



DOUBLING DOWN

ARMY OF TWO BETS BIG ON THE CONCEPT OF TEAMWORK by JOE RYBICKI

In 2005, KBR made an awful lot of money. According to the company's website, the group posted revenues of almost 11 billion dollars. KBR does two things, and it does them very well: Its Energy and Chemicals division offers support to the energy industry through "engineering, procurement, construction, technology and services," while its vastly more profitable Government and Infrastructure division offers support to the military through "logistics, construction and maintenance services for national governments as well as consulting and civil engineering services for local governments."

The 2005 year-end report of KBR's parent corporation is a bit more explicit, calling the Government and Infrastructure division "one of the world's leading defense-services providers," providing "whenever and wherever" support across the full military mission cycle—from on-base services to the largest deployments." In other words, KBR draws most of its income from its function as a private military company, or PMC. In fact, KBR's G&I division is so successful that in 2005, it provided nearly 40 percent of the revenue of its parent corporation—nearly double the revenue of the next-biggest division. You may have heard of the parent corporation: It's called Halliburton.

MASKED MARAUDERS

Tyson and Elliot's ballistic masks represent real-world technology. "They're not something we just threw in there because we think they look cool," says senior producer Reid Schneider. In real life, the masks are rarely so colorful, but as with many other character elements, you can customize them like crazy.

CONTRACTOR'S SPECIAL

Private military companies are a growing force in the world. At their most innocuous, they provide civilian support for military action: building roads, stringing wires, or providing or servicing vehicles. They can take much of the logistical load off of the traditional military through their specialized services, allowing the military to focus on more immediate demands. But at the other end of the spectrum, many provide another military asset that's not often talked about: professional soldiers. This function is the basis for EA Montreal's ambitious co-op shooter, *Army of Two*.

There are a lot of benefits to augmenting a public military with a private corporation. Lacking the bureaucracy of, for example, the U.S. military, a PMC can respond more quickly to changing conditions, with more agility than its publicly funded counterpart. And private soldiers are often both better equipped and more experienced than the traditional military; the significantly higher pay—rumored to be more than \$30,000 a day for particularly hairy assignments—tends to draw battle-hardened ex-military who may have gotten fed up with the mindless bureaucracy that permeates the life of a traditional soldier.

But there are less innocent reasons for a government to contract a PMC. "You can do things in a PMC that the military either can't or won't do," says Corey May, scriptwriter for *Army of Two*. "There are a lot of things that may be considered unethical or illegal, but they still need to get done. Assassinations are a big thing. You're not supposed to assassinate people; it's against the Geneva Conventions. For a PMC to go in there and do it, it's not going to dirty the government's hands."

SOLDIERS OF FORTUNE

This is heavy, scary stuff. But the young team behind *Army of Two* isn't afraid of taking chances. "We're going one step beyond pure gaming, into the gray area," says Alain Tascan, vice president and general manager of EA Montreal. "Are these things possible? Do these things happen? You have things that happen today that, if a movie was made about them, you wouldn't believe it."

"Between one-fourth and one-third of the budget from the Pentagon is going into private corporations," Tascan continues. "This is the reality today. You're talking about 100 billion dollars. And think about a private company: What's your role? To make more money. And there

"WE'RE GOING ONE STEP BEYOND PURE GAMING, INTO THE GRAY AREA."

is so much going on in the world right now—I would be an investor in Halliburton or the Carlyle Group right now, because between everything going on, it's happy times [for them]. It is not in the corporate interest to have less trouble in the world."

This is the central conflict that underlies the story of *Army of Two*: the conflict between doing the right thing and doing the profitable thing. Here you have two private soldiers—the older, battle-scarred Tyson Rios and the young upstart Elliot Salem—who go beyond the restrictions of legitimate military for very lucrative sums of money. But



at some point, questions arise. "Later on in the game, they'll start facing these complicated situations," May says, "and they'll start asking themselves, 'Are we the good guys, or are we the bad guys?' They start to notice that there are certain things under the surface that may not sit well with them. So they're going to have to make some decisions: How much do you want a new car, or clothes for your kid, or a bigger house—and at what price?"

BLUDDY SYSTEM

But this daringly topical story line isn't the biggest risk the *Army of Two* team is taking. That distinction belongs to the unorthodox gameplay mechanic that underlies the entire experience. *Army of Two* is a game based firmly in the idea of cooperation. You control one member of a two-man PMC team, and your partner is controlled either by a friend (in person or online) or by a very complex AI system the team is putting together. That may not sound terribly revolutionary, but that's probably because you're thinking of the type of AI-controlled, squad-based games that have plagued the industry in the past.

Make no mistake: This two-man idea is absolutely integral to *Army of Two*. Everything in this game is done as a team, so much so that it's led to plenty of jokes about just how close these two characters are (jokes that now seem embarrassingly glib in light of the game's frighteningly plausible premise). This teamwork mechanic is the very reason for *Army of Two*'s existence, and it's what the team is fervently hoping will differentiate the game from other shooters.

profile: XBOX 360 | upgrade weapon | total funds: \$ 10000

cartridge default

cost: \$0 | no upgrade selected

cycle options | cycle mount | try out | rotate view | purchase | back

profile: XBOX 360 | upgrade weapon | total funds: \$ 10000

front mount 646k Vertgrip

cost: \$950 | 646k Vertgrip (\$200)

cycle options | cycle mount | try out | rotate view | purchase | back

profile: XBOX 360 | upgrade weapon | total funds: \$ 10000

front mount M203 40mm GL

cost: \$2600 | M203 40mm GL (\$1700)

cycle options | cycle mount | try out | rotate view | purchase | back

profile: XBOX 360 | upgrade weapon | total funds: \$ 10000

front mount 870 MCS Master Key

cost: \$1900 | 870 MCS Master Key (\$1000)

cycle options | cycle mount | try out | rotate view | purchase | back

CHOOSE YOUR WEAPON

One big feature of *Army of Two* will be the weapon-customization feature. By completing bonus objectives, you'll earn extra cash, which you can use to trick out your firearm. Among the many different features you can snap onto your piece: a shield, which deflects bullets but decreases accuracy; a pistol grip, which increases accuracy but decreases speed; a shotgun to clear out close quarters; and even a grenade launcher. You can even make changes to the gun's appearance, even going so far as to chrome-plate the entire thing.

STEERING THE JUGGERNAUT
EA MONTREAL IS AT THE VANGUARD OF "THE NEW EA"



photos by Darren Curtis

"It's not that we have this new laser gun, and big explosions, and stuff like that," says Tascan. "It's different on the design level. And it's not just like I push Button A and you push Button B—you can really interact together. It's a window you open for the designer, to the game-maker, and to the storyteller: How is my partnership going to evolve as a result of what I'm doing? This new thing is going to open up tons of possibilities."

Lead designer Chris Ferriera elaborates: "In my opinion, every co-op game has been: 'OK, here's a single-player map—have someone else play with you.' And once in awhile, that second person becomes a key: You can use him to open this gate and get to this area. Our whole focus on the game design," he tells us, "is that the two characters are intertwined, and also interacting. These are two separate characters with different personalities who actually interact with the environment—and each other—in different ways. In terms of the gameplay, you're as responsible for my death as I am. Mission success—you are just as responsible as I am for getting that done. It's not like you just happened to be there. If we split off, we will never get through this area. We have to work together."

TWO'S COMPANY

Even at this early stage (the game is planned for release simply "some-time in 2007") *Army of Two* has plenty of interesting examples of team-

work-based segments. Consider this example: You start a level with a tandem parachute jump. You're controlling the speed and direction of your parachute, while your partner, armed with a high-powered sniper rifle, does his best to dispatch as many enemies as possible from your landing zone. By the time you land, he's taken out a good percentage of the waiting enemies, but quite a few still remain. In the middle of the landing area, you go back-to-back with your partner, giving you a full 360 degrees of view and protecting your less-armored backs.

Having cleaned out your landing zone, you move on to the next

"THESE ARE TWO SEPARATE CHARACTERS WITH DIFFERENT PERSONALITIES."

area, a large canyon, liberally populated by baddies, with high ledges on the side. You wait by the entrance while your partner sneaks up to one of the ledges with his sniper rifle. He takes a few of the enemies before the rest of the group notices him. They dash toward his sniper spot...allowing you to storm in and spray the (now more tightly packed) group of bad guys with machine gun fire.

You finish off the enemy and move on to a warehouse sprinkled with crates, pallets, forklifts, and other equipment. You creep up behind a storage container with an enemy sentry posted on top. To get rid of



ALAN TASCAN

Vice President, General Manager



VANDER CABALLERO

Game Designer



THE TEAM

L to R: Marcus Fielding, development director; Francois Pelland, lead artist/level designer; Chris Ferreira, lead designer; Tascan; Caballero; Antoine Dodens, lead engineer; Steve Dupont, animation director; Reid Schneider, senior producer.

A game as unorthodox as *Army of Two* requires an unorthodox development team and an unorthodox development process. And EA Montreal provides exactly that.

Let that sink in a moment: an *Electronic Arts* studio as trendsetter? Iconoclasts within a company that built its house with nearly 17 years of *Madden*? Sequel-, franchise-, license-happy EA? Something has changed.

As the first of EA's internal "boutique" studios, EA Montreal has been able to write a lot of its own rules. Vice president and general manager Alain Tascan seems almost befuddled when he talks about the lack of invasive meddling from the higher-ups at EA's corporate center. "They know the company needs to go in a different direction. They know they have to innovate more than they have. So they have given us a lot of freedom," he says. "We are able to hire the people we want...and our people are able to get the gear they need."

Look around the office and you see top-of-the-line...well, everything. Huge, dual-monitor setups; ergonomic chairs; a full-sized pool table; even a giant classroom for frequent training sessions to keep all the employees at the top of their fields.

Getting—and keeping—top-tier employees is clearly a priority for Tascan. "If you drew lines between all the major universities in Montreal," he says, "you would get something like a triangle. We're at the center of that triangle." The purpose: to recruit young, fresh artists and designers interested in creating something different, with the skills to do it and a minimum of cynicism about what is and is not possible in videogames.

The result is a shockingly different approach to design in which the entire studio not only contributes ideas to the game, but also has the tools to illustrate those ideas.

Game designer Vander Caballero explains: "The way we work is something that's quite new at EA," he says. "As a designer, it's hard to figure out everything that's going to happen and write it down: what's going to happen with the camera, what's going to happen with the physics, and so on. So we prototype our own design. Everyone goes off and figures out what works and what doesn't work."

"The idea behind it," Tascan says, "is that describing design with words

within one team, everyone would feel like they need to be efficient—so they would go with a sure bet. After one or two slaps in the face, they would be late on their schedule, and they would lower the risks they would take. By setting this up differently, we liberate them."

The result is plenty of ideas that proved too odd or unwieldy even for this genre-pushing game (see page 55 for examples of ideas that didn't make it), but with this open-minded team, more ideas have made it past the drawing board than anyone expected. "It turns out they have a 50 percent adoption rate," Tascan says.

It's clear, though, that this idea of

THE DIVISION'S SOLE PURPOSE IS TO COME UP WITH AND PROTOTYPE OFF-THE-WALL IDEAS.

is like describing music with words. You can describe some emotion, but if you want to say that to a musician, you need a score. It's the same thing with design. You can storyboard, but you have to *feel* it to know if it's fun."

This unusual approach goes far beyond the tools, though: It's created a division within the *Army of Two* team, headed by Caballero, whose sole purpose is to come up with and prototype off-the-wall ideas, a team otherwise removed from the day-to-day schedule of game design. "Having Vander outside of the schedule and the milestone plan enables him to be more free about what he's doing," continues Tascan, "and to bring up crazy stuff. It's very liberating for his team. If everything were

empowerment is a philosophy that drives the whole studio. One indicator of this is Tascan's insistence on not requiring his employees to sign non-compete clauses. He wants them to *want* to work there, not feel like they *have* to. He even penned an open letter to the head of Ubisoft Montreal in 2003, decrying Ubisoft's tradition of noncompete clauses.

In the letter, which came in the wake of lawsuits alleging EA had poached some of Ubisoft's top employees, Tascan urged Ubisoft Montreal to "stop the illegitimate practice of forcing talented people to sign employment contracts that restrict their creative and economic freedom." This is indeed a new direction for EA. Let's hope it continues.

this guy, you boost your partner up to the top of the container, raising him only a little at a time with the analog stick to make sure the coast is clear before he climbs up. Turns out there's another guy up there you didn't see, so rather than climbing up, your partner rolls a grenade across the top of the container, and you hurriedly lower him back down.

The grenade goes off—sending the sentries flying—and all hell breaks loose. So you dash over to a forklift and use it to lift up a machine-gun turret that's conveniently located on a pallet. Your partner hops on and starts blasting away while you use the forklift to maneuver him into prime firing position. During this exercise, your partner takes some pretty heavy fire, and once you lower him back down, he's unable to walk on his own. So he throws his arm around your shoulder and you carry him along to a safer spot—yet all the while, you both are able to fire with your free hands. And so on....

FRIENDSHIP OF ONE

All of this may sound like a complete blast to play with a friend...but what happens if you're not online and you don't have a friend handy to accompany you in your adventure? Is it even possible to create a computer-controlled character that will behave realistically in these kinds of conditions? Not only is it possible, the team says—it's all but a given. "We won't release it if it's not working," says lead engineer Antoine Dodens. "It would be like releasing it if it had a bug. We would fix it."

It's clear that the developers are not just interested in creating an interesting co-op game, but in creating an interesting co-op game *that can be played solo*. "We talk about 'next gen' in a lot of different aspects," Tascan says, "but one of the dreams we had was interacting with the machine—and having the machine respond to you. It's this concept of the 'friend in the box' that is close to our heart. When you're only doing things yourself, it limits the emotion you can feel: If you die, you start again. If you have a partner, you start establishing a relationship, and now you care about not only what you're doing, but [also] what the other guy is doing. And if something happens to him, you have a new kind of feeling. I think *ICO* started it with the princess, and that was a huge inspiration. Our aim is not only co-op in terms of gameplay, but in terms of feelings you can have throughout the game, because you care about somebody else."

To this end, EA Montreal has an entire team devoted solely to making your AI partner behave in a lifelike fashion. Some of the ideas this team has come up with are revolutionary. "We need to give this partner AI a good memory," says Dodens. "So we're keeping track of everything that happens. If you're using the AK-47, and 20 percent of the time you miss, the partner AI is going to be aware of that. So the next time you go to use the AK-47 in a fighting situation, the partner's going to say, 'Oh, man—I don't agree with that. Change your weapon; you're no good with that one.' Imagine if you're playing and the guy says to you, 'I don't think this is the right way to do this.' He will

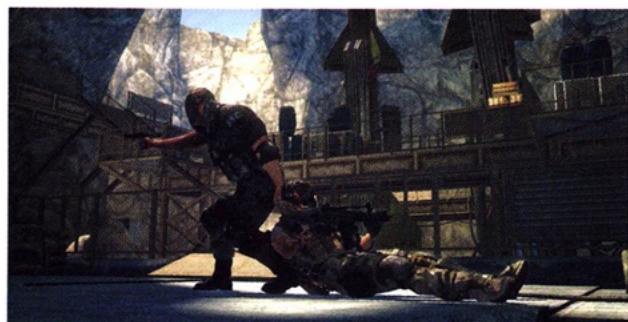
FAMILIAR FACES

EA Montreal may be relatively new, but the key talent behind *Army of Two* is well known: Most of them created the first *Splinter Cell*. Schneider, Dodens, Pelland, and Dupont all played key roles in launching that influential franchise.



DON'T GET MAD...

If you shoot, betray, offend, or otherwise piss off your computer-controlled partner, don't be surprised when he comes at you seeking retribution. He won't kill you, and he won't let you down in a firefight, but he will find interesting and creative ways to make you pay...dearly.



remember your failures, so the next time you replay the map he may say, 'Last time we did that, it didn't work.' That's really simple to put into place, but nobody's done that before."

MISTY, WATER-COLORED MEMORIES

And that memory will extend to more personal elements. Other games with teammate AI will let you wantonly spray bullets into your partners with no negative effects aside from maybe a "Hey, quit it!" Not so with *Army of Two*. "You always want to cooperate," says senior producer Reid Schneider, "but if you shoot your friend, he's going to come after you." He demonstrates by loading up a test level on the PS3 development kit, picking up a rifle, and shooting his partner in the leg. The partner immediately reacts, running up to Schneider's character and getting in his face.

"I will drop you right here!" the computer-controlled partner yells. Schneider shoots him again. Instantly, his partner unleashes a strong right hook to the face, and Schneider's character goes down.

"He's not happy," Schneider observes, "and he's going to knock me over. He may even head-butt me. And now he's going to be more angry with me; he'll still cooperate with me on moves, but he'll be really pissed."

Eventually, if you upset your partner enough, he will refuse certain opportunities for teamwork. "The idea here is that we can open up more or less co-op moves depending on what stage you're in your

cooperative mode," says Tascan. "He'll react to what I do; if I'm behaving like a jackass, he'll treat me like a jackass." And the actions that affect your relationship with your partner go beyond the physical; if you do something he doesn't approve of—gunning down a civilian, for example—he may nurse a grudge...at least until the next time you pull his ass out of the fire.

"But see, this stuff isn't going to happen in the middle of a gunfight," Ferriera says. "We don't want to interrupt the player. But at moments where there's not much going on, it gives life to the game."

"IF I'M BEHAVING LIKE A JACKASS, HE'LL TREAT ME LIKE A JACKASS."

SOMETHING FROM NOTHING

And exploiting those generally empty moments is key to bringing life to an AI partner, the team says. "If you think about a shooter-type game," Schneider explains, "the moment-to-moment experience between gunfights is generally pretty boring. You're just waiting for the next encounter. But we thought we'd really make use of your partner, so now we think about how your partner will react to objects in the world. So imagine you're in someone's house, or whatever. Your partner may decide he wants to go in the fridge, and he passes you a beer.



It's an awareness of you and an awareness of the environment."

"It's an opportunity to be aware of the world," Tascan says, "and be more aware of yourself and what you're doing through your interaction with your partner. We feel like this is the 'next-gen' part. Forget the physics, forget the graphical aspect—it's being aware of more stuff, being involved in the experience."

Schneider demonstrates by walking through a virtual house set up to illustrate these concepts. We see the computer-controlled partner turn on a stereo, rock out to the tunes, and trash the living room in a rock-star-style frenzy. We see him walk to the phone and call his wife. We see him root through the occupants' dresser. We see him urinate in the tenants' coffee pot...and then put it back on the burner.

This is not your typical shooter.

HOW REAL IS TOO REAL?

But making the AI behave in a lifelike fashion, Dodens says, is not the major obstacle. "I think the hard thing will be, if we make this cool co-op play that is really great to play with a human friend—how will you be able to play that with the AI? Because if you play with a human, the human can fail. You're fine with the fact that you lose the game if your human friend is failing," he says, "but how are you going to feel if the computer fails and you die? That's the trickiest question we have to answer. How are we going to make the player OK with this kind of stuff happening? Because we need to have that. I know that once we get to

where the player is fine with the AI failing, we will be successful."

It's this kind of unorthodox thinking that characterizes the approach the *Army of Two* team is taking. "We need to give people a new experience," says Schneider. "The genre is stale. Shooters will look better, they'll play better, the controls will be great—but it's inherently still so much of the same thing. That's why we want to create something new. We're not claiming to know 100 percent the path before us, but we need to innovate, we need to put something new into the marketplace."

"Five years ago," he continues, "if you made something that looked good or looked more impressive than anything else, you would get noticed. Now we're at a point where every game is going to have great graphics—that's the price of entry. So you can't rely on that; now it's about the experience."

"We feel that if we're not, in a meaningful way, trying to change things, games are going to be stale," Tascan says. "People are not waiting on new graphics, or even smarter AI, but being able to play differently. We're convinced that we need to push in this direction very hard, not for the sake of being different, but because we owe that to the game. We're trying to make things more exciting for us, and we hope that by making things more exciting for us we will make it more exciting for the people."

"And," Dodens says, "we will also have really nice graphics."

"Do we know exactly where we're going?" continues Tascan. "Have we figured it out to the last level? Maybe not; it would be pretentious to say that. But there are some very exciting new things going on." |

OUTSIDE THE BOX

During our visit to EA Montreal, the team demonstrated several of the unusual game-play mechanics that have come out of the studio's unorthodox design approach (see "Steering the Jugernaut," page 52). Among these is the much-talked-about CPR segment, where one player performs CPR while the other runs away from "the light." Another involves one player controlling the breathing of his character in order to lower his heart rate so that, when the other player got in close to stick a tampon into a bullet wound, he wouldn't be sprayed in the eyes by spurting blood.

With such outlandish elements making it *into* the game, we couldn't help but wonder what ideas had been rejected. So we asked game designer Vander Caballero for some examples of what didn't make the cut.

Bow and arrow: "The camera travels with the arrow. If you hit a character, the camera goes inside the body, showing the damage you caused."

Operation: "You extract a bullet from your partner's body to save his life. My father was [shot] when I was a kid, and I've always had the fantasy of saving his life if I only could extract the bullets from his body."

3D Heads-up display: "You [use] a full 3D interface to manage all your inventory and communication. I hate 2D HUD overlays; it is old school. We can do much better than this."

In the end, all these ideas proved too awkward, or would have required too much restructuring of the game engine.