of soap between a jet-engine fan and a shark tank, for example, the fan knows to start blowing after an enemy Agent slips on the soap.

Easy as it is to design rooms, it's simple to redesign. Rebellion wants you to reconsider base layout throughout the campaign. "Simple lairs with just a small barracks and a small set of defences grow into these multi-floor spanning things with hundreds of minions walking around," says Edwards, "That process takes quite a while for the player to go through, and at every stage they have to make sure that everything is working smoothly."

But it's not all lairs and no spies, so Agents of the Forces of Justice are smarter. That was a major focus of production for Tregay, "The Forces of Justice agents are a perennial threat in *Evil Genius 2*. They're going to be showing up with the same frequency as tourists in your cover operation. They'll be blending in amongst them, coming off the same cruise ships to begin with, and making their way through to the lair itself."

Agents have finally figured out disguises. You might catch someone wandering about in a minion jumpsuit… with a bomb strapped to their back. You then tag them for real minions to deal with. You can also set responses in advance using automation tools, telling minions to escort unwanted guests out of low-sensitivity areas or kill on sight.

As time wound up I had to ask about the best feature from *EG1*: cloning. You could make and sacrifice clones to fake your own death. Will it be in? "Not going to answer that," Edwards laughed. I insist that if it's a sequel, then clones are canonical. "It is absolutely canonical," says Edwards, "but we've made sure that its application is a lot more evil than it used to be." We'll find out more when *Evil Genius 2* releases in early 2021.

Jon Bolding

Minions don't carry weapons, but armouries have them for red alerts.

Some hitmen and security thugs party under the supervision of a socialite minion.

Normal minions train to become security.

Magic does damage, but is more effective as a "strategic" tool.

Potions must be equipped before they can be drunk.

The tax collector who assigns your first quest.

Cruxfirth

The city is actually quite lovely, if you can overlook all the dead bodies lying around.
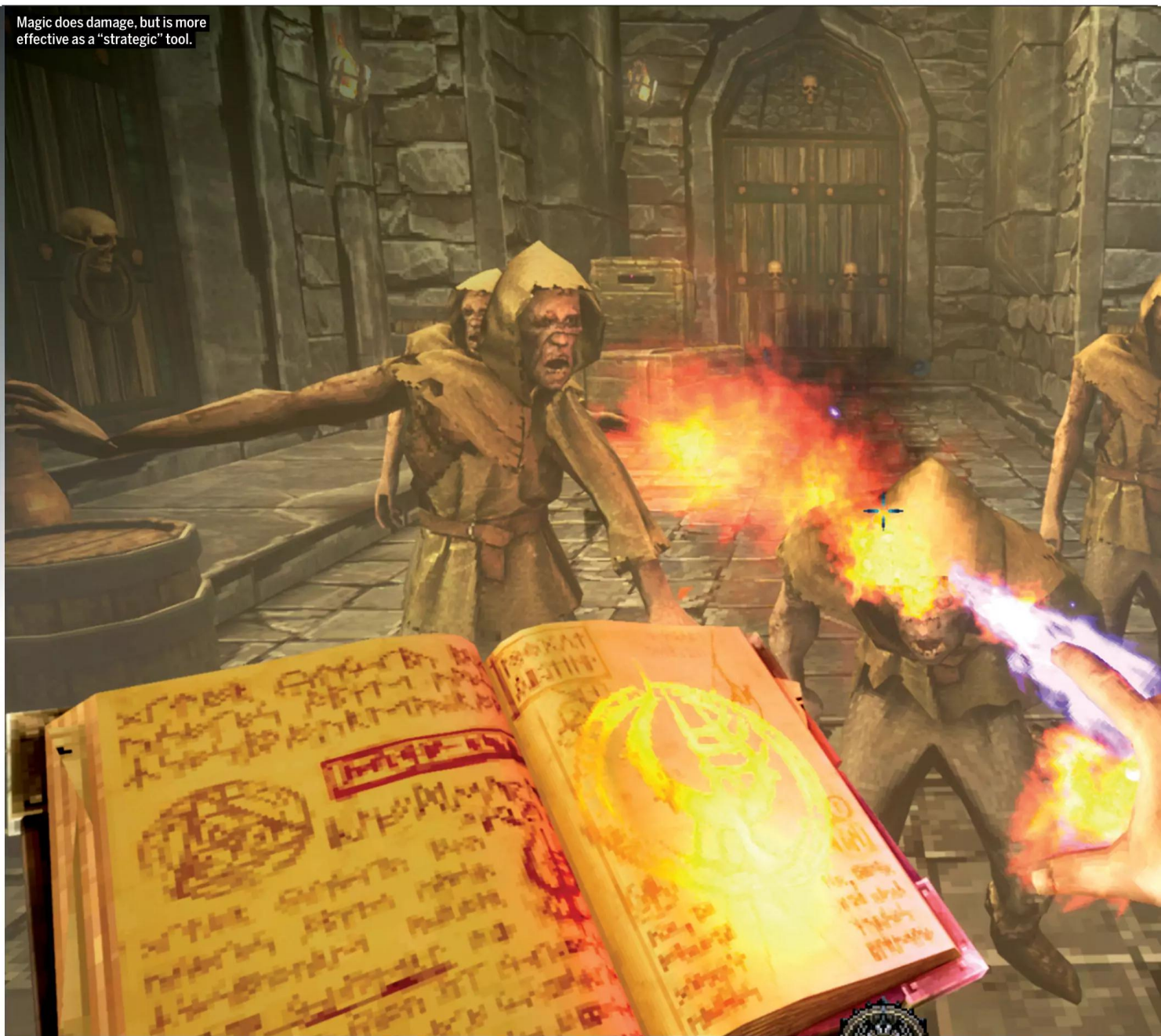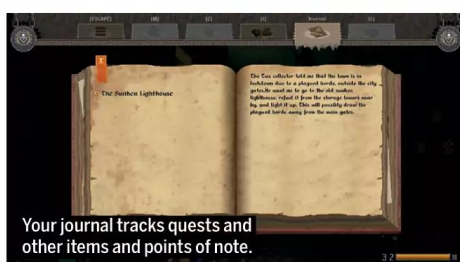
NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
Late 2021	Slipgate Ironworks	3D Realms	bit.ly/2SetvQp

GRAVEN

A *Hexen*-inspired shooter that aims to take us back to 1998.

Graven is a spiritual successor to the *Hexen* games, but it promises a much deeper experience than its predecessors. *"Graven* is *Hexen 3* – kind of,"* 3D Realms chief Frederik Schreiber tells me during a recent preview session. It's the game that Raven Software would've made in 1998, if 1998 was now.

Schreiber describes *Graven* as an "action-adventure puzzler, with a few RPG elements here and there", including quests, spells, and upgrades. It certainly looks like an RPG at the outset: as a priest of the Orthogonal Order, you're convicted of a crime you didn't commit and cast into the midst of a heretical conspiracy when your death sentence is interrupted by a divine being who's not supposed to exist. You wake up on a boat sliding through a thick, dark swamp, which eventually deposits you into a city where your adventure begins.

After wandering around and smashing some stuff on the docks, which doesn't bother any of the bystanders in the area, Schreiber took us to the game's first quest-giver, who wanted us to rekindle the lighthouse that's slowly sinking into the bog. This is where *Graven* starts to demonstrate that despite appearances, it is not an RPG: there are quests to complete, but your real job is to shoot and hack a whole lot of creepy monsters.

MAGIC MISSILES

You'll have a variety of ranged and melee weapons at your disposal – my demo featured an auto-firing crossbow and a big sword – each of which will have three upgrades that can be purchased over the course of the game. You'll also wield a staff and spellbook, which unlike weapons cannot be dropped or swapped around. Interestingly, while magic is a central part of the game, Schreiber said it's more of a "strategic" tool that's not really meant to provide offensive firepower.

"[Spells] do deal some type of damage, but if you only want to deal damage, using weapons is better," he explains. "For instance, you can use the Enflame spell to melt stuff, you can use the Discharge spell to electrify or stun things and so on – and then switch over to a sword and kill them while they're stunned."

Spells will also take advantage of some of *Graven*'s more complex underlying systems, enabling the sort of emergent interactions that simply weren't possible in the days of the original *Hexen*. "At later points in the game, the lightning spell Discharge can also be used to magnetise igneous rock, which can pull away enemy projectiles if they're metal, and can also be used to suspend gates open and things like that," lead designer David Queener tells me.

FIRST LOOK

It will be up to players to discover most of these possibilities for themselves, which is where the 'puzzler' part of *Graven* comes into play: developers want to do just enough handholding to set players off on the right path, while otherwise leaving them to their own devices. That'll also be true of the game world itself, much of which will be hidden away from players who don't take the time to explore it.

Schreiber and Queener cited some unexpected influences on *Graven*: *Hexen*, obviously, but also *Symphony of the Night*, *Grim Dawn*, *Stalker*, and even *Dark Souls*, although Queener emphasised that it's not a *Souls*-like. At the same time, 3D Realms aims to keep *Graven* as "authentic" to its roots as possible, which means sticking to a limited colour palette and "very strict rules" about textures and triangles, Schreiber tells me.

"But in terms of the openness and how big you can make the levels and enemies and mechanics and so on, we're just going to take it as far as we can take it."

Andy Chalk

> Yes, you can kick the bad guys.

> Your journal tracks quests and other items and points of note.

YOU'LL HAVE A VARIETY OF RANGED AND MELEE WEAPONS AT YOUR DISPOSAL.

51

The (current) climactic boss fight is done as an *Ori*-style platforming setpiece.

拣仔，你嚟哩度做乜啊？

Juavi Soldier

The game's developer is Chinese – but, at least in the English version, the language is treated as foreign to Haak himself.

NEED TO KNOW

RELEASE	DEVELOPER	PUBLISHER	LINK
2020	Blingame	Lightning Games	haakgame.com

HAAK

A mini-Metroidvania with serious style.

There aren't many things that have made the past five years a great time to be alive, but for fans of stylish action-platformer Metroidvanias, it's a golden age. *Hollow Knight*, *Dead Cells*, the *Ori* games… all of them weaving their own particular path through the ability-expanding, area-unlocking, backtracking joys of this odd little subgenre.

Haak, as it currently exists, doesn't do this. The path it carves is straight down the middle, doing absolutely everything you'd expect and not a smidgen more. And yet. Even in Early Access, it has the power to anchor me to my desk. I work through the entire thing in two sittings. If I hadn't been forced out the door by necessity it would have been one.

Partly because everything *Haak* does, it does with style. You're unlikely to be surprised by any of the moveset as it unlocks: a melee slash and charge attack, a dash that's equally handy for dodging and reaching platforms, a grappling hook which doubles as a short-range projectile. But it all connects satisfyingly, and you're pretty much guaranteed to look good doing it.

HAAK & SLASH

Take another peek at that list of games above – prettiness has become a requisite of the genre at this point, and this is no exception. Your character, the titular Haak, cuts a heroic silhouette: two glowing eyes behind a fluttering cape, everything else permanently couched in darkness.

PLAYED IT

Where the visuals really shine (excuse the pun) are in the game's stuttering neons, the lanterns that swing overhead, the occasional shaft of natural light breaking through. The environments you're exploring are mostly dark, miserable affairs, so these bursts of illumination are very welcome.

It's all stylish enough to elevate what's being portrayed. Your enemies are a standard-issue rogue's gallery of broken-down robots, sentient slimes, and the odd mutant, but they all look cool, and move smoothly. Likewise the setting. Post-apocalyptic wasteland, touches of retro tech, heavy deployment of Hànzì characters – these are all stock elements, but they're beautifully realised. Breaking out of a dungeon to be treated to a widescreen backdrop of broken towers, fading gradually into the smog, is like taking your first deep breath of air after a long time cooped up.

Besides, what really matters about the setting is how well it functions as a map to fill in. The game is divided up into discrete locations, each made up of a hundred or so rooms that connect pleasingly, and occasionally unexpectedly. Uncovering a shortcut between spaces you've grown to know independently; realising you've now got the tool to cross that chasm you plummeted down ten minutes ago; guessing at which dark corners conceal a breakable wall, a hidden pickup… I'm aware this is just a list of the virtues of Metroidvania games, but I can report that they haven't lost any of their thrill.

Less than a month into Early Access, *Haak* offers a polished version of this find-unlock-revisit loop – for now, in miniature. The version I play consists of two full-size warrens to explore, plus a small city hub and an extended boss fight. More is due to arrive soon, but the most important thing is that I still can't resist seeking out every hidden nook, accruing currency I likely won't get to spend, striving for that '100 percent completed' exit screen. It doesn't especially matter that it's a similar shape to many I've wriggled on in the past – *Haak* has its hook in me now and, whether I come back for each update or wait till I can explore uninterrupted, I'll be back for more.
Alex Spencer

A big arrow pointing right? You'd better believe I'm headed left.
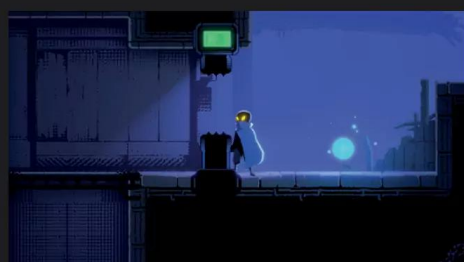
YOUR CHARACTER, THE TITULAR HAAK, CUTS A HEROIC SILHOUETTE.

SHLOCK HORROR

Looking back on the pioneer of
fear that was **HORROR SOFT**.

By Robert Zak

W

hat's the oldest horror game that can still make you jump today, or send that acidic tingle of unease up your spine? Dogs bursting through the windows in the original *Resident Evil* spring to mind, while the PC faithful may point to another glass-breaking moment – the first monster you encounter in the original *Alone in the Dark*. The last notable horror game before that, *Sweet Home* on the NES, probably finds itself just on the wrong side of the 1990s to maintain much impact today.

But in that overlooked period between 1989 and 1992, a British studio in the quiet town of Sutton Coldfield made some serious horror headway. Adventure Soft, founded by father-son team Mike and Simon Woodroffe, rebranded itself as Horror Soft, and over the course of three years released four first-person horror games that culminated in the beautifully gruesome *Waxworks*.

These games straddled a technological leap in PC gaming, introducing new ideas to the then-stagnant genre that left a sanguine blood trail for other developers to follow.

DEVIL IN THE DETAILS

The shockingly detailed death scenes remain as brutal to behold today as they did 30 years ago, while its grimy labyrinthine levels foreshadow the 'helpless horror' subgenre popularised by *Amnesia: The Dark Descent*, as you're often forced to flee
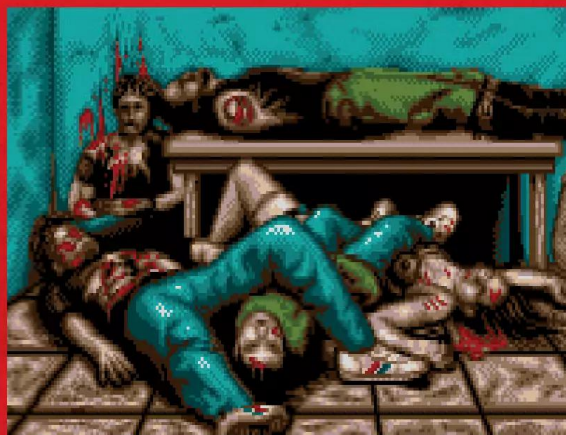
THESE GAMES STRADDLED A TECHNOLOGICAL LEAP IN PC GAMING.

from the Eldritch creatures, zombies and mobs that twitchily stalk you through porous walls of darkness.

Horror Soft's father-son development team was an unusual dynamic, but it didn't impact the development process – no filial door-slammings or paternal telling-offs. Over time, father Mike gravitated towards the business and finances of the studio, while Simon became the creative and designer.

Simon, who now works as a creative director at Rare, didn't treat game development as a serious career at the time. "Most of those games were designed in my spare time between studying for exams," he says. "It was a way to make a bit of cash for beer and petrol!"

Horror Soft wasn't a wealthy studio, but it was supported by the fact that its games were technically licensed movie spin-offs. Three of Horror Soft's four games were fronted by '80s shlock-horror icon

BACK FROM THE GRAVE *How to play Horror Soft's games today*

If you're going to just play one Horror Soft game, go for *Waxworks*, which is the most polished of the lot, followed by *Elvira 2* which similarly throws you into several themed worlds. The original *Elvira* is more of a fantasy dungeon crawler, while *Personal Nightmare* is much more dated.

GETTING STARTED

Both *Personal Nightmare* and *Waxworks* are available to buy on GOG.com, while the *Elvira* games can't be purchased anywhere. They can, however, be found on Archive.org as abandonware and can even be played directly through your browser.

All the games run through the DOS emulator DOSBox, but the official build of DOSBox is now outdated, and you're better off running the original BAT files with a more recent source version of DOSBox like SVN Daum to get extra features like texture filtering and save-states.

TIPS

1 Save often (and don't be afraid to die – the death scenes are great!).
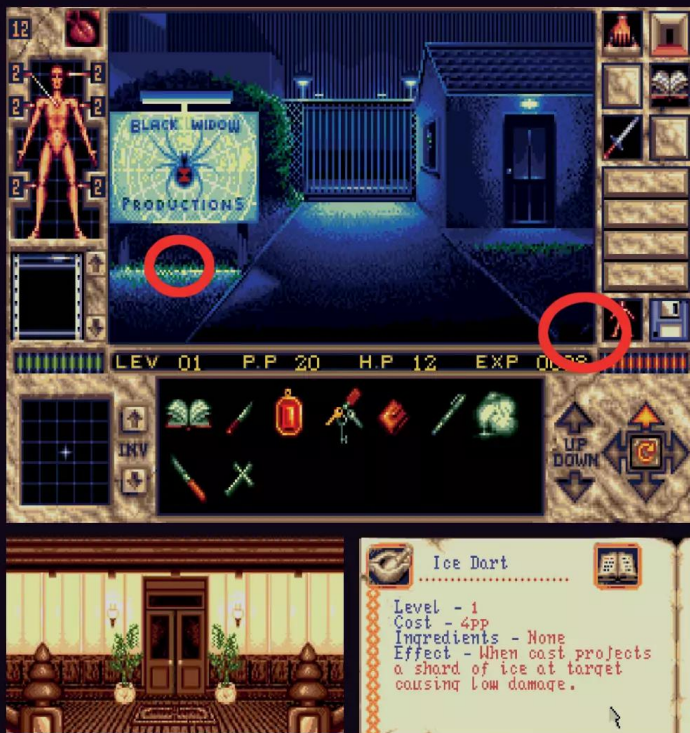
2 Click *everything* – secret key compartments hide behind indistinct metal rings on walls, vital herbs are often barely visible. This is truly 1990s adventure gaming.

3 *Elvira* and *Elvira 2* have weight limits, so drop items in central locations where you can pick them up later. *Waxworks* doesn't have weight limits.

4 Check your spell book for the ingredients required for spells.

5 Don't be afraid to run from a fight.

6 *Waxworks* has a hint system in the form of your crystal ball. Use it.

Ice Dart

Level - 1
Cost - 4pp
Ingredients - None
Effect - When cast projects a shard of ice at target causing low damage.

TOP LEFT: Camp '80s horror queen Elvira appears throughout the series to offer aid, puns, and bosom aplenty.

LEFT: Well, that's pretty damn horrifying.

Elvira, Mistress of the Dark, who pops up occasionally to brew spells, push the plot forward (and her chest out), all the while negging you and explaining what a pathetic worm of a person you are.

Horror Soft understood that line between horror and comedy, figuratively squeezing the jump-scares and gore into Elvira's omnipresent cleavage. The visual gags are supported by the writing – a showcase of dry British humour that glibly dismisses a dead security guard as "very poorly looking" or quips that an uncannily realistic rotting corpse, complete with animated maggots, "isn't going anywhere anytime soon".

GRAPHIC VIOLENCE

The Horror Soft era coincided with a seismic moment in PC gaming. Its first game in 1989, *Personal Nightmare*, was largely text-based,

confined to 16-colour EGA graphics and featured almost no sound, giving it that feverishly psychedelic look. The fact that the released Amiga version of the game enjoyed 32 colours and a comprehensive soundtrack puts into perspective just how dated DOS and PC were as a gaming platform at the time.

But by the time Horror Soft released *Elvira: Mistress of the Dark* the following year, VGA – which was capable of outputting 256 colours – was fast becoming the standard on PC. It made all the difference, bringing *Elvira*'s graphics and colour depth up to the standard of the Amiga version – a standard that amazingly remains (ahem) palette-able to this day. Meanwhile, SoundBlaster audio launched in 1990 to offer an audio experience far superior to AdLib's 'robot choking on a frog' sound tech that preceded it.

The timing couldn't have been better for Horror Soft, with each game in the series feeling and looking more advanced than its predecessor. This means that, when played today, *Personal Nightmare* suffers quite badly in comparison to the later games, while *Waxworks* stands out as a truly proto-modern horror game.

But before I bury *Personal Nightmare* for good, its clever ideas are worth pointing out. It's the only game in the series to use a persistent clock and day-night cycle, with the denizens of its cursed town going about their routines, shops closing and opening, and so on. It adds a layer of suspense knowing that at any moment you may get caught snooping around someone's house, or that at certain nocturnal hours a vampire starts roaming the town.

Personal Nightmare throws up some nasty imagery too, such as one sequence where you hack away at a wall to uncover your mother's corpse buried within, before cutting her fingers off with scissors to prise a book from her cold dead hands; the single-frame animation of her head dropping is the kind of jarring jump-scare that persists through the series. But with its lack of sound, rudimentary colours, and inscrutable text-based puzzles, it may just feel a bit too arcane for today's gamers.

NEW NIGHTMARE
There wasn't much for Horror Soft to draw on in the way of horror games, but Simon was awed by the seminal first-person RPGs of the time. "Mechanically *Dungeon Master* and *Eye of the Beholder* were big

inspirations," says Simon. "I guess there wasn't any precedent – but that's part of the excitement of making games!"

Mouse-click movement (and later, directional arrows in *Waxworks*) and the first-person perspective popularised by RPGs gelled well with horror, because it created an immediacy to your actions – a direct input without the intermediary of typing. So if you poked your head around the corner to see a zombie bearing down on you, you'd hammer the buttons as fast as you wanted to run away (or confront the creature, then decapitate it); your panic was mapped directly into the game.

Waxworks was also among the earliest first-person games to show your hand and weapon when attacking, heightening the sense that it was *you* in the world. All of this is standard horror protocol today, but at the time it was groundbreaking. Combined with the advances in PC

graphics and sound, it offered up unparalleled verisimilitude in horror.

But technology alone wouldn't be enough to successfully land those horror gut-punches, and Horror Soft also relied on some artistic wizardry. "Another thing we did differently was not hiring digital artists but bringing traditional artists to digital form," Simon recalls, "which brought in a whole bunch of new thinking that helped us be distinctive. We kept this going right through to *Call of Cthulhu* [the last game co-developed by the Woodroffes]". NPC faces, death scenes, and many of the backgrounds used actual photos, carefully hand-edited and compressed to evoke a shockingly grotesque realism.

The sound design is excellent too. *Personal Nightmare* had almost no sound, but this meant that during the few moments when demonic cackles or the crunchy cacophony of AdLib burst from your PC, it was enough to make you jump (my advice: if you

FACES OF DEATH
Horror Soft's death scenes are so grotesque that you can't help but laugh

STABBED
If the angry mob in Victorian London catches you, this is what happens. People power is overrated.

DESICCATED
Lose an encounter with your evil twin and he'll leave you as wrinkly as every *Dark Souls* player character.

RIPPED APART BY ZOMBIES
Dying at the hands of a zombie turns your chest into a great big strawberry trifle. Nom.

POPPED EYES
Seeing a falcon in flight is a sight to behold in *Elvira 2*, until it dives down and plucks your eyes out.

LACK OF SILVER BULLETS
This is what happens when you cross paths with a werewolf in a barn. We're lycan it.

choose to play *Personal Nightmare*, put on a *Silent Hill* ambient soundtrack on in the background).

The *Elvira* games introduced screams and ghoulish cackles along with a proper soundtrack (still better on Amiga), before *Waxworks* upped the ante with music that intensified when you spotted enemies – a zombie drunkenly swaying around a graveyard, an angry mob in Victorian London believing you to be Jack the Ripper, or a delightfully homoerotic Egyptian stalking you in the bowels of a pyramid. The choppy animations of enemies and crude way in which jump-scares can appear from nowhere gives these games an eerily enduring ability to shock.

The series does come with its caveats. In *Personal Nightmare*, most of the puzzles feel unsolvable without a guide, and things only marginally improve in later titles. There are no in-game maps, and *Waxworks* particularly suffers from samey environments that are easy to get lost in. "Back then we didn't do audience testing so we were mostly going on instinct," admits Simon.

ABOVE RIGHT: And that's just terrible, poor lass.

BELOW: Limited animations make for some jarring jump-scares, like this pustulant bastard.

Also brace yourself for death to strike quickly and without warning, whether it's opening the wrong coffin in a mausoleum or settling down for a canoodle with an attractive lady only for her to morph into a succubus. These games aren't afraid to give you a summary execution, but the gore-ious death sequences are a reward unto themselves, quickly drowning the injustice of a truly bullshit death in a splattering of violence that can make even us desensitised gamers of today squirm.

DEAD AND BURIED

After *Waxworks*, the Woodroffes shifted focus to rather more family-friendly fare, finding their greatest success with the classic *Simon the Sorceror* adventure games. "Honestly, my personal interests shifted away from horror," says Simon. "I had started watching more comedy so it was a natural shift, and the horror series and *Simon* have more in common than might be apparent on the surface."

BRACE YOURSELF FOR DEATH TO STRIKE QUICKLY AND WITHOUT WARNING.

But a time when the immersive potential of videogames wasn't explored, Horror Soft pulled us into a world of horror tropes like no game before. With subsequent '90s horror developers opting for fixed camera angles and third-person perspectives, it would be well over a decade before the genre at large returned to the first-person perspective used so effectively by Horror Soft.

Maybe it's because of this gap that the series gets overlooked in the horror chronology of gaming, but within it you'll find the roots of a style of horror that would surface years later. If you want to feast on some timeless pixel-gore, then see the boxout on how to play and give yourself in to Elvira's embrace. ∎

Games

YOUR GUIDE TO THE LATEST PC GAMES.

SCORING SYSTEM

PCPP scores its games on a 1 to 100 scale. The higher, the better – though 100 is by no means a "perfect" game. We're not convinced such a thing exists, so consider a 100 a masterpiece of PC gaming, despite its inevitable flaws. A 50 is a decidedly average game; one that doesn't excel in any particular area, without being an affront to our senses – the ultimate in mediocrity. Below this, you'll start to find the games our reviewers suffered an aneurysm getting through; above it, the titles truly worth your time and money. And remember: a score is only a vague indication of quality. Always read the full review for the definitive opinion!

POWERED BY

REPUBLIC OF GAMERS

A NEW YOKE

Exhilarating dogfights make STAR WARS: SQUADRONS a worthy heir to *X-Wing vs TIE Fighter*. *By Wes Fenlon*

Hot damn, I love the A-Wing. Until *Star Wars: Squadrons*, the speed demon of the Rebellion was never my favourite ship. *Rogue Squadron* made me an X-Wing diehard, and even when I first played *Star Wars: Squadrons* on a controller, I didn't appreciate the joy of piloting what's basically an aluminium foil cockpit attached to an oversized engine. But when I hooked up the HOTAS, the A-Wing made me forget how much Rise of Skywalker had drained my enthusiasm for all things Star Wars.

Star Wars: Squadrons succeeds where it's most important. It's a thrill to pilot these ships a hair's breadth above the surface of a Star Destroyer and through stunning nebulae more vivid than I could've possibly imagined while playing *TIE Fighter* in the late 1990s. The campaign, which took me about ten hours to complete on the default difficulty, never really surprises, but it does manage to accomplish something noteworthy: this feels like being *in* Star Wars in a way no game has in a long, long time.

The flying is exactly what I hoped for, with enough nuance to let skilled pilots excel. The central system is power management, just like in the classic *X-Wing* games. Over the course of the campaign I started to get a feel for exactly when to cut the throttle to make a tight turn, when to flick all my power to weapons to lay on the damage, and how to survive by focusing my shields to the rear to take a few more hits from an enemy blasting away at my tail.

The campaign teaches you most of these advanced moves as a primer for multiplayer, which is refreshingly simple in 2020. There's a progression system, but no battle pass or premium currency – you play multiplayer matches, rank up, and use your rewards to unlock cosmetics and additional ship components. That's it. Those unlocks are nice, but I mostly want to keep playing *Star Wars: Squadrons* because it's so fun to fly.

SAVE YOUR BATTLESHIP

If *Squadrons'* singleplayer is drinking a nice warm cup of Star Wars tea, its 5v5 multiplayer against human opponents is slamming a Red Bull. I found myself gripping my joystick tightly and leaning in, far more focused on the action.

Squadrons keeps multiplayer lean with only two modes: Dogfights (aka

> ### This feels like being in Star Wars in a way no game has in a long time

deathmatch) and Fleet Battles, which are tug-of-war contests between two enemy capital ships. If you destroy enough of the enemy team's fighters you can push forward on the offensive to attack their capital ships in stages. Fleet Battles are great play spaces because they demand some strategy, but still allow for plenty of flexibility – they provide structure to dogfights that give moment-to-moment victories more meaning.

They also force you to make decisions more complex than picking the fastest ship. You can pilot a heavy bomber and focus on dealing big damage to those capital ships, but you'll need teammates in nimbler craft, like the A-Wing or TIE Interceptor, to take down enemy fighters. Imperial teams really need a support ship, which can provide them temporary shields to stick it out in longer battles. Ship customisation plays into this well: ion cannons can take down shields quicker than lasers, while certain high damage missiles are ideal against capital ships but can only be fired from long range.

With random players there's only so much coordination you can do, but I've played enough of Fleet Battles to feel confident that it's a mode people will keep developing strategies and tricks for, with Discord groups planning out their exact ship selections and arsenals to complement each other like MOBA players before a match.

When I went into dogfights with a full team of PCPP colleagues, we got better at pinging targets and shooting enemies off one another's tails. That experience amplified the fun of simply juking an enemy or nailing a TIE Fighter with a perfect laser blast – which is saying something, because the core flying in *Squadrons* is already exhilarating. When I weave through the cracks of an asteroid field to dodge a torpedo, it's hard not to let out a Han Solo whoop.

Playing in VR makes that feeling even more intense, and even gives you some advantages. You can look

SQUAD GOALS *Meet our favourite fresh faces in* Star Wars: Squadrons

KEO VENZEE
Chipper and Force sensitive, Keo is the heart of Vanguard Squadron and I want to be friends.
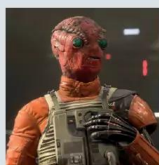
GUNNY
A Star Wars alien with a southern drawl? Gunny has personality to spare, y'all.

FRISK
Remember Bossk, the bounty hunter who shows up in Empire? Frisk is better-developed.

SHEN
The deadpan one. Like a Mandalorian, he'll never take off his helmet to show his scarred face.

ARDO BARADAI
Finally, a Mon Calamari character other than Ackbar! Great at mission briefings.

The Republic pilots have some stellar character designs.

There's no shame in asking for directions when you're lost in a nebula.
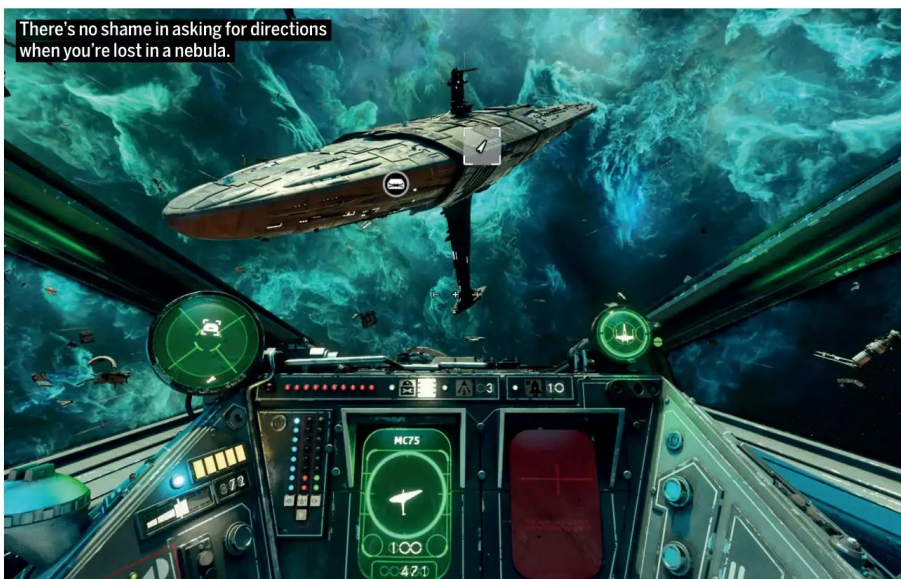
Not now, boss, I'm killing Rebels!

I've blown up so many Star Destroyers, they're not so fearsome anymore.

Titan Squad are a cool bunch, but not as fun as the Republic pilots.

all around your cockpit and stare straight up to see the ship you've been flying in circles trying to catch. I found it overwhelming (and nauseating, on the Oculus Quest) to pitch and roll my ship through these dogfights, and think it's a better fit for campaign's staged battles than the mad pace of multiplayer. And if you don't care at all about multiplayer, there's still a lot to love here. I was initially worried that the campaign would just be a glorified tutorial, but it's both more fun and more interesting than I expected.

STAR TOURS

It helps tremendously that this game is so scenic. It takes full advantage of scale to make you feel tiny in your cockpit. I kept trying to grab screenshots of enormous planetary backdrops, the dockyards and space stations and debris fields that anchor each map and keep you from getting lost in the void of space. *Squadrons* also runs flawlessly on my PC: at over 144 fps on ultra settings on an i7-7700K and a GTX 1080 (OK, occasionally it dipped into the 130s. I can live with that).

Even when the campaign missions aren't especially complex, the setting makes up for it. The moments that felt the most thrillingly Star Wars weren't scripted into the story, but of my own making – like flying through the husk of an old cruiser to shake a missile, then coming back out behind an enemy TIE and shooting it to bits.

The campaign recognises that the fun of *Squadrons* mostly lies in being at the controls, successfully tossing power to engines and making a corkscrew turn to get behind the ship that was just on your tail. But it does end up feeling all a bit routine by the end. Objectives don't really change mid-mission. You set out to do X, you do X, and that's a wrap. There are a few rare secondary objectives, but they don't add different ways to accomplish a mission or secrets to uncover.

Star Wars: Squadrons is a game with memorable moments rather than memorable missions. The story never guided me through something as thrilling and unforgettable as *Titanfall 2*'s Effect and Cause, for example, but I'll remember piloting an X-Wing upside-down along a Star

FLIGHT SCHOOL
Before you take the controls, know what each button does

1 Hull damage
2 Space radar
3 Throttle sweet spot for turning
4 Throttle
5 Boost meter
6 Light for fully-powered lasers
7 Laser charge
8 Repair kit cooldown
9 Countermeasures
10 Missile ammo
11 Power management
12 Current target
13 Target's health
14 Shields fully focussed to the rear

Destroyer's hull more vividly than any individual shootout in that game.

The story, too, lacks the depth to be truly memorable. It alternates between the New Republic and Imperial perspectives, putting you in the boots of the new fifth pilot in the Republic's Vanguard Squadron and the Empire's Titan Squadron. Vanguard's commander is an Imperial defector who led Titan before the destruction of Alderaan made him realise they were the baddies. The setup makes this story more personal than political, as Titan's new leader, Terisa Kerrill, feels betrayed by her former mentor and wants to make him suffer. Turns out fascists hold a grudge.

Squadrons never does much with its characters, though, and that's a real shame, because I wanted to be friends with every alien in sight. Their designs are imaginative and detailed, putting Star Wars species we rarely see front and centre. But *Squadrons* seems more concerned with adding your commanders and fellow pilots to the canon than giving them any growth or resolution.

There's so much potential here. Take Gunny, squad leader of Vanguard, who's been a pilot so long she fought in the Clone Wars. She tells the story of being shot down and having to take off her own arm to escape the wreckage and capture. Or Shen, a very one-note (but really entertaining) TIE pilot who's been wounded in so many battles he never takes off his helmet to unveil the

> ### Even when the missions aren't complex, the setting makes up for it

scarred face beneath. I enjoyed getting to know these characters at first, but grew bored of the chats between missions when it was clear none of them would really change throughout the campaign.

There are zero dialogue options, decisions, or ways to express or shape your own pilot's role in this story. *Squadrons* made me realise how meaningful even simple dialogue options are for bonding with your crew in games like *Mass Effect*. Unfortunately this is a shallow reflection of that experience.

At one point smuggler-turned-Rebel-pilot Frisk, a lizardy Trandoshan, mentions playing sabacc, the Star Wars version of poker. I spent the rest of the game imagining an alternate universe where *Squadrons* had a sabacc minigame and let me play cards like in Star Trek: TNG. If *Squadrons* is a success, then I hope the sequel has the budget to be more ambitious with its singleplayer mode. I feel like I want more to do between missions than listen to monologues.

In the cockpit, though, this is probably the best a *Star Wars* flight game has ever felt, and that's a real feat for the spiritual successor to some truly beloved games. It deserves to be the start of a new era of *Star Wars* flight sims with at *least* a big enough budget to fit a B-Wing into the next one, hopefully. ■

PC PowerPlay **VERDICT**

Star Wars: Squadrons delivers with great combat, even when its campaign doesn't live up to its full potential.

83

FEARLESS

AMNESIA: REBIRTH is an unforgettable follow-up to a horror classic. *By Leana Hafer*

This direct follow-up *Amnesia: The Dark Descent* had enormous expectations to meet. Judging by the number of times my housemates heard me shout at it, I'd say that *Amnesia: Rebirth* succeeded. Navigating cramped corridors with no way to directly combat the abominations pursuing you may not be as novel today as it was a decade ago, but it's as terrifying as ever, and *Rebirth* takes the series to even more disturbing places.

It's almost impossible to say anything specific about the plot, characters, or locations without spoiling the expertly-crafted story. Here are just the basic details, then: the beleaguered protagonist Tasi Trianon, brought to life with a superb performance by Alix Wilton Regan, finds herself marooned in the Algerian desert in 1937 with, appropriately enough, amnesia. Trekking through a huge variety of dark and foreboding locales, finding notes and photographs to piece together her past, while evading nightmare horrors using stealth and speed, all feel very familiar. But the stakes are higher and the journey is weirder. If *The Dark Descent* scratched the surface of the *Amnesia* mythos and *A Machine for Pigs* gave us a glimpse below the skin, *Rebirth* takes us all the way into its eldritch heart.

This is very much a direct follow-up to *The Dark Descent*, both in terms of story and game mechanics. If you had unanswered questions about previous protagonist Daniel, or Alexander von Brennenburg, or the mysterious Shadow, chances are some diligent exploration will find you the answers you seek. However, *Rebirth* also creates new questions along the way. It mainly distinguishes itself by how far it gets to run with its predecessor's themes. In a world where inflicting anguish on others can give you actual magical powers, what would be the implications of doing so on an unthinkable scale? The allusions to real 20th century history are a little on the nose, but the presentation is superb so it never comes across as preachy.

> ## Frictional has mastered the art of building tension using imagery

LONG SHADOW
Given how much bigger and more ambitious the story is, I was disappointed that the basic gameplay is almost entirely unchanged from *The Dark Descent*. The concept of 'sanity' has been replaced with 'fear', reflecting a more modern and thoughtful understanding of mental illness. But it's just a re-labelling of the idea that if you hang out in the dark or look at disturbing scenes or creatures for too long, you'll eventually lose control of your faculties. You'll be scrounging for matches, which can be used to light torches and candles, and eventually oil for your portable lantern. The very limited amount of each you can carry serves to build tension, but both are abundant enough that if you're tenacious about exploration and stingy with your resources, you'll almost never run out. The fleshy, chittering monsters often lurking just at the edges of your sight are visually horrifying, using clever design, animation, and sound to get your hairs standing on end. But their behaviour doesn't present any new surprises and stealth still feels as clunky and random as it did in the previous *Amnesia* games.

Even so, Frictional has mastered the art of building tension using imagery, music, level design, and sound mixing. Parts of the in-universe story even spell out how they do this in a way that is both openly self-referential and self-congratulatory – it comes close to breaking the fourth wall, but it feels earned. The breathtaking story payoffs are well worth putting yourself through the ordeal, too. Their ability to marry deeply personal, relatable fears with cosmic horror is nearly unparalleled in games. While mechanically rusty, *Amnesia: Rebirth* deserves to go down as one of the most effective and mind-bending horror games of our generation, just like its predecessor. See you on the other side. ■

DON'T FORGET *A quick catch up on the* Amnesia *mythos*

VITAE
An alchemical substance produced by causing mental and physical anguish in higher-order animals, including humans.

ORBS
Poorly-understood artefacts of cosmic power that may have the ability to enable communication or travel between realities.
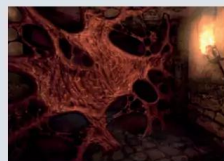
THE SHADOW
A hostile force that pursues any who misuse the power of the orbs. It manifests as a fleshy mass that infects everything around it.

PC PowerPlay — VERDICT — 91

Amnesia: Rebirth is a brilliantly told tale of terror worthy of the series, even if the ride is a little old and clunky.

I feel like this is symbolic of something and I really don't like it.

Side effects may include thinking that playing this game at night was a good idea.
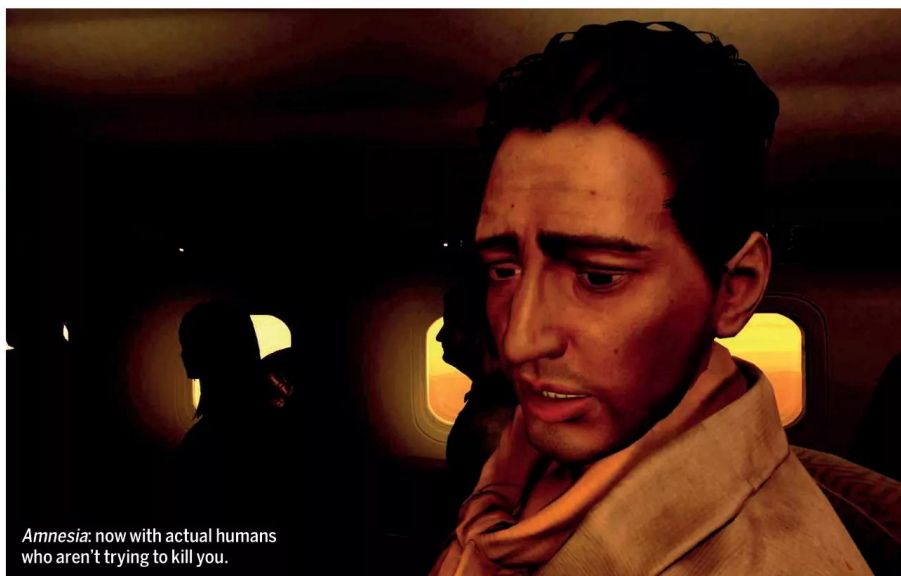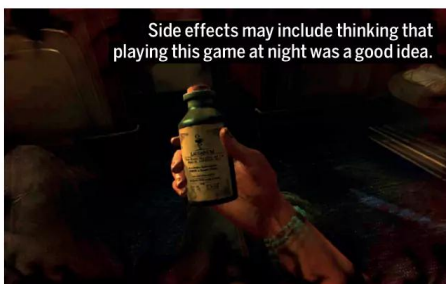
Amnesia: now with actual humans who aren't trying to kill you.

HINT
Matches can be used to light up dark areas and to light torches and other lights by interacting with them.
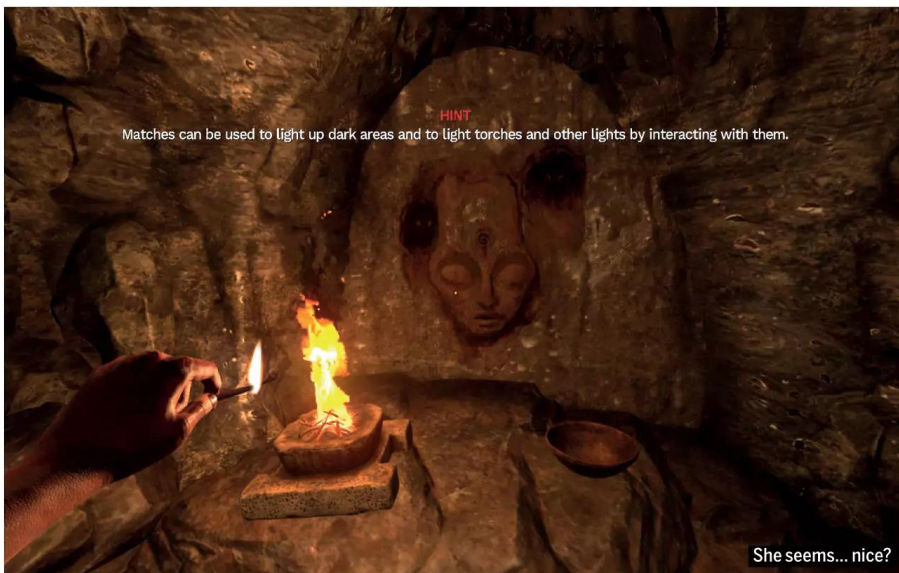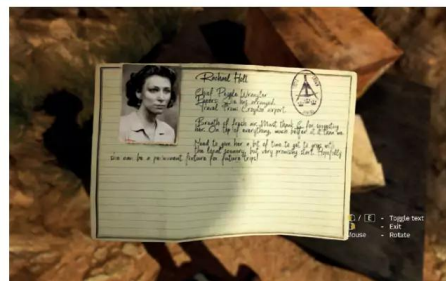
Even the creepy discarded dolls are fully physics enabled.

She seems... nice?

ON ME HEAD, SON

A solid if uninspiring season awaits, as **FIFA 21**
sneaks a top half finish. *By Dave Meikleham*

E A's soccer sim has been going through the motions for years now. Ever since *FIFA 14* launched, it's been hard to shake the sense each new entry has acted as a barely reskinned version of its predecessor. It's an accusation you can definitely lay at *FIFA 21*'s feet. Though welcome improvements have been made since *FIFA 20*, this sports package could do with an overhaul.

Before I start going studs up on *FIFA 21*, EA deserves credit for making the on-pitch action feel less sterile and predictable. Far too often, players in *FIFA 20* felt like they were stuck on an invisible eight-directional axis – like their movement was inhibited by some unseen force. This time, movement feels more freeform, with unpredictable spaces opening up in a way that didn't happen in *FIFA 20*.

The game's physics really are stupid, though. *PES* has long held an advantage when it comes to believable ball movement, and the gap between the two soccer rivals hasn't closed in 2020. Whereas the football in Konami's series behaves like its own entity, the ball in *FIFA 21* is just... well, flat. Predictable and prone to travelling in identical fashion no matter how hard you hit it, it often looks fake in motion.

At least tackling has improved. Short-range lunges feel more effective, and I usually make a half a dozen or so successful interceptions a half. Winning the ball back occasionally feels so precise, I've temporarily turned Arsenal's normally disastrous David Luiz into a functional centre back during lengthy spells of Career Mode.

FIFA's non-FUT headline mode has received welcome improvements with a renewed focus on training and squad management. Playing out fitness minigames in real-time ensures your players are as sharp as possible, while simming sessions lessens their impact. Sharpness is also affected by giving players sustained runs in your first 11. Balancing a competitive squad over a 38 game season is a slightly stressful yet rewarding challenge.

The biggest Career Mode addition comes in the form of new sim features that let you play out matches like *Football Manager* lite. Presented in top-down tactical menus, you're free to make subs and formations

> **The biggest addition comes in the form of new sim features**

changes on the fly as you chew your nails while the AI tries to win matches for your club.

FUT IT OUT

Then there's Ultimate Team. *FIFA*'s card-collecting mode has received a lot of bad press over the years, and the continuing presence of pay-to-win features feel as tone deaf as ever. FUT lets you build custom squads by opening card packs containing players and cosmetic items, like new kits or club badges. While you can unlock packs by grinding through online matches, it's quicker to buy them by spending actual money. If you feel loot boxes should go in the bin right alongside Project Big Picture, FUT will continue to leave a bad taste in your mouth.

At least EA has made some welcome changes to the mode. First up, fitness cards have been scrapped. Not only does this mean your squad goes into each match in peak condition, it stops players from hoarding tons of stamina-boosting cards before selling them on the online transfer market. FUT's best new signing, though? Silly stadium customisation features that let you add huge cardboard cutouts for your stands. Are you an obsessed Newcastle fan? Here, stick this colossal cutout of Alan Shearer behind your goal.

Despite improvements, *FIFA* continues to leave me a little cold. Does it play a more thoughtful game of football than last season? Sure. Sadly, it's also a fairly rote update that fails to meaningfully evolve the series' on-field action. *FIFA 21* serves up solid football, but like VAR, EA's latest entry still has some way to go before it fully captures the true spirit of the sport. ∎

PC PowerPlay   **VERDICT**

70

FIFA 21 fixes some on-pitch issues, though it stops short of giving the series the meaningful overhaul it needs.

ONES TO WATCH *This season's best young stars*

KYLIAN MBAPPÉ
Remains a superior striker thanks to his blistering pace. We still hate his 'Cry Baby' celebration, though.

MATTHIJS DE LIGT
The hottest young defender in world football plays with a composure well beyond his tender years.

JADON SANDON
The young Englishman continues to rip the Bundesliga apart. How Man United would love to have him on the books.

KAI HAVERTZ
Chelsea's right winger has one of the highest potential ratings in *FIFA 21*. If the Blues ever sell him, they'll get a colossal fee.

Crossing is a little more effective than it was in *FIFA 20*.

CHE 1 - 2 ARS
45:48 +2'

28 AZPILICUETA

34 XHAKA

Goalies are fairly reliable. Now touch *all* the wood.

There are some truly obnoxious celebrations this season.

Pacey strikers are still king. We pity those virtual fullbacks.

Yes, Ronaldo's questionable top knot has made the cut. Ugh.

SMASH THE FASH

PARTISANS: 1941 is a tactics game with heart as well as smarts. *By Rick Lane*

While *Partisans: 1941* may look drier than a towel in Death Valley, a game with more brown in it than your average furniture warehouse, one should never judge a guerrilla fighter by the condition of their outfit. Behind *Partisans'* mud-stained trousers lies a capable real-time tactics game with some radical ideas and heart in abundance.

The game involves controlling a group of Russian resistance fighters dedicated to being a thorn in Hitler's side while his armies sweep across the Soviet Union during Operation Barbarossa. From your base situated deep in the forest, your ragtag band embarks on a series of increasingly daring raids against the Wehrmacht.

The core is similar to most other real-time tactics games. Each mission sees you pick several of your partisans to complete an objective in a large, openly explorable map, before safely exfiltrating back to your camp. These maps are swarming with guards that range from Polizei – a militia of Russian citizens working for the Germans – to crack SS soldiers whose machine-guns can rip up your squad like an unsolicited takeaway leaflet. Their sweeping vision cones and the complex arrangement of their posts and patrols makes every step your squad takes fraught with danger. Hence, the meat of the game involves evading, tricking, and ambushing these patrols, picking them off as you creep to your goal.

BOTTLE IT

Your partisans start off with next to nothing, a single knife and a handful of rocks you can use to distract guards. Soon, though, you'll have scavenged a wide range of equipment and abilities that'll help you get the upper hand, from guns and grenades to mines and trip-wires. My favourite partisan 'gadget' is a simple bottle filled with water. When placed on the ground, bottles attract the attention of thirsty guards hoping for a free swig of schnapps, making them useful for disrupting patrol patterns.

Generally, *Partisans'* systems are more forgiving than its key touchstone *Commandos*, but it's also more nuanced. A good example of this is stealth. A guard's ability to detect you is based on proximity, so if you accidentally stumble across the edge of their vision cone, you've usually got time to rectify the problem. But guards can hear you as well as see you. Hiding inside a bush will you make you practically invisible, but if you move around too much when a guard is nearby, they'll be alerted by the rustling foliage.

Another crucial difference between *Partisans* and *Commandos* is that being detected doesn't necessarily mean mission failure. Combat is as much a part of the game as stealth. It's advisable to soften up

> ## The more I played of *Partisans*, the more I enjoyed it.

guard patrols and encampments with stealth before engaging them head on. It's equally possible to defend yourself when things go awry, shifting your partisans into cover, using abilities like suppressing fire to keep the Nazis at bay, and using grenades to flush them out so your riflemen can pick them off. The fuzzier edge to *Partisans'* tactical play is mainly a good thing, but it does have downsides. Judging the effects of more aggressive tactics is difficult. It's hard to know whether a gunshot will simply alert the troops in the immediate area, or bring half the Wehrmacht down on your position.

After each mission, your partisans return to their forest camp, where a resource management minigame awaits. You need to find food and resources to keep the camp running, while also sending your partisans on autonomous side-missions for varying rewards. I like this element thematically, and the way equipment carries over from mission to mission is a neat touch, encouraging you to weigh your options and ensure that every bullet counts.

The more I played of *Partisans*, the more I enjoyed it. I like the slow build-up of your forces, the careful drip-feed of new characters and equipment. I like how each new mission is incrementally more ambitious than the last, starting with convoy assaults and rescuing civilians from Nazi death squads, then evolving into blowing up bridges and assassinating local comptrollers. I particularly like how earnest the whole experience is. The game clearly has great respect for its subject matter. It may be a bit shabby to look at, but with a redoubt spirit and a little ingenuity, *Partisans* certainly gets the job done. ∎

PARTISAN STORE

Unique abilities for your squad

ZORIN
Age: 29
Specialities: Leadership, Recon
Weapon proficiency: Melee, pistol, rifle
Key Ability: Knife throw

SANEK
Age: 14
Specialities: Stealth, distraction
Weapon proficiency: Shotgun
Key Ability: Disguise

VALYA
Age: 21
Specialities: Sniping
Weapon proficiency: Rifle
Key Ability: Aimed shot

PC PowerPlay

VERDICT

80

Partisans combines a classic real-time tactics structure with more flexible systems for a winning formula.

Partisans won't win any beauty contests. Not that I'd say it to its face.

Reach the execution site in 25 minutes

Eliminate enemies on the square

Find the village head

Don't let yourself be found

Each character has special skills, like quickly blasting three enemies with a pistol.

INVENTORY · SKILLS · TACTICAL MAP · ENCYCLOPEDIA

Commander Zorin

◇ INJURIES ◇

◇ EFFECTS ◇

STORAGE

BACKPACK

Please click "TO MISSION"

TO MISSION ★

Pulling off a good ambush is really satisfying.

★ GRIST TO THE MILL

Eliminate the enemies near the mill

Weapons and equipment are persistent across the game, so get scavenging!

69

OIL AND WATER

NOITA offers destructive sorcery action in a fun, albeit messy roguelike package. *By Luke Winkie*

During one *Noita* run, I purchased a spell modifier I didn't fully understand. One of the core ideas in this roguelike is that you can alter your magic wands, becoming a true arcane master with clever min-maxing. But there's no safety net if your experimentation goes awry, or if you're not paying attention. When I next pointed my wand at a wall and clicked, a giant razorblade shot out, cranked a U-turn and ploughed into my wizard. Dead.

After doing my research, I believe the modifier I attached to that wand was called 'boomerang', and according to the greater *Noita* community, it's pretty much useless unless paired with various healing spells. That's the thing with *Noita*: even the power-ups are conspiring to kill you.

There was a time, in the ice caves, where I found a wand that had an ability called 'unstable crystal' on it. I pulled the trigger, and immediately exploded, provoking another game over. I've accidentally polymorphed myself too many times to count. I've self-immolated, I've detonated explosive barrels that I didn't see until it was too late, and I've drowned in a vat full of whiskey. But despite all of those mishaps, I think *Noita* is one of the best roguelikes of the year (a year with *Spelunky 2* and *Hades*, no less). It isn't an easy game, nor is it fair, or balanced, or well-polished. But it can be absurd, brilliant fun – as long as you have the stomach for some turbid deaths along the way.

Every new *Noita* seed begins with your character – a robed, Dementor-like wizard – perched at the precipice of a yawning cavern system just below your feet. Like most roguelikes, the structure of the world is consistent every time out. If you decide to traverse downwards (which isn't the only direction you're limited to), the wizard will first encounter the mines, then the coal pits, the frozen depths, a steel alien stronghold, a toxic jungle, and so on.

There is no meta progression. You will not be increasing your health or attack power at the start of each run; there is no talent tree here to bail you out. Instead, every game of *Noita* is a self-contained universe up until the moment the warlock on screen meets their demise. Freedom, here, can only be achieved by getting good.

FLASK MANAGER

If you know anything about *Noita*, it's probably that every pixel in the game is fully simulated. That became a huge talking point while the game was in Early Access, and what that means in practice is that nothing in the environment is static, and objects

> **Freedom, here, can only be achieved by getting good.**

and enemies tend to cascade like teetering dominoes stacked in front of one another. Shoot a lantern with your wand, and watch the flames lazily snake through the moss and wood below. Toss a bomb at the bottom of an underground lake and the bedrock is obliterated, creating a new waterfall that tumbles through the shattered earth.

One of *Noita*'s most ingenious uses of this 2D physics simulation is how it equips your wizard with flasks that can capture any of the fluidic reagents in the game. Sometimes, they can be used as magic potions – downing a glass of ambrosia will render yourself briefly immortal. Other times though, you can use them to solve problems with your brain. That seemingly impassable lava pit on the eastern end of the mines? Consider spraying your water bottle at it. The whole system gives *Noita* a simmy granularity that a lot of other games in the genre lack.

Most newcomers will scarcely scratch the surface of *Noita*'s underworld. This is a punishing game, and you will die in some deeply stupid ways. I sometimes don't know how I'm meant to succeed, which is frustrating.

That said, there are very few games that can create the sheer maelstrom of activity that *Noita* does. You're in a firefight with a shock trooper, your spell zings over his head and strikes the pile of gunpowder lurking in the shadows. Suddenly, both of you are trapped in a burning chasm, as the wooden vat containing a metric ton of oil begins to deteriorate in the flames, leading to more chaos. *Noita* desperately wants to show you what its little box of horrors is capable of. You just need to be patient enough to enjoy it. ∎

SPELLING MISTAKES *My most pathetic deaths*
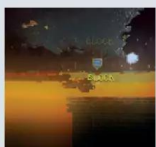
Drowned in a mixture of lava and other nasty stuff.	Threw a stick of dynamite into a vat of oil.	Drowned in whisky. There are worse ways to go.	Learned what the gunpowder potion does, the hard way.
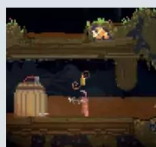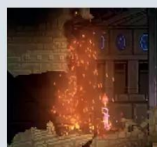
PC PowerPlay | **VERDICT**

Roguelike adventure and spell-building in a fully simulated, dynamic world that wants to see you dead.

81

You can wizard your way out of anything.

The world in *Noita* is deceptively huge.

The particle effects on *Noita*'s spells are glorious.

Every pixel is a danger.

It's gorier than you might expect.

WAR DEAL

SQUAD is a game for soldiers who actually want to work as a team. *By Luke Kemp*

Perhaps you like to jump in and out of online shooters, and you're looking for something like *Call of Duty* to dip into a few times a month. This is not that game. On the other hand, if you're looking for something that would jump out of the monitor and slap you around the face, you'll be in *oorah*! heaven here. It's a game that would only hold your hand in order to crush it.

The fact that *Squad* marched around Early Access for almost *five years* before official release might tell you something. Like many games that linger in public development for long periods of time, the final version is an awkward, sharp-edged puzzle for anybody approaching it for the first time. There's a tutorial, including a large area for you to play around with the systems in, but there's absolutely no way you'll get your head around everything without a crash course of wikis, YouTube videos, and friendly veteran players.

From a distance, the fundamentals appear deceptively simple. There are several game modes, but they all essentially boil down to attack and defend. The most popular modes (by far) are concerned with the comfortingly familiar concept of two teams battling to capture and hold control points on the map. Success or failure is utterly dependent on your team's ability to play in the way that *Squad* intends you to.

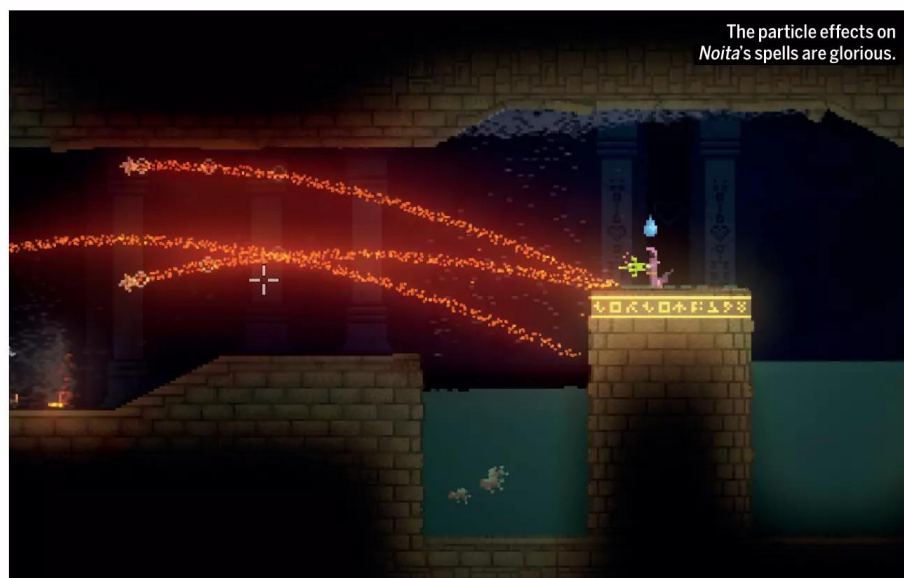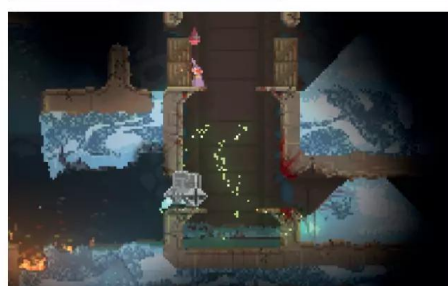Death comes quickly and easily in this game. Expect to get killed a *lot* by players you never even see. This is one of the first things I learned and so, when I was carefully creeping through some trees, I wasn't surprised when somebody from another squad came up alongside me and asked if there was danger near. I warned him about a sniper, he thanked me, then continued on his way. Matches are full of little things like this that, in the moment, really help you soak up the atmosphere of a tense and unpredictable battlefield.

Kills are usually the least important element of a match

SOLDIER PADS

There is one significant issue that results in many unfair, frustrating deaths. Teammates are, as you would expect, identified by usernames visible above their heads. However, these are displayed with worrying inconsistency. A friendly right in front of you might have the name missing while you can see that of another across the street. Add this to the fact that it's usually very difficult to distinguish between friend and foe based on character models, and you won't be surprised to hear that every match of *Squad* that I've played has featured a lot of team kills. The fact that the game has left Early Access with what is a pretty fundamental flaw indicates that the developer has no intention of fixing it.

Yet despite this, I still manage to have a lot of fun, and create countless unique anecdotes. Kills are usually the least important element of a match, really, and this is reflected in the score weighting. Kill an enemy and, if they're not revived, you've cost the other team a ticket. You can however lose them more tickets (or even gain some for your team) and/or score big points through actions such as capturing and defending points, helping to build structures, deconstructing enemy structures, and reviving your teammates. I love the fact that not only is the leaderboard divided by team, the teams are then ranked by squad – rather than by individual player.

It's a game so dense with variables, I haven't scratched the surface here; but this is a review, not a wiki entry. The most important thing to understand is that this is a game that only works – and, indeed, is only actually fun – when you act as part of a team. Making a tense run across a road when you suspect there's a sniper above you, reviving and healing teammates while under fire, helping several others establish a new base... it's thrilling, intensely satisfying stuff. If only identifying enemies was as easy as in, well, pretty much any other online game I've ever played. That would turn a good game into a great one. ■

PC PowerPlay | **VERDICT**

Squad is a hardcore team game that forces you to plays its way, but it impresses despite some unfriendly systems.

75

GETTING STARTED *The first ten hours of playing* Squad

Enjoyment (vertical axis) vs Time (hours) (horizontal axis, 0–10)

- What the hell is going on?
- Still not sure. To the wiki!
- Usually playing as a medic now. I'm helping!
- I'm getting it. Intense, but fun.
- I've scored a total of three kills. Happy with that.
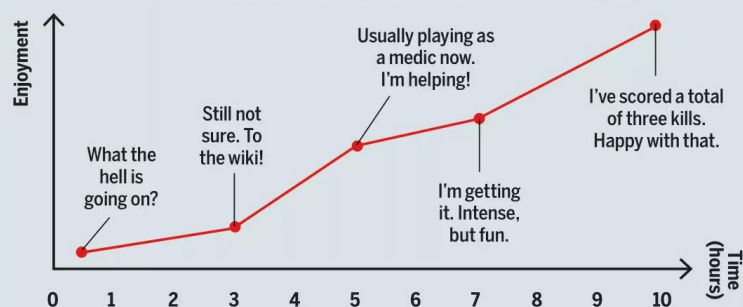
Friendlies? Enemies? Who knows?

disconnected.

Only medics can fully heal themselves and other players.

Police Station

Medical Kit

Do not get in a helicopter without practicing...
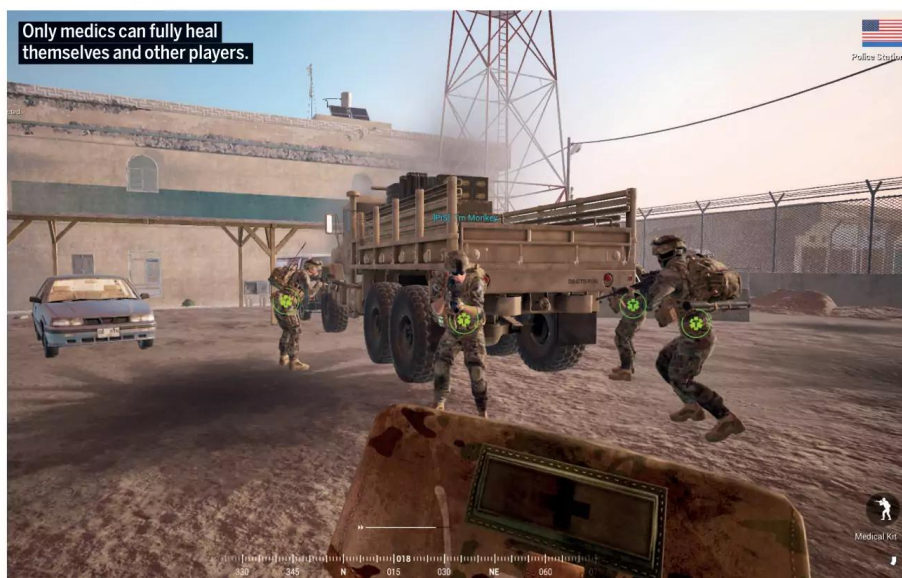
Avoid eye contact at all costs.

For sale: APC. One not very careful owner.

TIMELY RETURN

It doesn't do everything smoothly, but **AGE OF EMPIRES III: DEFINITIVE EDITION** still offers the easiest way to get into this classic RTS series. *By Robert Zak*

Honestly, *Age of Empires III* comes from an era of 3D games that don't exactly beg to be remastered. It's a game where increased resolutions serve to highlight the half-baked animations that were previously hidden among pixels. So a remaster of this is like watching historical reenactments in 4K only to find that they're performed by animatronic soldiers. Yet while there's not much gained in this definitive edition, not all is lost either.

Series fans will know the drill in *Age of Empires III*: plonk down a town centre anywhere on a map, build villagers, and scurry around extracting food, wood, and gold from the earth that you use to build armies, improve your technologies, and wipe out your enemies.

One of the most joyous things about *Age of Empires* has always been the faction variety and the tradition continues here. You have 16 civilisations to choose from, and each has a host of unique units and quirks that make them distinctive.

There are two all-new civs in the definitive edition, both with some interesting bonuses: Sweden gets cheap mercenaries and charming wooden torps (quaint little huts) that gather resources, while Inca can garrison military in many of its buildings and use priestesses to woo enemies over to your side.

> ## The problems with *Age of Empires III* start when you zoom in.

Age of Empires III requires cohesive strategy, fast clicking, and the mental motivation to learn a thousand hotkeys. It's demanding and intense, but also deceptively simple, and a whole lot less fiddly than its predecessors.

You now only have three resources to worry about instead of four and you no longer need special buildings to store resources, cutting down on menial micro-management. There's an enjoyable card system too, which lets you set up a deck between battles, then call in supplies from your home city on a timer.

All this makes for a fast-flowing game that condenses centuries of progress into battles that last between ten minutes and an hour. It's a satisfying journey across hundreds of years surrounding the colonial era, punctuated by flashy new units that reflect your progress.

SHOWING ITS AGE

The problems with *Age of Empires III* start when you zoom in, seeing how messy things are up close. Combat neither looks nor feels great – your own units often struggle to get around each other, pathfinding is dodgy and inflexible. For a game gloating about its updated physics engine, it's strange that the physicality of its combat makes it seem like everyone's wielding weapons and armour forged from monopole north-facing magnets.

Age of Empires III remains a solid skirmish-style RTS that would fare better were it not released shortly after a game that's so clearly Microsoft's favourite strategy baby. Where *Age of Empires II* received several expansions over the last decade, including an all-new one for the *Definitive Edition*, there are no new campaigns here beyond the base game and its two expansions released at the time. And while there are a couple of highlights in there, most notably the tale of Native American soldiers in the *WarChiefs* expansion, they don't really add up.

If you care little for single-player campaigns and are looking for a brisk RTS to play online with friends, then this is an easy path into a stalwart series and a timelessly fun strategy formula, with plenty of touches that make it easy to acclimatise to. If you're an *Age of Empires III* fan, then this is the best way to play it going forward, even if the extent of the improvements reflects its status as the least loved entry in the series.

Age of Empires III may require less patience than *Age of Empires II*, but it's also less rewarding over the long term, struggling to match the elegance of a game that's been updated and refined for 21 years. ∎

FIGHT THE GOOD FIGHT

The pace of an Age of Empires III *game ranges between brisk and hectic*

Clicking intensity

FEED AND BREED
Find hotkeys for selecting villagers, jumping to the town centre, and building more villagers.

SHINE THE HELMETS
Once you have enough resources you can advance to the next age.

BLOW YOUR LOAD
The inevitable first attack where you *think* you can win with your ragtag army, but they get blown away, forcing a full humiliating, whimpering retreat.

HAVE A BREATHER
You'll be tired at this point – forgetting which keyboard shortcut did what while your mouse glistens from your oily fingers.

FINAL PUSH
It's make or break time, as you send the full force of your army at the enemy (assuming they don't do it first).

Time

PC PowerPlay

VERDICT

70

Age of Empires III is a modest remaster of a fun but flawed RTS that's stuck in its predecessor's ever-lengthening shadow.

Historical battles are a nice addition, offering pre-existing structures to attack and defend.

Each civ has a unique home city screen where you pick cards and make superfluous cosmetic changes.

The 'Classic' UI is in the style of the 2005 version.

The campaigns may have been cinematic in 2005, not so much in 2020.

Hero units can be revived if they die in battle.
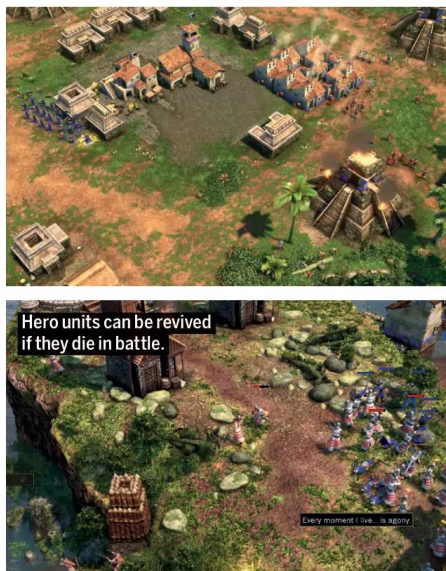
FAMILY AFFAIR

Relive the rise and fall of Tommy Angelo in **MAFIA: DEFINITIVE EDITION**, a shiny remake that's still rooted in the past. *By Andy Kelly*

Welcome to the 1930s. The economy has collapsed, authoritarian regimes are gaining power around the world, dust storms are killing crops, and to make matters worse, booze has been declared illegal. But for Tommy Angelo, a lowly cab driver in the city of Lost Heaven, the Dirty Thirties are an age of opportunity. This is the story of his rise from working stiff to mafia big shot.

But before you dive into the criminal underworld, you have to spend some time earning an honest living. The first mission in *Mafia* sees you driving a taxi, picking up passengers, and getting a feel for the city. The *Mafia* series has always been great at slowing down and giving you a chance to immerse yourself in its evocative world, and this glitzy remake of the 2002 original is no different.

Naturally, it doesn't last long. After a fateful encounter, Tommy ditches his cab and joins the Salieri crime family. The jobs are simple at first: squeezing protection money out of local business owners, driving people around town. But thanks to a vibrantly paced story, it's not long before you get to indulge in car chases, shootouts, robberies, and all the other jolly activities of a hard-working mobster.

MOB RULE

Mafia features an open, explorable city, but it's not an open world game.

This is a completely linear experience, split into tightly designed missions, so don't go in expecting a big *GTA*-style playground. It's a cover shooter, really, interspersed with long drives and slower moments of scene-setting to let you soak up the atmosphere, before the bullets start flying.

It gets the balance right. You rarely feel overloaded with combat, with plenty of breaks in between to wander around, talk to people, or take a drive. The shooting is chunky and satisfying, but ultimately pretty basic. And sluggish character movement makes sprinting between, and snapping to, pieces of cover feel clumsier than it should.

It is, honestly, a deeply average, old-fashioned shooter. But through its use of set-pieces, world-building, and storytelling, I was often having too much fun to care. One mission in particular, which takes place at night during an apocalyptic thunderstorm, is brilliantly crafted, thrillingly tense, and hugely atmospheric. It's still just

> **Deep down it's the same game and sticks closely to the source material**

driving and shooting, but the way it's packaged is magnificent.

It's all smoke and mirrors, of course. But when it's this entertaining, I don't mind being fooled. Make peace with the fact that *Mafia* is a heavily scripted, totally linear, story-led shooter and you can just sit back and enjoy the ride. The story isn't as good as *Mafia II*'s, but the tale of Tommy Angelo's rise and fall is very well told.

But it's worth remembering that the bones of *Mafia: Definitive Edition* are almost 20 years old. The game has been rebuilt with new technology, but deep down it's the same game and sticks closely to the source material, especially in how the missions are structured and paced.

Of course, it looks a whole lot better. Lost Heaven is a little emptier than some modern videogame cities, but it's occasionally incredible to look at – especially at night when it's raining. The period accurate signage, fashion and vehicles do a good job of making you feel like you've stepped back in time, in addition to a nice selection of old timey music on the radio. The sense of place is superb.

And if you really want to get lost in the setting, you can set it so that driving over the speed limit, running red lights, or bumping into other cars will get you in trouble with the cops. This adds a layer of simulation to the city, but you can disable it if you'd rather just gun it to the next location without worrying about the law.

Whether you're well acquainted with *Mafia* or a newcomer, this is a solid remake that's well worth playing. The new tech doesn't hide the fact that it's a game built on 18-year-old foundations, but it's a fun and well-presented gangster epic with a compelling setting. ∎

MEAN STREETS *Places to visit in Lost Heaven*

LITTLE ITALY
Tommy's boss, Don Salieri, has operated here since the 1920s, but is beginning to lose his grip on the neighbourhood.

CENTRAL ISLAND
Lost Heaven's tallest skyscrapers are all squeezed onto this island, and can be seen from most places in the city.

DOWNTOWN
This is the bustling heart of Lost Heaven, with offices, luxury hotels, department stores, and a grand church.

BEECH HILL
You'll find the mansions of Lost Heaven's wealthiest citizens here, which makes it a fine target for a crook.

PC PowerPlay

VERDICT

A decent, if unremarkable, cover shooter, elevated by artful scene-setting and memorable set-pieces.

79

Tommy has been given a pretty major facelift in the remake.

Seems not all cars from the 1930s were boxy jalopies.

Tommy the cabbie, before he becomes a gangster.

The facial animation is some of the best I've seen.

Looking down on the city from the suburbs.

Tech

POWER AWARD

Our Power Award is given to products that are best in class no matter your budget.

SMART BUY

Our Smart Buy Award goes to products that balance performance with price tag.
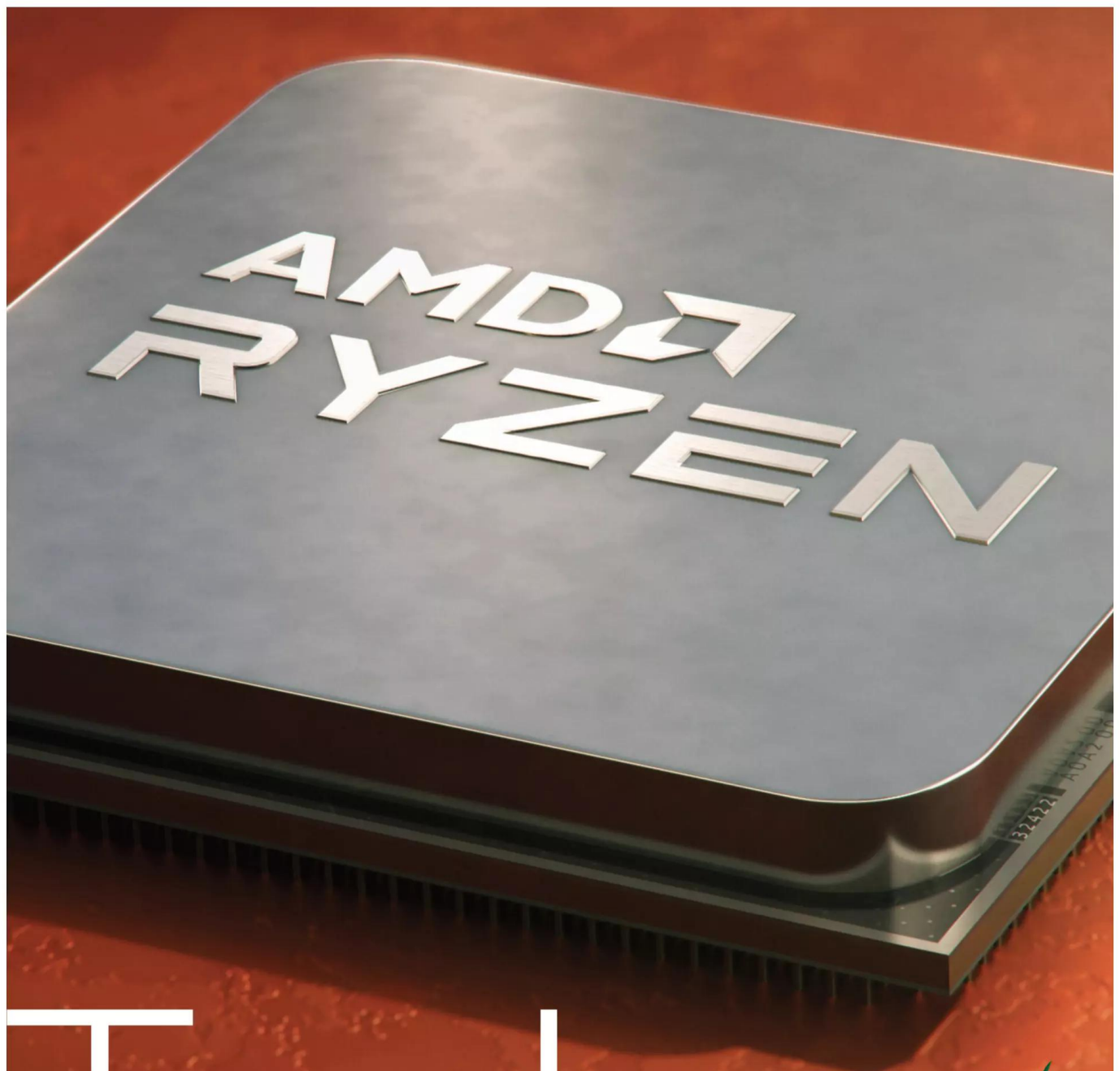
YOUR GUIDE TO PC GAMING HARDWARE.

THE PCPP TESTBENCH
CPU INTEL I7 7700K INTEL.COM.AU
MOBO ASUS Z270 ROG CROSSHAIR VI HERO ASUS.COM.AU
RAM 2 X BALLISTIX 8GB DDR4-3200 CRUCIAL.COM
PSU CORSAIR 850W PSU CORSAIR.COM
COOLING H105 CORSAIR COOLER WWW.CORSAIR.COM.AU
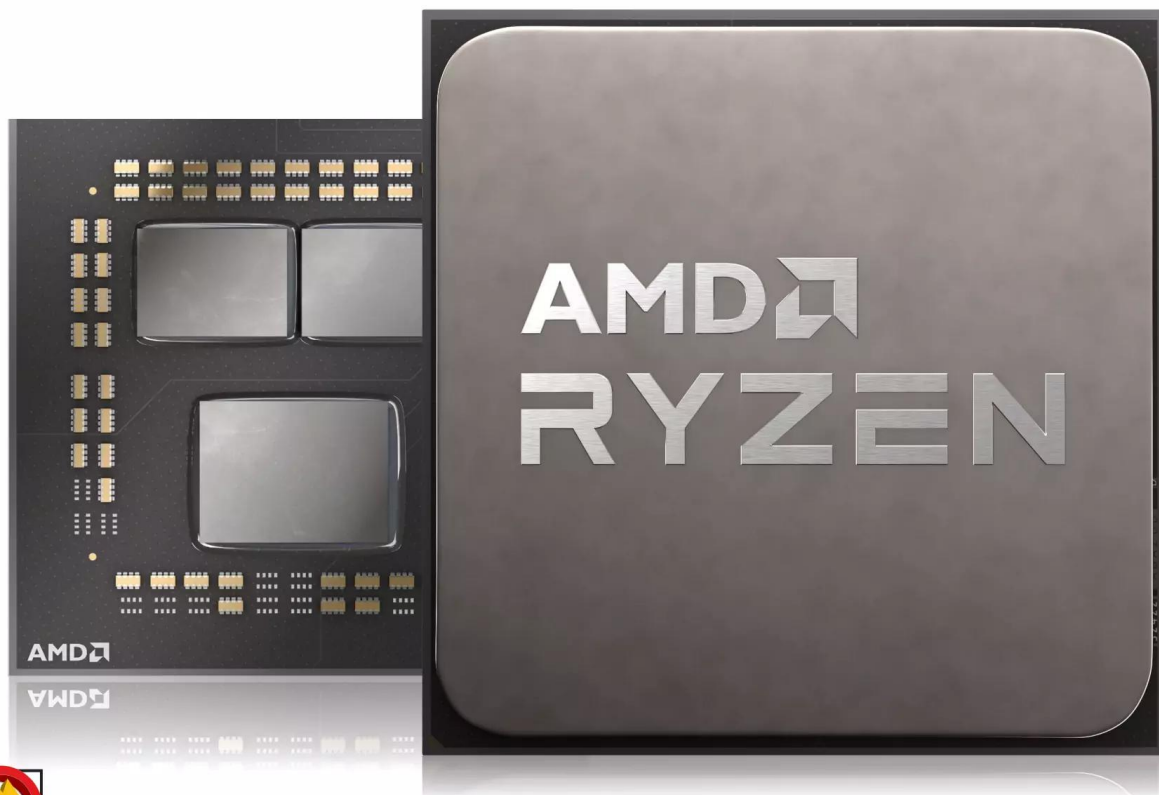
CPU

AMD Ryzen 7 5800X and Ryzen 9 5950X

There's a new sheriff in town. **Chris Szewczyk** is in the Labs.

PRICE 5800X: $699, 5950X: $1249 ONLINE www.amd.com

When AMD launched its first generation Ryzen processors in 2016, we applauded the massive performance uplift they brought, particularly the strong multithreaded performance. One area it tended to lag behind Intel in, though, was in single threaded performance and gaming. Though the Zen+ and Zen 2 generations closed the gap, Intel was always able to compete by refreshing its Skylake architecture with significant frequency increases.

AMD believes it has reached the inflection point where it has achieved undisputed leadership. The company claims that its CPU options win in not some, but all the relevant categories, including multi-threaded performance, single threaded and gaming performance, performance per watt and value for money. Big claims indeed! Should your next upgrade be AMD? We have the Ryzen 7 5800X and Ryzen 9 5950X on hand to answer that question.

THE BIG CHANGES

AMD describes the Zen 3 architectural overhaul as the biggest since the first-generation Ryzen. The chiplet design and 7nm process node remain the same. Changes include improved branch prediction, reduced latency and improved caching performance. Improving latency was a key focus given this is an area where Ryzen 3000 processors lost some gaming performance. All in all, AMD

AMD Ryzen 7 5800X
Socket AM4;
8core/16thread; 3.8GHz base/4.7GHz boost clock;
32MB L3 cache; Supports DDR4-3200; 105W TDP.

AMD Ryzen 9 5950X
Socket AM4;
16core/32thread; 3.4GHz base/4.9GHz boost clock;
64MB L3 cache; Supports DDR4-3200; 105W TDP.

claims up to a 19 percent uplift in instructions per cycle. Combine this with the increases in frequency and it's clear that 5000 series processors promise to be much faster than their predecessors.

While the I/O die remains unchanged, the core dies have undergone some fundamental changes. Six and eight core CPUs are all contained on the one so called CCX, whereas before they were spread across two. These cores can now access the full 32MB of cache directly which accelerates core and cache communication and reduces latency. This is key for gaming. The Infinity Fabric clock is unchanged at 1800MHz, meaning the IF clock and DDR4-3600 (or 1800MHz Double Data Rate)

remains the memory sweet spot.

The 5800X is an 8-core/16 thread model with a 105W TDP. Its base clock is 3.8GHz and its boost clock is listed at 4.7GHz, though our software readings were sometimes higher than this, in fact as high as 5.0GHz. As mentioned earlier, it's got 32MB of L3 cache that all cores can access. It's priced at $699. It can be considered a replacement for the

3800X and XT. For now there isn't a 65W option. Given the popularity of the retiring 3700X, we're a little surprised, though we may well see one later. If you wish to 'create your own' 65W processor though, you can with AMD's under-appreciated ECO mode. You'll lose a bit of performance of course but it's a game changer for some users.

The 5000 series might be killer CPUs, but only the six-core 5600X

includes a cooler, which is a tick against them. All Ryzen 5000 CPUs are compatible with X570 and B550 motherboards. X570 boards in particular will require a BIOS update, with most, if not all X470 and B450 models adding BIOS support in early 2021.

PERFORMANCE GAINS

5950X is the top model in the range with 16 cores and 32 threads. Its

AMD RYZEN 7 5800X AND RYZEN 9 5950X BENCHMARK RESULTS

Indicates Best Result	X264 v5.0 Video Encoding	Cinebench 20	Cinebench 20	Blender 2.79 BMW Render	7Zip	CPU-Z	CPU-Z
	PASS 2 AVG FPS	MULTI THREAD SCORE	SINGLE THREAD SCORE	TIME (SECONDS) LOWER IS BETTER	MILLION INSTRUC-TION PER SECOND	SINGLE THREAD SCORE	MULTI THREAD SCORE
AMD RYZEN 9 5950X	80.05	9,562	627	123.0	108,088	677.0	11,758
AMD RYZEN 7 5800X	51.07	5,845	609	206.2	69,871	659.0	6,698
AMD RYZEN 7 3700X	43.46	4,809	506	234.7	58,642	529.5	5,576
AMD RYZEN 9 3900X	61.34	7,205	520	154.2	83,538	548.0	8,411
INTEL CORE i9-9900K	42.70	4,918	498	217.9	50,791	546.3	5,562
INTEL CORE i9-10900K	53.70	6,357	535	167.8	61,658	562.7	7,443

	AS SSD	AS SSD	AS SSD	AS SSD	POV-RAY	Handbrake Video Encoding	Peak Power Consumption
	SEQUENTIAL READ	SEQUENTIAL WRITE	4K READ	4K WRITE	RAY TRACING - PIX-ELS PER SECOND	4K 10-BIT HEVC TO 1080P FPS	WATTS (SYSTEM WALL DRAW)
AMD RYZEN 9 5950X	5555.8	3982.3	84.5	209.3	8,468	76.6	216.4
AMD RYZEN 7 5800X	5581.5	3993.1	85.1	213.8	5,260	69.1	206.1
AMD RYZEN 7 3700X	5505.2	3930.6	81.5	192.8	4,298	59.3	175.4
AMD RYZEN 9 3900X	5507.7	3952.6	81.5	193.1	6,357	65.7	231.7
INTEL CORE i9-9900K	2730.8	2508.1	64.4	129.9	4,246	58.2	246.1
INTEL CORE i9-10900K	2850.2	2624.8	65.4	129.3	5,531	63.1	309.7

	Civilization VI	Civilization VI	Civilization VI	Ghost Recon: Breakpoint	Metro: Exodus	Metro: Exodus	Middle Earth: Shadow Of War
	1080P, ULTRA, DX12, AVG FPS	1080P, ULTRA, DX12, MIN FPS	1080P, ULTRA, DX12, AI TURN TIME	1080P, LOW, AVG FPS	1080P, ULTRA, DX12, AVG FPS	1080P, ULTRA, DX12, MIN FPS	1080P, LOWEST PRESET, AVG FPS
AMD RYZEN 9 5950X	206	146	6.97	168	100.8	51.8	317
AMD RYZEN 7 5800X	213	153	6.65	178	102.8	56.2	312
AMD RYZEN 7 3700X	198	153	6.89	171	99.7	48.6	228
AMD RYZEN 9 3900X	211	150	6.98	173	98.3	48.9	231
INTEL CORE i9-9900K	207	149	7.12	177	99.0	54.8	259
INTEL CORE i9-10900K	212	153	7.14	180	102.9	55.6	277

base clock is 3.4GHz and its boost clock is 4.9GHz. It packs in 64MB of L3 cache. This is impressive when you consider the TDP is still 105W. It's pretty safe to say that Intel doesn't have anything to compete with this CPU unless you go to ultra-expensive enterprise options. All 5000 series models are unlocked for easy overclocking, support PCIe 4.0, DDR4-3200 (officially) and other AMD technologies such as StoreMI, Precision Boost Overdrive and all can be controlled by the impressive Ryzen Master software.

Now we come to it. Performance. Ryzen 3000 was already competitive with Intel in multithreaded and content creation applications, but with Ryzen 5000 there is now daylight between them. Where the most impressive gains are is in gaming. The 5800X can match and even exceed the 10900K, with the 5950X trending a little behind, likely due to the underutilisation of all those cores. It's definitely no slouch though. Just look at the numbers. AMD is matching or leading everywhere in performance. Well done! Power consumption levels are also impressive. In fact the 5950X system pulled 216W from the wall, less than the 231W we measured from the 12-core 3900X. This again points to a small underutilisation. The 5800X system pulled 206W.

Overclocking is not really recommended. We were able to hit 4.6 and even 4.65GHz on all cores with our 5800X, but this is quite a way below the single-threaded boost clock. With this in mind, if you are gaming or using single threaded applications, you're better off leaving the processor at stock. The processor will boost to a higher level when conditions allow without the heat and power consumption penalty associated with a heavy all core overclock. It's a similar story with the 5950X.

Returning to our original question – should an AMD 5000 series processor be your next upgrade? The answer is yes. Gamers using current Intel Z490 systems will see more of a side grade, though only in terms of gaming performance. Anything related to content creation, power consumption, and cooling requirements see AMD take a bigger lead than it had already. With a hot summer coming, cooling is key and AMD has a huge lead there.

Indicates Best Result	Far Cry New Dawn		3DMark TimeSpy		3DMark TimeSpy Extreme	
	4K ULTRA PRESET AVG FPS	4K ULTRA PRESET MIN FPS	OVERALL SCORE	CPU SCORE	OVERALL SCORE	CPU SCORE
AMD RYZEN 9 5950X	77	65	14,166	13,318	6,847	8,109
AMD RYZEN 7 5800X	77	66	13,824	11,726	6,466	5,510
AMD RYZEN 7 3700X	76	64	13,487	9,943	6,325	4,537
AMD RYZEN 9 3900X	76	65	13,948	12,232	6,681	6,833
INTEL CORE i9-9900K	77	65	13,539	10,376	6,635	4,920
INTEL CORE i9-10900K	77	65	13,836	12,300	6,565	6,205

"ZEN 2" LAYOUT — 16MB L3 CACHE / CPU CORE

"ZEN 3" LAYOUT — 32MB L3 CACHE / CPU CORE

Pic: AMD

"THE 5800X HAS KILLED INTEL'S GAMING LEADERSHIP NARRATIVE. IT DOESN'T MAKE GAMING ON INTEL IRRELEVANT BY ANY STRETCH, BUT IF YOU ADD THE OTHER STRENGTHS INCLUDING ENERGY EFFICIENCY, MULTI-THREADED PERFORMANCE AND PLATFORM FEATURE ADVANTAGE THEN IT'S A CLEAR WINNER."

Upgrading from early Ryzen or pre-Skylake systems will see massive performance improvements as well as better feature support.

The 5800X has killed Intel's gaming leadership narrative. It doesn't make gaming on Intel irrelevant by any stretch, but if you add the other strengths including energy efficiency, multi-threaded performance and platform feature advantage then it's a clear winner. The 5950X is also a stellar CPU but for some different reasons. A 16-core CPU isn't yet ideal for gaming as we see some games struggle to optimally utilise the cores or the chiplet topology. It should be considered the king of multi-threading and content creation. Intel has nothing at the consumer level to compete with it at all.

AMD isn't a charity though. It knows it's got a winner on its hands so pricing has trended upwards, plus you'll need to buy a cooler. But if you're upgrading a compatible AM4 system, this is a moot point. It's really only the price creep that causes Ryzen 5000 to lose a smidgen of its shine. The king sets the rules though, and for now, the king is AMD. Oh, to be a fly on the wall at Intel headquarters right now. **PC**
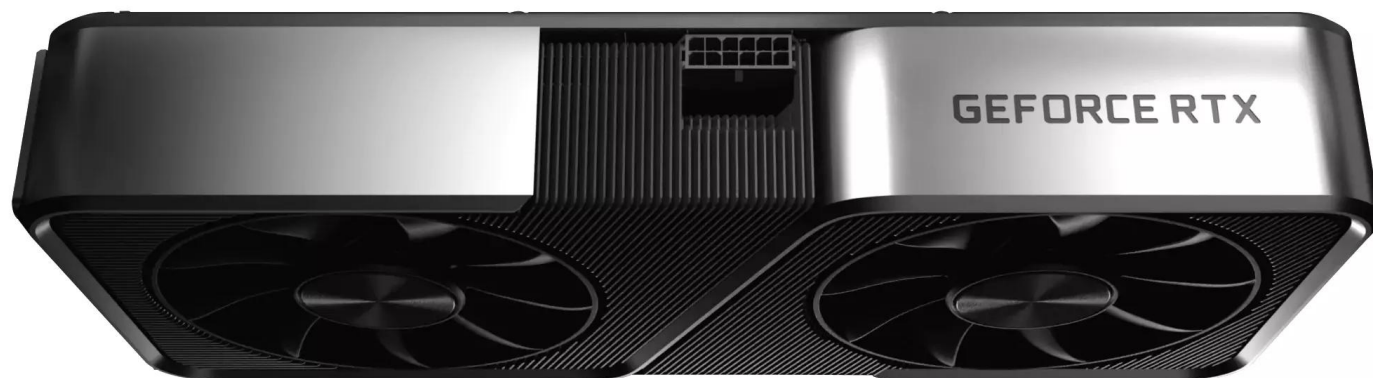
PC PowerPlay

AMD's Ryzen 5000 series takes the outright performance crown. Full stop.

VERDICT

AMD 5800X **99**

AMD 5950X **82**

GRAPHICS CARD

Nvidia GeForce RTX 3070 Founders Edition

Ampere impresses again.

PRICE $809 **ONLINE** www.nvidia.com

The Nvidia RTX 3070 is the third Ampere card to be released and it's a card we've really been looking forward to. The 3080 really surprised us with its inter-generational performance jump and relative value for money. By most standards though, it's still a very expensive card that's priced out of reach of most gamers. The RTX 3070 though is available for under $1,000. That's around half the price of the outgoing 2080 Ti. Since the RTX 3070 purportedly offers performance around the 2080 Ti level, that's an incredible doubling of 'frames per dollar'. We have the RTX 3070 Founders Edition on hand for review. Does it deliver on

its promise? Of course the RTX 3070 includes all the key Ampere features including improved ray tracing support, Broadcast, Reflex and GSync Ultimate.

The RTX 3070 is the first card built with the GA104 GPU. It packs in 5888 shader cores running at a boost clock of 1730 MHz. These are joined by 46 Ray Tracing cores and 184 Tensor cores. It's paired up with 8GB of GDDR6 that runs at 14Gbps over a 256 bit bus for a total of 448GB/s of memory bandwidth. The TDP is 220W which is far more palatable than the 350W of many RTX 3080s. It comes with the same single 12-pin power connector found on the 3080 and 3090 FE cards. It still has the rather odd mid card

Nvidia GeForce RTX 3070 Founders Edition
5888 Cuda cores; 1500 MHz Base Clock, 1730 MHz Boost Clock; 8GB GDDR6 14 Gbps memory, 448 GB/s Memory Bandwidth; 3x Display Port 1.4a, 1x HDMI 2.1; 1x 12-Pin Power Connector, 220W TDP

placement that won't impress clean build purists. It's also a questionable requirement at all given that it's effectively an extension cable, with a single 8-pin connector input.

The card itself is very compact and aesthetically simple. It takes up exactly two slots, in terms of both width and height which will appeal to builders of compact systems. Its length matches up perfectly with an ATX motherboard. The cooler is similar to the ones found on the 3080 and 3090 cards, but scaled down size. There are triple DisplayPort 1.4a ports and a single HDMI 2.1 port with support up to 8K.

What really matters is how it performs, and we're happy to say, the 3070 does a stellar job. We found it to be only slightly behind the RTX 2080 Ti, a card that went for twice the price, so by that measure alone, the 3070 is a fantastic card. It's a perfect high refresh rate 1080p or 1440p card. It's also capable of 4K gaming, though 8GB is starting to be a limiting factor in some games at their most taxing settings.

As we continually note with Nvidia cards, the base clock is all but irrelevant unless you want to run Furmark in a case with zero airflow.

Indictaes Best Result	Temperatures ©		3DMark	
	Idle	Load	Time Spy Extreme	Fire Strike Extreme
Nvidia GeForce RTX 3070 FE	32	74	6,756	16,378
Nvidia GeForce RTX 3080 FE	34	74	8,515	20,033
Nvidia GeForce RTX 2080 Ti	36	68	6,815	16,068
Nvidia GeForce RTX 2080 Super	38	72	5,524	13,285

■ Indictaes Best Result

	Metro: Exodus						F1 2020					
	1920x1080 Ultra Preset		2560x1440 Ultra Preset		3840x2160 Ultra Preset		1920x1080 Ultra Preset		2560x1440 Ultra Preset		3840x2160 Ultra Preset	
	Min	Avg	Min	Avg	Min	Avg	Min	Avg	Min	Avg	Min	Avg
Nvidia GeForce RTX 3070 FE	53.1	103.1	48.0	81.4	32.5	51.1	168	194	135	155	90	100
Nvidia GeForce RTX 3080 FE	62.6	130.0	57.4	105.9	43.9	68.7	191	218	160	186	112	126
Nvidia GeForce RTX 2080 Ti	55.4	108.6	51.1	85.4	35.1	54.1	171	200	141	161	88	98
Nvidia GeForce RTX 2080 Super	48.5	90.0	42.7	71.6	28.9	44.7	150	175	120	138	75	84

	Middle Earth: Shadow of War						Total War: Warhammer II					
	1920x1080 Ultra Preset		2560x1440 Ultra Preset		3840x2160 Ultra Preset		1920x1080 Ultra Preset		2560x1440 Ultra Preset		3840x2160 Ultra Preset	
	Min	Avg	Min	Avg	Min	Avg	Min	Avg	Min	Avg	Min	Avg
Nvidia GeForce RTX 3070 FE	36	161	30	116	29	71		128.9		97.9		54.6
Nvidia GeForce RTX 3080 FE	36	193	38	150	31	97		155.3		126.6		76.2
Nvidia GeForce RTX 2080 Ti	35	166	36	121	30	75		136.8		101.4		56.5
Nvidia GeForce RTX 2080 Super	36	137	33	100	25	61		108.8		79.6		46.4

	Ghost Recon: Breakpoint						Shadow of the Tomb Raider					
	1920x1080 Ultimate Preset		2560x1440 Ultimate Preset		3840x2160 Ultimate Preset		1920x1080 Highest Preset		2560x1440 Highest Preset		3840x2160 Highest Preset	
	Min	Avg	Min	Avg	Min	Avg	Min	Avg	Min	Avg	Min	Avg
Nvidia GeForce RTX 3070 FE	60	107	60	86	46	52	126	160	94	114	52	62
Nvidia GeForce RTX 3080 FE	60	122	60	101	53	69	159	195	118	145	70	83
Nvidia GeForce RTX 2080 Ti	60	107	61	86	46	56	129	164	94	114	54	63
Nvidia GeForce RTX 2080 Super	60	95	60	74	26	44	112	140	80	96	43	51

Our sample settled into a long term boost clock of between around 1890MHz to 1940MHz at 73 C. At this default setting, we saw the card pull a peak of 227W. This is a full 100W less than the 3080 Founders Edition.

At 220W, the TDP of the card is back to more acceptable levels and the 3070's compact cooler doesn't need to work anywhere near as hard to keep cool. We saw a peak temperature of 74 C. That will be a bit higher in a closed case, but we were very happy with the effective combination of cooling capability and low noise levels. Custom cards will likely be very cool and quiet indeed.

As is the case with the other Ampere cards we've tested, there isn't a lot of overclocking headroom. You will gain a bit from overclocking the memory, but the card runs into its power limits quickly. Partner cards will likely feature BIOS' that allow for less restricted power limits.

In conclusion, the 3070 goes very close to the RTX 2080 Ti at half the price. This is simply incredible. Having said that, the pricing is perhaps a little too high given that high end 3070 cards are the same price as the entry level 3080s which are a big step up in performance. Availability also remains a concern for the entire range. Then there's the elephant in the room which is the pending release of the AMD Radeon RX 6000 series. At the time of writing we only had AMD's performance measurements on hand. We'll reserve judgment until we do our own independent testing, but the competing models could end up being very strong indeed. Unless you're particularly interested in a unique Nvidia feature such as G-Sync or DLSS in a particular game, we'd recommend holding off on your buying decision until RX 6000 cards are released. Wherever the dust settles, the consumer is the winner. RTX 3070 buyers won't be disappointed. Don't forget there's the imminent release of 3060 cards to look forward to as well. It's a fantastic time to be in the market for a new GPU.
CHRIS SZEWCZYK

PC **PowerPlay**

VERDICT

89

The RTX 3070 competes well with the 2080 Ti at half the price, but we'd suggest waiting a little bit longer before making a decision.

GAMING HEADSET

Thermaltake Isurus Pro V2

Not your normal gaming headphones...

PRICE $69 **ONLINE** www.thermaltake.com.au

The very idea of a dedicated pair of gaming headphones conjures a very specific mental image. A set of cans that are aggressively styled, often sleak, sometimes oddly clunky, and more often than not blessed/cursed that blinking RGB lighting. They might feature gaudy coloured plastic highlights, or be stripped back to look like a piece of real-world military kit. Thermaltake's new Isurus Pro V2s... is none of those things.

That's because while gaming is the focus of the Pro V2s, it's gaming on the go that they're all about. In fact, there's only a couple of design and ease-of-use hardware choices that separate the V2s from your average pair of in-ear headphones – but those choices do make an impact, and make a pretty good case for picking up a pair if you're looking for something a little more discrete and versatile than traditional gaming cans.

The V2s can be worn with or without the included, detachable, metal headband. It's slim and light enough that you barely notice it, but it does offer a degree of security, keeping the earbuds firmly stuck in your ears. The buds come with three pairs of rubber ear tips so you can find the right fit, and it's definitely worth experimenting to find the right ones for you, otherwise both sound quality and – possibly more importantly – comfort will suffer. As always with such intimate items as earbuds, your mileage will vary, and I struggled to find a truly comfortable fit.

That sense of adaptability goes even further, thanks to a dual 3.5-mm three-pole (TRS) splitter cable, which allows the Pro V2's to be hooked up to pretty much any kind of gaming platform. If you're looking for a set of in-ear headphones that are as at home on your PC or Switch, and light enough to double to tackle music playback from your smartphone, you're in luck. That said, there are some compromises to get everything into a neat package, and some curious design decisions that get in the way. The V2's mic, for instance, isn't attached to the inline remote, but rather is built into the left earpiece, which leaves the mic rather further away from your mouth. This is less of an issue on mobile devices, but you'll really notice it if you're on a PC.

For the price, though, the audio output of the V2s is pretty solid. From speech to gunfire, everything sounds good in the mid-range, and you can even pick up some subtle environmental noises. The Isurus Pro V2 earphones are a serious contender if you're a gamer of eclectic tastes, but less so if you're more dedicated to just one or two platforms.
DAVID HOLLINGWORTH

PC PowerPlay

VERDICT

Well-priced and versatile, by being a jack of all trades, Thermaltake's Isurus Pro V2 earbuds tend to lack mastery. But if you're looking for a single audio solution across as many gaming platforms as possible, they're hard to look past.

78

GAMING HEADSET

Turtle Beach Stealth 600 Gen 2

An affordable gaming headset that's made for Xbox consoles.

PRICE $169.95 **ONLINE** https://au.turtlebeach.com

While there are more premium gaming headsets currently available for Xbox One and Xbox Series X/S gamers, Turtle Beach's Stealth 600 Gen 2 delivers exceptional bang for your buck, thanks to its excellent sound quality and robust features.

Apart from its dedicated PS4 version, Turtle Beach offers a Stealth 600 Gen 2 model that's designed specifically for Xbox consoles, meaning users can pair the gaming headset directly to their Xbox One or Xbox Series X/S without the need for a USB dongle or optical connection – it's as simple as pairing a controller. Moreover, the Xbox version works just as well with Windows 10, although you will need to purchase an additional Xbox Wireless Adapter (RRP $29.95) in order to pair the headset to your PC.

From an audio standpoint, the Stealth 600 Gen 2 delivers vibrant spatial sound (the headset worked well with Windows Sonic and Dolby Atmos for Headphones) with a decent amount of depth. This is due to their powerful 50mm drivers, which offer exceptional clarity and bass, depending on your audio preference. The surround sound effect proved convincing at all times, allowing us to hear approaching enemies from all angles. We also came away impressed with the headset's lack of distortion – particularly during loud in-game explosions.

The Stealth 600 Gen 2 headset also does a good job of allowing the player to tailor the audio experience to their liking, with a mode button which lets you cycle through four EQ settings: Signature Sound, Bass Boost, Bass + Treble Boost and Vocal Boost. Additionally, a quick press of the power button will enable Superhuman Hearing mode, which amplifies subtle sounds like footsteps and reloading weapons in order to give players a tactical advantage.

You also get a flip-down mic that mutes when retracted into its upright position, separate volume rockers for chat and game, along with the much appreciated inclusion of mic monitoring, allowing you to hear your own voice while you chat. Voice quality is decent, but we've heard clearer, fuller chat audio from higher-end headsets, Such as Razer's BlackShark V2 Pro and Logitech's G Pro X Wireless.

It wasn't always smooth sailing, though – we experienced a spotty connection on a couple of instances during online matches in Call of Duty: Black Ops Cold War, with dotted sound resembling Morse Code coming through. In fact, it was intrusive enough that we were forced to switch the headset off and on again to make it go away. That said, it didn't occur often enough to be a real cause for concern.

It's also worth noting that the headset has a somewhat cheap plastic feel, and it sits fairly tight on the head and on the neck below the ears, leading to some discomfort during long gaming sessions.
STEPHEN LAMBRECHTS

PC PowerPlay

VERDICT

80

Turtle Beach's Stealth 600 Gen 2 gaming headset is a terrific all-rounder for those who want to keep a lid on their finances.

GAMING KEYBOARD

Asus ROG Strix Scope RX

A solid board that shines without too many bells and whistles.

PRICE $TBC **ONLINE** rog.asus.com

I'm very picky when it comes to keyboards, and it takes a *lot* for a new design to ween me off my years long addiction to Corsair's K-series of boards. And I'm not saying that Asus has done that – at least… not yet. But it must be said that this is one of the very best keyboards Asus has produced, and I was more than pleasantly surprised by just how sturdy the new ROG Strix Scope RX is. Even more surprising is just how good Asus' new in-house switches are, especially as they're not the now-standard mechanical switches, but optical mechanical instead!

Asus has tended to add all kinds of odd gimmicks to its peripherals, but the Scope RX is pleasantly free from any such guff. It's a frameless board, so should be super easy to keep clean, and a solid alloy top plate helps it withstand a tonne of gaming punishment. There's very little if any flex to the keyboard, and the sound of the key action is nice and solid - there's no tinny echo that you might find from a lighter construction method. The function keys do double duty as media keys, and while dedicated media keys are nice, it does lead to a very clean, no-nonsense aesthetic. The thick cable – thanks to a USB2 passthrough is – unbraided and quite flexible, and two flip-down feet let you adjust keyboard height.

The big star of the show are Asus' new switches, and for what is basically a fancy scissor switch, they really are very good. The ROG RX optical mechanical 'red' switches aim to mimic the feel of the similar Cherry Red switches, and they do the job admirably. The fast 1ms response and 1.5mm actuation point make for responsive gaming and typing, and a slightly heavier key-press keeps mis-keys at bay. That heaviness of actuation – about 45gf – does take some getting used to, but not much. Personally, I think I still prefer Cherry Reds, but that is fast feeling like I'm being loyal to a brand, rather than picking the best switch on the market. I'm not saying that Asus' effort is the best, but it's certainly giving other switches some very tough competition.

Asus has added a few other nice touches to the board. There's a Stealth key so you can immediately close all windows and mute all audio at a single stroke. It's kind of interesting that Asus offers this, since the only real use case is if you're hiding stuff from your boss or your family, so it's kinda like the company is saying "Play games and watch pr0n all you want!" So, thanks for the okay, there, Asus – it's appreciated. On top of that, a wider than usual Ctrl key makes a big difference in games where that is mapped to crouching, stealth or similar in-game actions.

DAVID HOLLINGWORTH

PC PowerPlay

VERDICT

This is easily Asus' best keyboard to date, and a makes Asus a real competitor in the market. It's sturdy, built for purpose, and with a truly impressive switch design. More of this please! A wrist rest would be nice, but that's really splitting hairs.

93

GAMING HEADSET

Asus ROG Delta S

Great game audio is let down by a simple design flaw.

PRICE $TBC ONLINE rog.asus.com

It's two big firsts for Asus this issue, with their first Asus-switch-powered keyboard on the previous page, and now the new Delta S gaming cans, which include a whole mess of audio buzzwords. Built-in quad DAC! MQA rendering! Switch and PlayStation compatibility! It's all very exciting, but the other thing Asus is touting - a lightweight 300gm design - is where things go just a little bit sideways...

Which is a serious shame, because the Delta S headset sounds fantastic. Annoyingly, for best performance, you do need to download and install the ROG Armoury Crate software, so if you're not a fan of Asus' coding smarts, you might be wary. But once installed, you start to discover a truly formidable array of options. From here you can set whether you'll hear audio in stereo or in virtual surround, choose reverb settings (if you're some kind of monster), and fiddle with equaliser presets, amongst other things. To be honest, it's far from the worst software we've seen, at least in

terms of audio tweaking (we're looking at you, JBL!).

Of course, not all those presets are all that useful, and if you're like us, you'll be sticking with the Gaming preset, and virtual surround on. There's a dedicated FPS preset, but that just boosts everything to such an over the top level that it's downright distracting. Of course, your own mileage may vary, but with those settings we were legitimately blown away – even plain old stereo sounds amazing. I've just started getting into Warframe (don't judge) and in the missions where you're defending a location against waves of enemies that appear from all around the map, I was able to pinpoint each approach by sound alone.

Music is another area where the Delta S headset shines, and if you're a user of hi-res services like Tidal, MQA rendering will make those streams sound even better. Normal playback and streaming is solid, but not as detailed as in-game audio, but that's just a quibble, and for ordinary listeners they're perfectly fine.

Design-wise... Yeah. The Delta

S cans are light – super light. Almost too light, in fact. I have a rather sizeable noggin, and the combination of lightweight design and lack of clamp force meant that the headset sat very lightly on my head indeed. Tested by someone with a more reasonable skull, the Delta S became downright wobbly; the earcups sat askew, making the soundscape sound muddied. We commend lightweight headphones, and the detachable mic works great, but they just don't sit firmly, and can be shaken off far too easily. There's a second pair of earpads in the kit, so that's nice, and a USB converter if you can't handle the native USB C connector, but that lack of clamp force is a real downer. It's the only thing keeping ROG's latest from becoming our new favourite set of gaming cans.

DAVID HOLLINGWORTH

PC PowerPlay

VERDICT

A stellar audio outing, with incredible clarity in-game, and perfect for gamers also into hi-res music streaming. But a too-light design gets in the way of making for a near-perfect headset. Buty Asus is on the right track.

81

GAMING HEADSET

Steelseries Arctis 7X

Steelseries takes the already excellent Arctis 7 and updates it for a new generation of consoles.

PRICE $299 **ONLINE** www.steelseries.com

The Steelseries Arctis 7X is an update to one of the best-loved wireless gaming headsets of all time, the Arctis 7. The original is an incredibly comfortable headsets thanks to that ski-goggle headband design and plush ear cups that envelope your ears in stellar gaming audio. Its only flaw is that it doesn't work on Microsoft's Xbox consoles.

And now that we have the next generation Xbox Series X/S, it's only fitting that this OG headset got a timely update. The new $299 Arctis 7X is part of a pair that also includes the Playstation 5 specific Arctis 7P. The two headsets are identical save for the color scheme — Black and Green for Xbox, and White and Blue for Playstation.

So why have two identical headsets? Because Microsoft. Its proprietary Xbox wireless protocol doesn't play nice with other devices unlike Playstation's more universal implementation. But this time around, the Arctis 7X works on both Xbox and Playstation, as well as PC, Switch, and smart devices with USB Type-C.

The physical design remains unchanged. The signature ski goggle headband and Air Weave ear cushions used across the range of Arctis headsets return— meaning the 7X is one of the most comfortable gaming headsets, period. I wear glasses and these headsets don't hurt like others normally do.

In terms of audio, the new headset sounds just like it's predecessor – for better or worse. Steelseries kept the same drivers because of positive feedback on the Arctis 7. And indeed, these have some of the cleanest game audio on any gaming headset.

The clarity and separation is pin sharp making everything stand out clearly, especially in games. Positional accuracy is excellent making it easy to pinpoint where audio cues are coming from, even in the midst of the action. This is great for competitive shooters where there's lots of gun fire.

I still find the bass response a bit anaemic, which can make music sound cold and clinical. There are various EQ profiles in the Steelseries Engine but none improved bass enough to make my music pop. I'm not a bass head mind you but I appreciate powerful, clear bass to help you 'feel' the audio and not just hear it.

The mic however, is really great. It's a Discord-certified ClearCast bidirectional microphone that retracts into the left earcup. Just pull it out of its cubbyhole when you need it and slide it back when you're done. It sounds great, picking up my voice clearly without the usual nasaliness and I enjoyed using it for my daily work Zoom calls. I'm a bit of a hermit gamer so party chat isn't my jam though I'm confident that it sounds great.
KIZITO KATAWONGA

PC PowerPlay

The Arctis 7X wins with impressive versatility, supreme comfort, excellent gaming audio and long battery life.

VERDICT

90

GAMING MONITOR

BenQ EX2510

This 24.5-inch gaming monitor combines affordability with some tidy extras.

PRICE $399 **ONLINE** www.benq.com

In terms of top-line specs, the EX2510 is a 24.5-inch, Full HD, IPS, 144Hz gaming monitor with 'HDR' technology. The Mobiuz is also much smarter-looking than most budget monitors, thanks to a solid, classy stand, sharp lines, a colorful design flourish and a very thin bezel. The stand itself can be manipulated to generous degrees, offering -5º/+20º tilt, 20º/20º swivel and a height adjustment of 130mm. However, it rotates only to only a negligible degree – one that helps slightly with cable insertion but little else.

Those connections consist of two DisplayPort 1.2 sockets, an HDMI 2.0 port and a 3.5mm audio jack. They're hidden behind a removable panel at the back and cables can be tidily channeled through a gap in the stand. Unsurprisingly for a monitor with this price tag, there are no RGB lights adorning it.

It houses two 2.5-watt speakers, which get surprisingly loud. They offer well-rounded audio too, which is great for casual YouTube videos and casual gaming. BenQ goes into some detail on how everything has been tailored for audiophiles by utilising its in-house treVolo technology. However, playing music at any serious volume exposes their near-total lack of bass. Changing the equaliser from Pop/Live mode to Cinema mode merely muddies the lower frequencies, while Game mode removes them altogether – highlighting top-end, scratchy sounds of frequencies favored by approaching footsteps and gun-cocking sounds, helping battlefield awareness. Still, they're significantly superior to most other built-in monitor speakers that we've ever used.

In theory, a headline feature that elevates the Mobiuz above many similarly-priced rivals is the incorporation of HDR. Not surprisingly, it can't match the stunning imagery of more expensive and premium 1,000-nit rivals, but BenQ's emulated 'HDRi' system offers a little more than the usual, low-end, 'high-contrast' excuse for HDR that's

occasionally seen around this level of the market. In practice, a small button in the bottom right-hand corner of the screen cycles between HDR, Game, Cinema and Off modes. They all make the screen noticeably brighter and improve color vibrancy – just with slight variances in color temperature.

When gaming, the HDRi technology can combine with the IPS panel's 1,000:1 contrast ratio and impressive 400-nit brightness to produce a pleasing picture. However, while we liked seeing sneaky blighters hiding in dark areas, it was rather easy for detail to get lost in bright skies and such like. It was still possible to produce impressive, near-black dark areas in cinematic situations, but IPS panels only get so dark and, consequently, true-black performance is off the table.
NICK ROSS

PC PowerPlay

VERDICT

There's much to like about the BenQ Mobiuz EX2510. All the main gaming features you'd want are present, like 144Hz, emulated HDR and a matte screen. It looks good and interacting with it is simple too.

92

I didn't expect this to rocket to the top of my favourite RTS games.

Dawn of War's campaign is straightforward but lots of fun.

WARHAMMER 40,000: DAWN OF WAR

The real king of the RTS genre. *By Steven Messner*

I t's a tragedy that *Warcraft III* got an HD remaster – albeit a half-assed one – but if I want to play *Warhammer 40,000: Dawn of War* I need to download widescreen hacks and an app just to remap the controls and get it into a playable state. Blizzard's seminal RTS no doubt deserves all the praise it gets, but all these years later *Dawn of War* feels like the strategy game that really pushed the genre into new and interesting spaces. It's not just the glorious, violent battles that erupt constantly across each mission, but the way *Dawn of War*

cleverly trims the fat to create a strategy game that feels innovative and exciting even 16 years later.

I didn't appreciate that the first time I played it, though. For most of my life, I had chugged Blizzard's kool-aid and assumed Warhammer was a cheap knock-off for grown men who like gluing things together and spending $40 on tiny vials of paint with ridiculous names like Runelord Brass. But a colleague and I both recently decided to read some Warhammer 40k novels for the first time and instantly became converts. That naturally meant I had no choice but to consume all Warhammer

media I could possibly find, and with *Dawn of War* and its expansions sitting in my Steam library, it was a natural place to start. I just wanted something to tickle my fancy for this new universe I suddenly developed an appetite for – but I didn't expect this to rocket to the top of my favourite RTS games.

RIP AND TEAR

First released back in 2004, *Dawn of War* follows a chapter of Space Marines called the Blood Ravens as they work to delay an Ork 'WAAAGH!' (40k parlance for 'unstoppable invasion') while the last human inhabitants of Tartarus regroup and flee the planet. Once Chaos Marines and Eldar start getting involved, though, the whole operation goes sideways as ancient demonic artefacts whisper betrayal and an impending warpstorm – basically an evil space hurricane –

▶ **NEED TO KNOW**

RELEASED
September 20, 2004

DEVELOPER
Relic Entertainment

PUBLISHER
THQ

LINK
bit.ly/36COuEG

Orkz. Orkz as far as the eye can see.

threatens to trap everyone on a planet overrun by Orks and demons.

That *Dawn of War*'s story manages to be this interesting decades later is a testament to how fun it is despite being so thoroughly incapable of nuance. Like many of the novels, its plot twists are seen coming miles away, but I don't care because I'm too enchanted by the stoicism of the Blood Ravens captain, Gabriel Angelos, and his too-wise-for-his-own-good Librarian Isador. A lot of it is buoyed by the voice acting, though, which manages to somehow bring a bit of life to a group of super-soldiers who are only capable of feeling either righteous indignation or anger.

You don't play *Dawn of War* for the story, though. You play it to gleefully watch a crab-like Chaos Marine Defiler wade into a group of Space Marines, pluck one up with its enormous mechanical claw, and toss his crumpled body half-way across the map. I feel like it's moments like this that are missing from other RTS games of that era, especially *Warcraft III*. There's almost a kind of disregard for the spectacle of watching giant fantasy armies clash in battle. Units just hit each other with the same

attack animations until one dies.

Dawn of War relishes in the violence. Every unit has bespoke 'sync kills' that trigger when they deal the killing blow against an enemy. When the Eldar summon the Avatar of Khaine in the seventh mission of the base campaign, much of the reason it's so terrifying is not just because it takes half an army to kill. It's terrifying because again and again it'll impale Space Marines on its sword and hoist them upward so that gravity slowly pulls them further down onto the sword amid gouts of blood. Often I'm so caught up with zooming in and rotating the camera to watch the carnage that I forget to feed my units new orders. I just want to soak it all in.

It's a system that only works because *Dawn of War* uses a unique squad system where individual units are actually composed of up to nine soldiers who act in unison. It's such a great deviation from the standard RTS formula where a single soldier represents a single unit, not only because it adds some significant layers of strategy – like being able to purchase weapon upgrades for individual members of a unit or

EXPANDED UNIVERSE
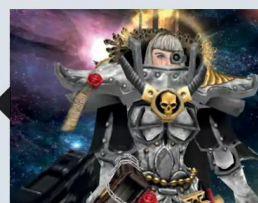### *Dawn of War's three expansions, ranked*

DARK CRUSADE
2006
Adds an incredible sandbox campaign mode with RPG elements and two new races: the techy Tau and the creepy robot Necrons.

WINTER ASSAULT
2005
Tough-as-nails campaign where you often swap between two different armies mid-mission, tons of new units, and a cool new faction.

SOULSTORM
2008
Too ambitious for its own good, but still added two unique factions and aerial combat. You could probably just skip over it, though.

Chaos Marines are my personal favourite faction.

IT'S JUST A SHAME THAT RELIC HASN'T FOUND A WAY TO UPDATE THE BASE GAME.

reinforce your damaged units with fresh recruits – but because it also adds a lot more meat to the grinder.

That's not the only innovation that makes *Dawn of War* still relevant today, however. It also disposes with the resource collection systems that I've come to despise in games like *StarCraft* only because it's so fiddly. It's not fun having to constantly micromanage whether or not my worker units are accessing the right resources back at base instead of pushing deeper into the map and watching fights break out.

TAKING CONTROL

Instead, resources are earned by spreading out and grabbing control points. Even by today's standards, it's such a genius evolution because it directly ties combat to your overall wealth and economy – especially in multiplayer where players are actively working to

defeat one another. There's no option to just turtle up inside your base and wait for players to come to you because you'll also be starving yourself. You have to be aggressive.

Obviously that kind of playstyle makes perfect sense in the Warhammer universe. Hell, even the opening cinematic for *Dawn of War* shows an entire squad of Blood Ravens getting decimated by Orks while trying to take a control point seconds before an army of Space Marines arrives to save the day. They could've just hunkered down and waited, but that's not the Space Marine way. That kind of wanton disregard for the individual sacrifice so long as it translates to increased control of the map infuses *Dawn of War* with a brutality you just don't see in other similar RTS games.

It's just a shame that Relic hasn't found a way to update the base game to run better on modern hardware. While the second expansion, *Dark Crusade*, introduces support for more wide aspect ratios, *Dawn of War* can only handle 1920x1440, which creates borders on the left and right of the screen and noticeably cuts down on
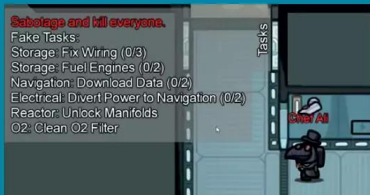
how much you can see on the map. There's a widescreen fix but it warps the size of the minimap so that it no longer fits within its borders, effectively cutting off pieces of it from your view.

I can deal with that, though, but it's enormously frustrating that you can't even bind certain keys. I didn't even know that there was a pause button until a friend mentioned it, but it's bound to the Pause key, which I don't have on my smaller keyboard. My only option was to download a program called AutoHotKey, which can rebind keys at a system level.

It's why I wish *Dawn of War* could get a remaster of its own. The ideas and systems holding this game together feel as subversive and exciting today as they probably did back in 2004. And even though the graphics aren't great, it doesn't take anything away from the thrill of *Dawn of War*'s bloody battles. It's just a shame that a few technical issues can make returning to Tartarus a little annoying. Even so, it's easy to look past those moments when you're wrapped up in the intensity of a skirmish or playing through the surprisingly good story campaign. ■

BEING THE IMPOSTOR IN AMONG US

'Acting kinda sus' is my new favourite way to be. *By Alistair Jones*

Sabotage and kill everyone.
Fake Tasks
Storage: Fix Wiring (0/3)
Storage: Fuel Engines (0/2)
Navigation: Download Data (0/2)
Electrical: Divert Power to Navigation (0/2)
Reactor: Unlock Manifolds
O2: Clean O2 Filter

RIGHT: One down, still a few more to go.

DEAD BODY REPORTED

"**A**ll I know is that it can't be Ali," my friend pipes up during an Emergency Meeting. "He's been with me the whole time, he definitely could have killed me if he was an impostor." Since I actually am an impostor, his espousal of my innocence is ideal. Thanks to this, I'm able to pick off other players with impunity, the burden of guilt not falling on me even after I stab my naive companion in the back three rounds later. As the end screen reveals my role and his indignant fury erupts through my headphones, I can barely stop myself from rubbing my hands with malevolent glee.

Among Us riffs on the success of social deduction games like Secret Hitler and Werewolf, in which the good guys attempt to root out a murderous minority before the latter can outnumber and overpower the former. In these games, where innocence and guilt are two sides of the same coin, bare-faced bluff is, more often than not, a key part of coming out on top. What makes being an impostor so special, however, is that your ability to lie to someone's face is just one aspect of a successful sabotage.

Bending the truth is important – you won't get far if you can't spin a good alibi out of thin air when challenged. But while that might be all you need in tabletop games, in *Among Us*, the impostor's role goes deeper than the lie. It's a detailed charade, a performance of innocence to sow uncertainty, confusion, and paranoia as your prey realise they're running out of time and they're still no closer to rooting you out.

It's not just about choosing who to kill, but about making sure your

▶ **NEED TO KNOW**

RELEASED
November 16, 2018

EXPECT TO PAY
Not much.

OUR REVIEW
N/A

LINK
innersloth.com

## MAKING A MURDERER *What type of impostor are you?*

THE SERIAL KILLER
Ever called an emergency meeting only to find half the crew already dead? The Serial Killer isn't interested in stealth – they just want every crewmate dead.

THE FALSE FRIEND
They do tasks, fix sabotages, and back you up in meetings. Then once you think you're safe, The False Friend puts a knife in your back (and your heart).
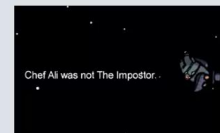
THE GRANDMASTER
The Grandmaster plays *Among Us* like a game of chess, manipulating the group into sealing their own fate with a single, well-placed accusation.

hands are thought to be as clean as possible for as long as you can. Committing a murder is easy, but doing so without any witnesses can require split-second timing – there's nothing better than cutting someone down just outside another player's field of vision, or ducking into a vent just before your fresh kill gets discovered, and then sitting quietly during the investigation without the finger of blame ever pointing at you.

But the deceit goes deeper still. No murder goes undiscovered forever, so

IN AMONG US, THE IMPOSTOR'S ROLE GOES DEEPER THAN THE LIE

fabricating an alibi is crucial. Not being found holding the smoking gun isn't enough – plenty of schemes have been undone by crewmates who find an impostor sprinting away from a newly-made corpse. To counter these unfortunate and embarrassing post-assassination run-ins, my preferred strategy is to go and find someone else to stumble across the body with me, who will then attest that I can't have been anywhere near the kill. Even more devious is the act of self-reporting – cutting someone down before sounding the alarm yourself – a heinous tactic that's even more effective if you can pin it on an unfortunate crewmate.
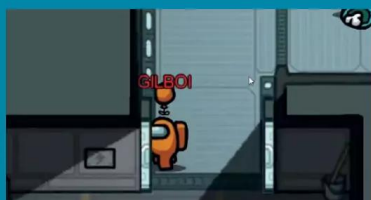
TIME TO KILL
The impostor's performance isn't just limited to the moments on either side of a kill. From the beginning of each game, you have to blend in with the crowd, making sure you act as though you're just another one of them. Plotting out a route through the map and play-acting your various tasks in such a way that you don't arouse suspicion is as crucial a skill as the perfect knife in the back. Even more useful is the ability to herd players from one area to another, sabotaging the oxygen supply or the electrics to force a quick repair, pulling prying eyes away from the place where you've just left a body before rushing to help out and ingratiate yourself with the remaining crew.

Genuine innocence has its own perks. Catching someone standing over a newly-butchered corpse provides its own special twinge of satisfaction. But being declared impostor offers an unmatched thrill. *Among Us* is a pretty simple game, but there's enough complexity that being the bad guy can turn you into a puppetmaster, manipulating your playthings into doing most of your dirty work for you, a well-timed kill and a vague accusation enough to spark an argument that'll see another innocent sentenced to death and me another step closer to success. Fair play be damned – as long as I end up on that end-game victory screen, I'll do whatever it takes to win, and *Among Us* will let me. ■

RIGHT: Accusations can sometimes reveal the truth.

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08.01.2021

SMARTER COOKIES
ENABLED