

## Games-Fusion Battlefield 2 Interview

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**Games Fusion:** What will the new game engine bring to Battlefield 2? And what features have you implemented to bring the game up to date with other competing titles?

**DICE:** To achieve our goals and expectations for Battlefield 2 we had to raise the bar for visual quality several notches from our previous titles. The new rendering engine, developed from scratch for BF2, is completely shader driven, and is written to utilize the full potential of next-generation graphics hardware. One of the major improvements over the first Battlefield installment is that in the new rendering engine, every pixel you see on screen is dynamically lit and shadowed from multiple light sources. To make lighting in the world of Battlefield both compelling and convincing to the player, and still retain the frame rate required to enjoy the playing experience, we've had to develop several new techniques to compose the end result you see on screen. We've developed techniques that allow us to combine global illumination and hemispherical lighting with per-pixel normal mapping, and we further expanded this by using a new, more realistic looking approach to applying normal maps. Lighting and shadowing such an expansive and dynamical world as Battlefield also meant that we had to come up with new hybrid shadowing techniques which realistically integrate the players into the world. All of these new features allow artists and designers alike to put an enormous amount of detail into the game world, both in terms of per-pixel visual detail, and dynamic, interactive game environments. In the end, this makes for a rich and visually pleasing environment for the players to interact with.

**Games Fusion:** What research have you had to do to deliver realistic depictions of modern day weaponry in the game? Have you involved the US military at all in the development of the game?

**DICE:** We have made extensive research in modern weapons systems, vehicles, uniforms and other available, equipment of today's fighting forces. Not only the US military. Many of us have served in the army and we even have an ex US-army captain employed on the project. But, mind you, this is an action game. We want to deliver a game that looks extremely real but is easy to learn and fun to play. We will carefully retain the "feeling" of Battlefield when we take the step into the 21st century. The biggest challenge when making the transition to modern war is to also retain the skill element in every weapon. Many modern weapons are all about being far, far away from you enemy, and letting the weapon itself do all the work. We will not allow for this, but carefully make sure there is skill involved in every kill.

**Games Fusion:** Can you tell us a bit about the weaponry available in the game? Can we expect to see futuristic weaponry, such as the OICW Assault Rifle?

**DICE:** Our approach is to use equipment that are actually fielded, or just about to become fielded by armies.. You can expect to see many common weapons used today such as M16's, M249 machineguns, Kalashnikovs, Miniguns, .50 calibre machineguns and so on. And then you can expect to see some of the next generation hardware. I will leave what they will be as a surprise, but if you watch something like the Discovery Channel, you will get an idea of what I'm talking about.

**Games Fusion:** Can you name a few of the vehicles that will be available in the game? What planes, helicopters, boats and tanks will be at the disposal of the player?

**DICE:** You can expect both current and near-future vehicles, found in use today in the US Marine Corps, Chinese and modern Middle-Eastern Armies. Battlefield has always being about Land, Sea and Air and we will continue to provide a fun experience in all of the those areas.

**Games Fusion:** Will the flight physics remain similar to Battlefield: Vietnam or will you be making dramatic changes to provide a more realistic experience to the player?

**DICE:** Well, the "style" that was set in BF1942 will be retained. That style was carried over to Vietnam, and will be carried over to Modern Warfare. What will happen though is that we develop the style adding new features that fit with modern day flying. For instance, our jets will have afterburner that you can use to get a speed burst for a short time. Very useful when you need to get out of trouble. And our aircraft will have functioning head-up displays that tell you about your flying and about your targets. I also want to say that dog-fighting in Modern Warfare will not be about selecting radar blips on a screen and watch them go out. This will be more like the dog-fighting sequences in Top Gun, where you try to get a lock on your enemy and deploy counter measures to avoid incoming heat seeking missiles.

**Games Fusion:** Will the planes in Battlefield 2 enable you to have wingmen, similarly to the helicopters in Battlefield: Vietnam?

**DICE:** Yes. There will be aircraft in BF2 that will increase the cooperation between the pilot and the gunners in the same aircraft.

**Games Fusion:** Will Battlefield 2 contain levels which are counterparts from real-world locations or have you kept the locations purely fictional?

**DICE:** We have always been more concerned with creating a sandbox for players to have a great experience in, rather than strict 'real world' fidelity. We have carried this over to the levels we are creating. All are inspired by settings in the real world, but none are meant to be them.

**Games Fusion:** How large will the levels be in Battlefield 2? Can we expect to see levels which are twice the size of those seen in BF: 1942 and BF: Vietnam?

**DICE:** We are still testing how large levels can be and still provide a fun experience. We are pushing the number of players much higher than in previous Battlefield games, but we want to insure that players will always have combat close by.

**Games Fusion:** The aircraft in BF: 1942 and BF: Vietnam have pretty bland cockpits. Will you be incorporating moving dials and lights into the aircraft cockpits of Battlefield 2 to intensify realism?

**DICE:** We want to give the 'feel' of a modern aircraft, but we don't want to sacrifice fun and simplicity to get it. We will strike a balance somewhere in between.

**Games Fusion:** Tell us a bit about the command mode. How will this work?

**DICE:** A player on each side will be able to become the commander for their side. They will be given special tools that allow them to direct their side and effect the outcome of the battle. They will only be rewarded for how their team does as a whole, not how they perform individually, so they will have an incentive to provide the best support to their side as possible.

**Games Fusion:** Will stealth play a bigger part in Battlefield 2? Will there be a Special Forces group and if so what weapons and gadgets will they have at their disposal?

**DICE:** We like to think of the Battlefield as more of all out war. There are a lot of moments within the Battlefield experience in which stealth is called for, but overall we are not aiming for a stealth environment found in some other shooters. We will have Special Forces type soldiers and they will have new, cool gadgets players will expect to find being carried by those soldiers today and in the near future.

**Games Fusion:** Where do you see the genre heading in the next few years? Can we soon expect to see a game which mixes elements of first person shooter and realistic flight simulation into one title?

**DICE:** I think that games like that will be developed, but realism also implies deep complexity and a lot of investment of the player's time to learn the system. I recall the manual for a flight simulator, F-16 Falcon, which was about 300 pages long. You had to read at least 40 pages of detailed instructions just in order to start your engine and taxi down the runway. While this great fun for many

people, we find that most people just don't have that kind of time. They want to get into the game and start playing in a few minutes.

We see the genre heading to more of a persistent state, in which a player collects awards and builds a reputation within the gaming community over time. We see the genre going away from the single player experience and focusing more on online play.

**Games Fusion:** As processing power increases do you anticipate games developers will attempt to produce a game, which focuses on a massive multiplayer campaign? For example, instead of single battles based on individual servers a network that everyone can join to take part in a real-time virtual war? Obviously the player will be confined to a particular battle similarly to how the player is confined in a single player campaign. Additionally the player will also be able to choose his career path, such as Navy, Air force or Infantry forces and improve upon his ranking.

**DICE:** As bandwidth increases and becomes more available, we do see larger battle, along the lines of massive multiplayer campaigns. We also see clans, community support and online tournaments becoming more mainstream and important to the overall player experience. We also see DICE leading the charge in that arena.

Thank you for taking the time to answer our questions. We wish you the best of success for the release of Battlefield 2. If it's any more addictive than Battlefield: Vietnam is I am sure I will have to quit my job just to play it! =)

Battlefield 2 will come to the PC in spring 2005.

Courtesy of [Games Fusion](#)